



Sault Ste Marie Forest Management Unit
Compartment Review Presentation
Compartment #136 **Entry Year: 2014**
Compartment Acreage: 1,834 **County: Mackinac**

Revision Date: 7/11/2012

Stand Examiner: Amy Douglass

Legal Description: T43N-R7W, Sections 4, 5, 8 and 9 Hendricks Township

RMU (if applicable): Mackinac Mix

Management Goals: The management of this compartment will be to maintain or improve the timber quality within the compartment while providing ample wildlife cover and wildlife favorable timber species. The hardwood and aspen stands have been actively managed to promote health and growth. Some beech in the area show signs of beech scale and beech bark disease. However, there may also be some resistance in this area too. The beech is generally not a high component of the hardwood stands, but maintaining this component is highly desirable. The non-native Scotch pine needs to be eradicated if possible. Last entry a Scotch pine plantation was final harvested, but the seed source is still prevalent from surrounding volunteers that were left. Efforts should be made to cut and/or herbicide these trees/areas where possible.

Soil and Topography: The majority of the compartment is rolling terrain. The large hardwood areas south of Strouble Lake is Kalkaska sand and Springlake loamy coarse sand, and a minor component of Adams sandy loam. The upland pine and hardwood in the northeast corner of the compartment consist of Wallace sand with minor components of Furlong sand, Solona loam and Amadon-Rock outcrop complex. The upland and transitional terrain north of Strouble Lake consists primarily of Paquin sand and Paquin-Finch sands, with a minor component of Heinz sandy loam and Pullup fine sand. The low, wet swamps and bogs are primarily Markey and Carbondale mucks.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Mainly state land surrounding the compartment with the exception of the “residential” burgs of Caffey Corner and DeRushaville, as well as Caffey Cemetery. Hendricks Township leases the grassy field along the south side of Strouble Lake for a picnic and boat launch area.

Unique, Natural Features: Northern fen, with associated moor rush, located within the compartment. Loon located on Strouble Lake. The potential exists for red-shouldered hawk in mature hardwoods. The potential exists for threatened and endangered plant and animal species. Nests or other T&E species will be buffered appropriately if found during harvest setup.

Archeological, Historical, and Cultural Features: Caffey Cemetery located in SENE section 4. Numerous old homesteads located within, and adjacent to, the compartment. Buried telephone cable runs the entire length of Strouble Lake Road.

Special Management Designations or Considerations: A five chain buffer will be maintained around Ryerse Lake ERA to help protect the integrity of the lake and bog. The Ryerse Lake area was once proposed as a nature study area in 1974, prior to the land acquisition of land on the west side of the lake.

Watershed and Fisheries Considerations: This compartment contains Strouble Lake and Ryerse Lake. Strouble Lake supports a mixed-coolwater community of northern pike, yellow perch, pumpkinseed sunfish, brown bullhead, rock bass and golden shiner. Occasional winterkills have been reported due to the shallow depth of the lake and organic substrates. Recreational fishery values for this waterbody are moderate. Ryerse Lake is shallow and most likely experiences winterkill conditions and thus it does not support much (if anything) in terms of recreational fishery values. However, it does provide important aquatic habitat for amphibians and reptiles. All Best Management Practices (BMP's) should be adhered to around these lakes to preserve water quality and habitat.

Wildlife Habitat Considerations: This compartment is part of the Mackinac Mix Management Area and contains a mix of types including northern hardwoods, aspen, mixed deciduous and coniferous stands, and lowland cedar. Strouble Lake is located near the center of the compartment. Past management has included thinnings of hardwoods and managing mature aspen to maintain this type on the landscape while providing young growth for white-tailed deer, ruffed grouse, and American woodcock. Some stands where management had previously been planned are awaiting treatment. Management over the next 10 years will continue to focus on encouraging diversity in hardwoods and maintaining aspen by regenerating some mature stands. Lowland cedar stands will be left to provide cover for snowshoe hare, deer, bobcat, and other species. Strouble Lake will be buffered to maintain the near-shore and nearby habitat for waterfowl and other wetland species.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel and peat and muck, in places thin to discontinuous over bedrock. There is insufficient data to determine the glacial drift thickness. The Silurian Engadine and Manistique Groups subcrop below the glacial drift. The Engadine is quarried for stone/limestone elsewhere in the UP. The nearest gravel pit is located just to the north off Hiawatha Trail. There may be gravel potential on the upland areas. There is no economic oil and gas production in the UP.

Vehicle Access: The majority of the compartment has very good access. Hiawatha Trail is a class-A county road running along the east side. Section 9 is accessed by paved county roads: Strouble Lake Road and Town Hall Road. DeRusha Road, also in this section, is paved between Strouble Lake Road and Town Hall Road, and then becomes gravel as it travels south to Hiawatha Trail. Strouble Lake Road continues west and north through section 8, but this stretch is gravel. There are numerous two-tracks off the various county roads which access most of the compartment.

Survey Needs: A survey will need to be done around the small private in-holdings in Section 9, unless private corners are found there.

Recreational Facilities and Opportunities: Hendricks Township leases a day-use area along the south side of Strouble Lake. The park consists of a picnic area and shallow boat launch. The Brevort-Trout Lake Motorcycle trail cuts through the northeast corner of section 4. The area offers opportunity for hunting, fishing, trapping, nature viewing and berry picking.

Fire Protection: This area has low potential for fires.

Additional Compartment Information: Chestnut and oak trials (1989-90) have been planted within a grassy opening. Some still exist, but are not taller than 3' yet.

- **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**

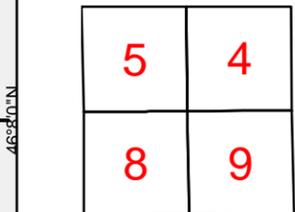
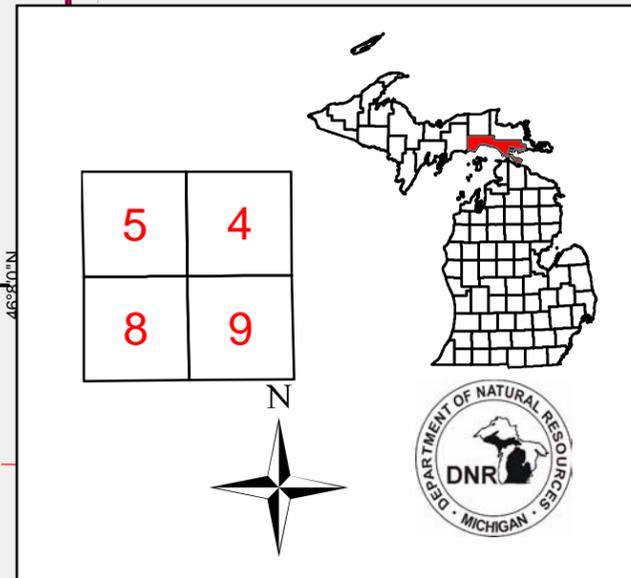
Cover Type & Treatment Map

Compartment: 136
 T43N R07W Sec. 4, 5, 8, 9
 County: Mackinac
 Unit: Sault Ste. Marie
 YOE: 2014
 Acres: 1,834 GIS Calculated
 Examiner: Amy Douglass
 Map Revised: 08/08/2012
 Map Phase: Pre-Review

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

Legend

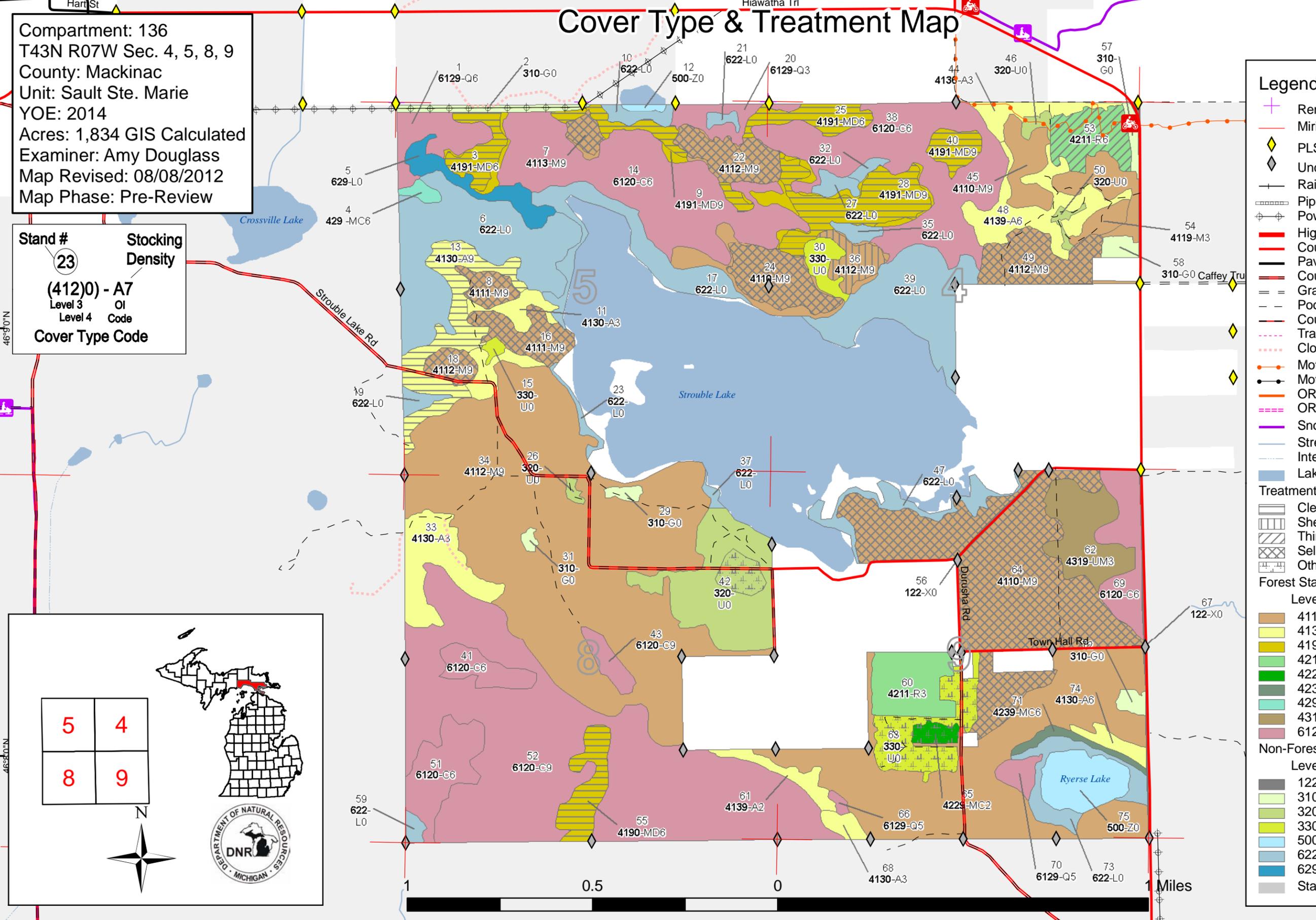
- Remonumented Section Corners
 - Miris Corners
 - PLSS Corner
 - Unclassified Corners
 - Railroads
 - Pipeline
 - Powerline
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Closed Roads
 - Motorcycle (DNR Sticker)
 - Motorcycle (SOS License)
 - ORV Trail
 - ORV Route
 - Snowmobile Trail
 - Stream
 - Intermittent Stream
 - Lakes and Rivers
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
 - Shelter Wood (w/Reserves)
 - Thinning (Crown, Low, Systematic)
 - Selection (Group, Single Tree)
 - Other Treatment - See Comments
- Forest Stands**
- Level 3**
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 429 - Mixed Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3**
- 122 - Road/Parking Lot
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 629 - Mixed non-forested wetland
 - State Forest Land



46°50'0"N

85°14'0"W 85°13'0"W 85°12'0"W 85°11'0"W 85°10'0"W

85°13'0"W 85°12'0"W 85°11'0"W 85°10'0"W



1 0.5 0 1 Miles

Stand Boundary Map

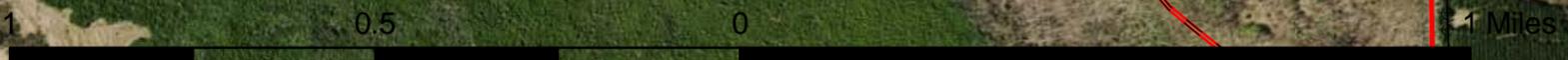
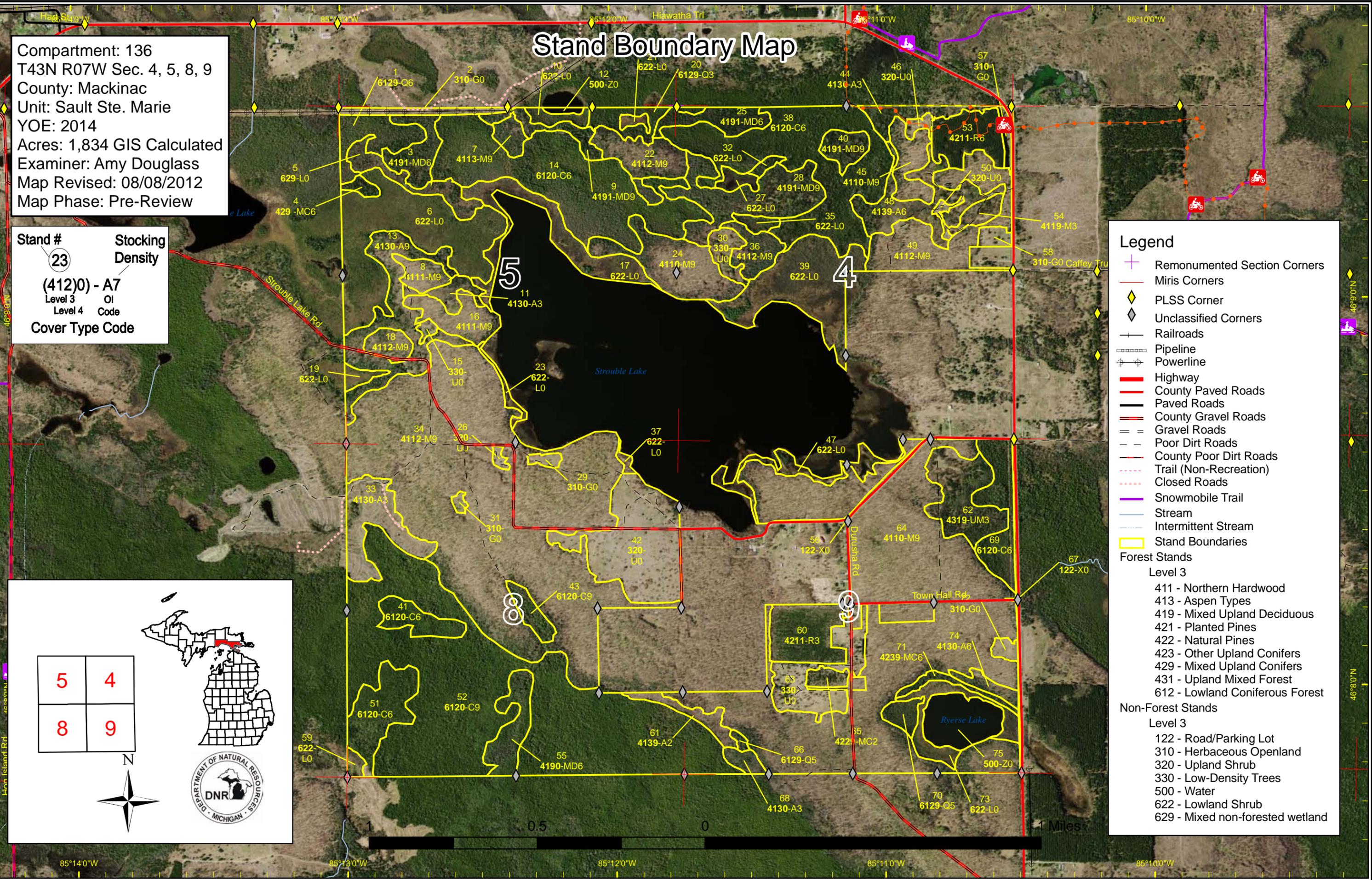
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 Map Revised: 08/08/2012
 Map Phase: Pre-Review

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

- ### Legend
- Remonumented Section Corners
 - Miris Corners
 - PLSS Corner
 - Unclassified Corners
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5	4
8	9

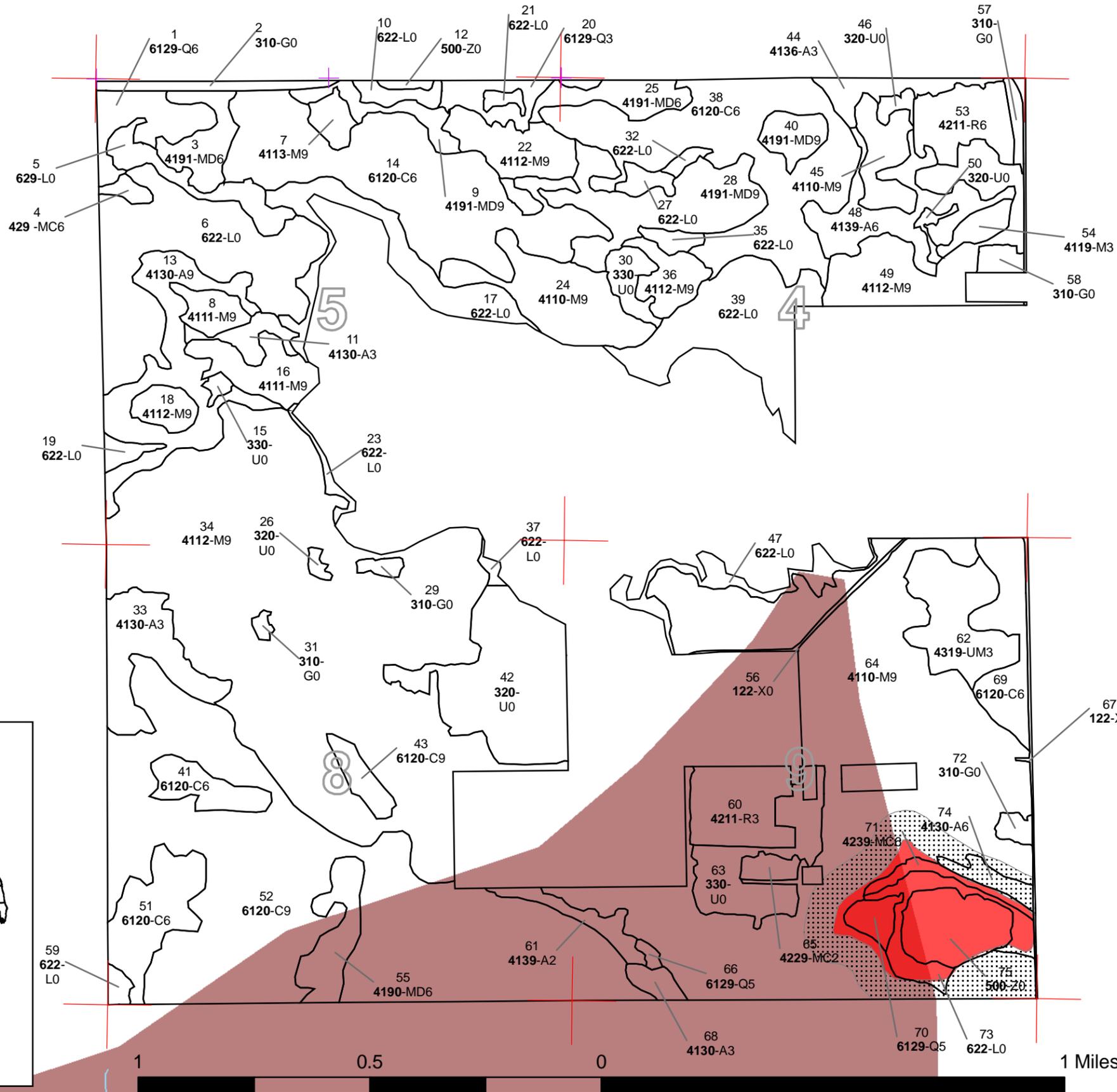
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Dedicated & Proposed Special Conservation Area Map

Compartment: 136
 T43N R07W Sec. 4, 5, 8, 9
 County: Mackinac
 Unit: Sault Ste. Marie
 YOE: 2014
 Acres: 1,834 GIS Calculated
 Examiner: Amy Douglass
 Map Revised: 08/08/2012
 Map Phase: Pre-Review

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



- ### Legend
- Remonumented Section Corners
 - Miris Corners
 - Stand Boundaries
 - Proposed Special Conservation Areas**
 - SCA - Special Conservation Area
 - SCA Removal
 - Dedicated Special Conservation Areas**
 - Ecological Reference Areas
 - Cold Water Streams
 - Deer Wintering Areas
 - Forest Stands**
 - Level 3**
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
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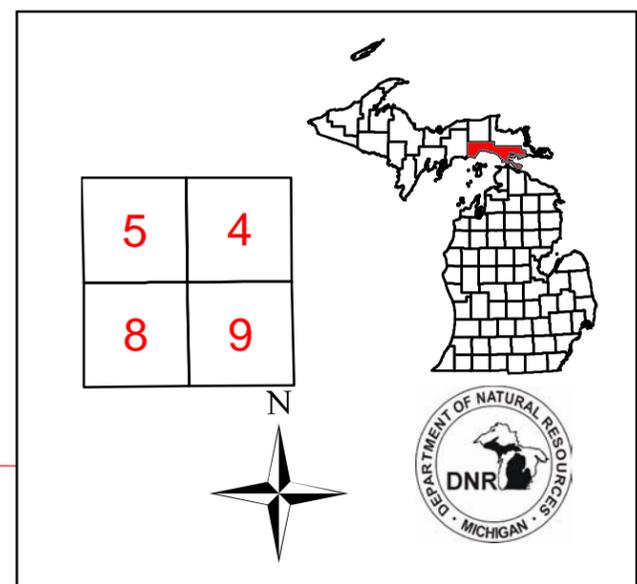


Table 1 – Total Acres by Cover Type and Age Class



	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	33	0	52	0	0	0	38	0	0	0	0	0	0	0	123
Cedar	0	0	0	0	0	0	0	11	24	102	90	232	0	0	459
Herbaceous Openland	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Low-Density Trees	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Lowland Conifers	0	0	0	0	0	0	1	0	0	0	5	26	0	0	32
Lowland Shrub	204	0	0	0	0	0	0	0	0	0	0	0	0	0	204
Mixed Upland Deciduous	0	0	0	0	0	0	8	16	12	60	0	0	0	0	95
Natural Mixed Pines	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Northern Hardwood	0	0	5	0	0	0	0	52	29	614	0	0	0	0	700
Red Pine	0	23	0	0	19	0	0	0	0	0	0	0	0	0	42
Upland Conifers	0	0	5	0	0	0	0	0	0	0	3	0	0	0	7
Upland Mixed Forest	0	0	28	0	0	0	0	0	0	0	0	0	0	0	28
Upland Shrub	59	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Urban	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Water	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Total	377	27	90	0	19	0	47	79	65	775	98	258	0	0	1834



Table 2 – Proposed Treatment Summaries

Sault Ste. Marie Mgt. Unit
Year of Entry 2014

Compartment 136
Total Compartment Acres: 1834

Acres by Treatment Type

Commercial Harvest - 374	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 34	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	31	0	0	0	0	0	0	31
Mixed Upland Deciduous	85	0	0	0	0	0	0	85
Northern Hardwood	0	230	0	9	0	0	0	239
Red Pine	0	0	0	0	19	0	0	19
Total	116	230	0	9	19	0	0	374



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	45136003-Cut	10.7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	91		Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription:</u> Cut all trees except white pine, cedar and hemlock. Retention left around edges.										
<u>Specs:</u>										
<u>Other</u> Currently under contract Steel Shovel Mix (451081001) Unit 1.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes white birch, aspen, maple, balsam, spruce, white pine and cedar in										
<u>Steps:</u> various amounts.										
<u>Proposed</u>										
<u>Start Date:</u> 09/01/2010										
7	45136007-Cut	4.7	4113 - R.Maple, Conifer	High Density Log	90		Harvest	Single Tree Selection	4113 - R.Maple, Conifer	Cmpt. Review Proposal
<u>Prescription:</u> Mark to approx. 80 BA. Try to promote H, YB, WB, RM.										
<u>Specs:</u>										
<u>Other</u> Currently under contract Steel Shovel Mix (451081001) Unit 2.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes red maple, sugar maple, hemlock, yellow birch and beech.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 09/30/2010										
8	45136008-Cut	7.4	4111 - S.Maple, Hard Mast Association	High Density Log	88	141-170	Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal
<u>Prescription:</u> Mark to approx 80 BA. Leave some larger aspen along edges. Leave 1-3 beech per acre, any healthy beech, some large wolfy trees, and										
<u>Specs:</u> maintain stand diversity.										
<u>Other</u> May be best to mark in spring or fall. Possible BBD resistant trees.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes sugar maple, red maple and beech. Monitor for excessive beech										
<u>Steps:</u> thickets and herbicide if needed.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
9	45136009-Cut	7.5	4191 - Mixed Upland Deciduous with Conifer	High Density Log	90		Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription:</u> Cut all trees except white pine, cedar and hemlock. Retention left around edges.										
<u>Specs:</u>										
<u>Other</u> Currently under contract Steel Shovel Mix (451081001) Unit 3.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes white birch, aspen, maple, balsam, spruce and cedar.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 09/30/2010										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13	45136013-Cut	30.9	4130 - Aspen	High Density Log	60		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Cut all trees except white pine, yellow birch and cherry where present. Leave some larger aspen along edges.										
<u>Specs:</u>										
<u>Other</u> Treatment area adjusted to leave smaller diameter areas.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes aspen, birch, maple, white pine, balsam, spruce, cherry and yellow										
<u>Steps:</u> birch.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
16	45136016-Cut	15.0	4111 - S.Maple, Hard Mast Association	High Density Log	88	141-170	Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal
<u>Prescription</u> Mark to approx 80 BA. Leave some larger aspen along edges. Maintain conifer component especially along lake edge. Buffer Strouble Lake										
<u>Specs:</u> appropriately. Leave 1-3 beech per acre, any healthy beech, some large wolfy trees, and maintain stand diversity.										
<u>Other</u> May be best to mark in spring or fall. Possible BBD resistant trees.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes sugar maple, red maple and beech. Monitor for excessive beech										
<u>Steps:</u> thickets and herbicide if needed.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
18	45136018-Cut	6.9	4112 - Maple, Beech, Cherry Association	High Density Log	80	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Mark to approx 80 BA. Leave some larger aspen along edges. Leave white pine. Try to promote yellow birch where possible. Leave 1-3 beech										
<u>Specs:</u> per acre, any healthy beech, some large wolfy trees, and maintain stand diversity. Also, leave birch where present.										
<u>Other</u> May be best to mark in spring or fall. Possible BBD resistant trees.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes sugar maple, red maple, aspen, birch and beech. Monitor for										
<u>Steps:</u> excessive beech thickets and herbicide if needed.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
22	45136022-Cut	16.8	4112 - Maple, Beech, Cherry Association	High Density Log	90		Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Mark to approx. 80 BA. Try to promote under-represented species.										
<u>Specs:</u>										
<u>Other</u> Currently under contract Steel Shovel Mix (451081001) Unit 2.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes sugar maple, red maple, beech, yellow birch, hemlock and cedar.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 09/30/2010										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	45136024-Cut	21.3	4110 - Sugar Maple Association	High Density Log	90		Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription</u> Mark to approx. 80 BA. Fingers left for retention.										
<u>Specs:</u>										
<u>Other</u> Currently under contract Steel Shovel Mix (451081001) Unit 4.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes sugar maple, red maple and birch.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 09/30/2010										
25	45136025-Cut	11.9	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	88		Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription</u> Cut all trees except white pine, cedar and hemlock. Retention left around edges.										
<u>Specs:</u>										
<u>Other</u> Currently under contract Steel Shovel Mix (451081001) Unit 5.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes maple, birch, aspen, balsam, spruce and cedar.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 09/30/2010										
28	45136028-Cut	31.6	4191 - Mixed Upland Deciduous with Conifer	High Density Log	90		Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription</u> Cut all trees except white pine, cedar and hemlock. Retention left around edges.										
<u>Specs:</u>										
<u>Other</u> Currently under contract Steel Shovel Mix (451081001) Unit 7.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes maple, birch, aspen, cherry, balsam, spruce, cedar and hemlock.										
<u>Steps:</u> Some semi-open spots are acceptable.										
<u>Proposed</u>										
<u>Start Date:</u> 09/30/2010										
36	45136036-Cut	9.2	4112 - Maple, Beech, Cherry Association	High Density Log	90		Harvest	Shelter Wood with Reserves	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Mark to approx. 60 - 80 BA.										
<u>Specs:</u>										
<u>Other</u> Currently under contract Steel Shovel Mix (451081001) Unit 6.										
<u>Comments:</u>										
<u>Next</u> Regeneration survey per Work Instructions. Acceptable regeneration includes red maple, sugar maple, white birch and cherry.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 09/30/2010										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40	45136040-Cut	7.9	4191 - Mixed Upland Deciduous with Conifer	High Density Log	65		Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<p><u>Prescription:</u> Cut all trees except white pine, cedar, hemlock and mark some large diameter spruce to be left.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Could be an extension to Steel Shovel Mix, accessing from the west, or can access from the east down the old skid road along edge of stand 44 and freeze across cedar.</p> <p><u>Next Steps:</u> Regeneration survey per Work Instructions. Acceptable regeneration includes aspen, birch, maple, cherry, balsam, spruce and cedar.</p> <p><u>Proposed Start Date:</u> 10/04/2012</p>										
49	45136049-Cut	24.0	4112 - Maple, Beech, Cherry Association	High Density Log	78	81-110	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription:</u> Remove beech from stand, marking 1 - 2 beech per acre to leave. May need to do light thinning in addition to beech removal.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Regeneration survey per Work Instructions. Acceptable regeneration includes sugar maple, red maple, cherry and beech. Monitor for excessive beech thickets and herbicide if needed.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
53	45136053-Cut	18.7	42110 - Planted Red Pine	High Density Pole	49	200+	Harvest	Low Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Second thinning. Mark to approx 140 BA (taking 1/3 BA). Leave cherry unless needed for access.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Motorcycle trail runs through stand.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
55	45136055-Cut	15.6	4190 - Mixed Upland Deciduous with Cedar	High Density Pole	70		Harvest	Clearcut with Reserves	4190 - Mixed Upland Deciduous with Cedar	Cmpt. Review Proposal
<p><u>Prescription:</u> Cut all trees except cedar, white pine and hemlock where present. Retention will be in buffer of small creek and on edges. Cedar may be cut for operational access, but cut only the minimal amount of cedar necessary to access the stand. Cut in winter. Do not reach into cedar or hemlock pockets.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Somewhat difficult access. Will have to extend road through hardwood stand and down over the hill at edge of hardwood stand. Recon small creek to see if this will inhibit access/cutting.</p> <p><u>Next Steps:</u> Regeneration survey per Work Instructions. Acceptable regeneration includes aspen, birch, balm, maple, balsam and spruce.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
64	45136064-Cut	133.5	4110 - Sugar Maple Association	High Density Log	98	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription</u> Mark areas down to approx 80 BA, focusing on beech. Leave 1-3 beech per acre where present, any healthy beech, some large wolfy trees, and <u>Specs:</u> maintain stand diversity. Also, leave birch where present. Buffer Strouble Lake appropriately.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Regeneration survey per Work Instructions. Acceptable regeneration includes sugar maple, red maple, cherry, yellow birch and beech.										
<u>Proposed Start Date:</u> 10/01/2013										

65	45136065- NonFor	4.1	42290 - Natural Mixed Pine	Medium Density Sapling	13		Non-Forest Management	Other - Specify	3102 - Grass	Cmpt. Review Proposal
<u>Prescription</u> Remove scotch pine that has seeded in naturally. Possible hydromow. <u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u> Herbicide as necessary to discriminate against scotch pine establishment. Monitor for additional seeding of scotch pine that will have to be dealt with.										
<u>Proposed Start Date:</u> Unspecified										

42	NF_45136042- NonFor	7.1	3204 - Mast Producing Shrub				Non-Forest Management	Other - Specify	3102 - Grass	Cmpt. Review Proposal
<u>Prescription</u> Remove scotch pine before more seeds in. Possible hydromow or hand cut. <u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u> Herbicide as necessary to discriminate against scotch pine establishment. Monitor for additional scotch pine that will have to be dealt with.										
<u>Proposed Start Date:</u> Unspecified										

63	NF_45136063- NonFor	23.0	330 - Low-Density Trees				Non-Forest Management	Other - Specify	3301 - Low Density Deciduous Trees	Cmpt. Review Proposal
<u>Prescription</u> Remove scotch pine that has seeded in naturally. Possible hydromow. <u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u> Herbicide as necessary to discriminate against scotch pine establishment. Monitor for additional scotch pine seeding that will have to be dealt with.										
<u>Proposed Start Date:</u> Unspecified										

**Total Treatment
Acreage Proposed: 407.9**

Table 4 -- Treatments Prescribed with a Limiting Factor



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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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#Error

Prescription Specs:

Other Comment:

Next Steps:

Proposed Start Date: #Error

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: 0

**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
45104_OutOfY OE-Cut	19.8					Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin to around 120 Basal Area. Leave species diversity within the stand were present.									
<u>Specs:</u>									
<u>Other</u> This was a buffer left along the creek from a sale called Golden Eagle.									
<u>Comments:</u>									
<u>Next</u>									
<u>Steps:</u>									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2013									
45152062-Cut	5.5	4115 - Y.Birch, Hemlock NH	High Density Log	76		Harvest	Clearcut with Reserves	4115 - Y.Birch, Hemlock NH	Cmpt. Review Proposal
<u>Prescription</u> Clear Cut the stand leaving all white pine, hemlock, cedar and yellow birch. Also, leave one healthy, mature red maple, black cherry, spruce, fir, paper birch or sugar maple in order to retain a representation of the stand.									
<u>Specs:</u>									
<u>Other</u> cut with adjacent compartment.									
<u>Comments:</u>									
<u>Next</u> Check for regeneration in 4-5 years. Acceptable regeneration will include red maple, yellow birch, hemlock, white pine, black cherry, sugar									
<u>Steps:</u> maple, aspen, ash, beech, and balsam fir.									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2011									
45157_OutOfY OE-Cut	0.7					Harvest	Low Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin to around 120 Basal Area. Leave species diversity within the stand where present.									
<u>Specs:</u>									
<u>Other</u> cut with stand 1 in comp 158.									
<u>Comments:</u>									
<u>Next</u>									
<u>Steps:</u>									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2013									
45195_OutOfY OE-Cut	27.3					Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal
<u>Prescription</u> Cut all of the beech in the stand. Mark 2-3 beech to leave when cruising.									
<u>Specs:</u>									
<u>Other</u> Beech bark disease is affecting the beech within this stand.									
<u>Comments:</u>									
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, yellow and									
<u>Steps:</u> paper birch, ironwood, balsam fir, white spruce and white pine.									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2013									
45202_OutOfY OE-Cut	449.6					Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal
<u>Prescription</u> Cut all beech in the stand. While cruising mark 2-3 beech per acre to leave.									
<u>Specs:</u>									
<u>Other</u> Beech bark disease is present in the stand.									
<u>Comments:</u>									
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, yellow and									
<u>Steps:</u> paper birch, ironwood, balsam fir, white spruce and white pine.									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2012									

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
Total Treatment Acreage Proposed:		502.9							

Stand	Sault Ste. Marie Mgt. Unit		5 – Forested Stands			Compartment: 136
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014
						General Comments:
1	6129 - Mixed Coniferous Lowland Forest	High Density Pole	15.9	112		cedar/tamarack
3	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	13.1	91		Currently under contract: Steel Shovel Mix (45-108-10-01) Unit 1. WB, RM, A, Fb, Fs, w/ C & WP.
4	429 - Mixed Upland Conifers	High Density Pole	2.6	102		spruce, white pine
7	4113 - R.Maple, Conifer	High Density Log	5.3	90		Currently under contract: Steel Shovel Mix (45-108-10-01) Unit 2. Hwd patch with RM, H, YB, A and Beech,
8	4111 - S.Maple, Hard Mast Association	High Density Log	7.4	88	141-170	Some maple borer damage.
9	4191 - Mixed Upland Deciduous with Conifer	High Density Log	8.6	90		Currently under contract: Steel Shovel Mix (45-108-10-01) Unit 3. WB, A, Fb w/ Fs & C. Scattered cedar clumps.
11	4130 - Aspen	High Density Sapling	6.6	27		Pockets of thick cherry. On the edge of pole size.
13	4130 - Aspen	High Density Log	38.0	60		Choppers choice in the late 60's. More white pine in overstory and understory on southern end. Some smaller diameter patches. Trace of yellow birch.
14	6120 - Lowland Cedar	High Density Pole	89.6	102		cedar/tamarack
16	4111 - S.Maple, Hard Mast Association	High Density Log	15.0	88	141-170	Several beech heavily scaled and/or beech snap pockets. Some beech with very little scale. Some maple borer damage.
18	4112 - Maple, Beech, Cherry Association	High Density Log	6.9	80	111-140	Beech scale and die back evident, but also healthy trees present. May be some resistance in the area? Not the prettiest of hardwood stands - red maple clumps and single trees, trace yellow birch, some areas of low BA.
20	6129 - Mixed Coniferous Lowland Forest	High Density Sapling	9.9	112		cedar/tamarack
22	4112 - Maple, Beech, Cherry Association	High Density Log	17.4	90		Currently under contract: Steel Shovel Mix (45-108-10-01) Unit 2. Gradiates from limby, crooked trees to a fairly open nice hwd stand. HM, RM, beech, C, YB with areas of softwood component (H, Fb, Fs, C).
24	4110 - Sugar Maple Association	High Density Log	30.9	90		Currently under contract: Steel Shovel Mix (45-108-10-01) Unit 4. Decent hwd stand w/ very little conifer component except along edges. Edges gradiates to RM, WB, Fb.
25	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	11.9	88		Currently under contract: Steel Shovel Mix (45-108-10-01) Unit 5. RM, WB, A, Fb, Fs, C.



Stand	Sault Ste. Marie Mgt. Unit		5 – Forested Stands			Compartment: 136	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
28	4191 - Mixed Upland Deciduous with Conifer	High Density Log	38.3	90			Currently under contract: Steel Shovel Mix (45-108-10-01) Unit 7. RM, WB, A, cherry, Fb, Fs, C & H. Includes semi open spots.
33	4130 - Aspen	High Density Sapling	25.1	5			Cut in 2007 as part of T's Missed Curve (45-114-04-01)
34	4112 - Maple, Beech, Cherry Association	High Density Log	282.6	98	81-110		Cut as part of T's Missed Curve (45-114-04-01). Edge areas have higher BA. Includes scattered Cherry, YB, WB. Some aspen reproduction pockets present.
36	4112 - Maple, Beech, Cherry Association	High Density Log	10.5	90			Currently under contract: Steel Shovel Mix (45-108-10-01) Unit 6. Low quality RM stand.
38	6120 - Lowland Cedar	High Density Pole	80.0	99			Variable BA. Thicker on east side.
40	4191 - Mixed Upland Deciduous with Conifer	High Density Log	7.9	65			Some nice large white spruce 16" - 18" dbh
41	6120 - Lowland Cedar	High Density Pole	11.4	75			Micro elevation change from surrounding cedar; slightly higher in spots. More leaf litter than adjacent cedar. Nice, straight growing cedar. Obvious deer trails thru stand.
43	6120 - Lowland Cedar	High Density Log	6.6	114			Very small creek runs thru middle of stand. Variable wetness. Many cedar have sweep.
44	4136 - Aspen, Mixed Conifer	High Density Sapling	9.5	25			Not very clean cut. Two storied stand in spots. Low to bedrock, especially on north end. Includes cherry, white birch and jack pine in eastern finger along road.
45	4110 - Sugar Maple Association	High Density Log	13.4	78	81-110		Cut as part of Funeral Flowers (45-113-04-01)
48	4139 - Aspen, Mixed Deciduous	High Density Pole	26.6	25			Areas of pole size aspen, but most on edge between sapling and pole. Remnant larger trees left - yellow birch and cherry
49	4112 - Maple, Beech, Cherry Association	High Density Log	38.5	78	81-110		Cut as part of Funeral Flowers (45-113-04-01). A little smaller diameter on the north end with mostly HM, but lots of beech understory. Southern portion has a bit more red maple, beech and cherry.
51	6120 - Lowland Cedar	High Density Pole	23.7	80			similar stand to pre-inv std 42
52	6120 - Lowland Cedar	High Density Log	225.8	119			Generally larger diameter cedar, many with sweep, and blowdown areas. Very little deciduous trees. Pockets of 3" dbh cedar, spruce and tamarack where there is evidence of cutting.
53	42110 - Planted Red Pine	High Density Pole	18.7	49	200+		Areas with little to no understory (mostly in north half). Areas with heavy M understory (mostly in south half).



S t a n d	Sault Ste. Marie Mgt. Unit		5 – Forested Stands			Compartment: 136	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
54	4119 - Mixed Northern Hardwoods	High Density Sapling	5.4	26			On edge between saplings and poles.
55	4190 - Mixed Upland Deciduous with Cedar	High Density Pole	15.6	70			Slight elevation change from surrounding cedar. More deciduous leaf litter even in areas heavier to cedar. Very small creek flowing in northern section - may not be detectable in winter. More balm south of this creek. Did not make it all the way to the south end of the stand.
60	42110 - Planted Red Pine	High Density Sapling	22.8	11			Red pine about 10' tall. Some small patches of scotch pine and scattered individuals too that seeded in from previous scotch pine plantation.
61	4139 - Aspen, Mixed Deciduous	Medium Density	7.7	6			Cut in 2006 as part of Funeral Flowers (45-113-04-01). Regen 10' - 20' tall.
62	4319 - Mixed Upland Forest	High Density Sapling	27.8	27			Variable stand
64	4110 - Sugar Maple Association	High Density Log	266.8	98	81-110		Portions cut by various timber sales (Airstrip Hwds, Edgy Hwds and Funeral Flowers). Portion purchased in 1987. Scattered cherry and yellow birch. Regeneration is good - 10' - 30' tall in the earlier cuts; 3' - 5' tall in the newer cuts. Small inclusions of aspen reproduction.
65	42290 - Natural Mixed Pine	Medium Density	4.1	13			Scotch pine seeded in after harvest of previous scotch pine plantation. Very thick in spots, sparse w/ cherry in others. Scattered aspen.
66	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	1.3	65			Boggy area with labrador tea/sphagnum. Hemlock poles on edge. Deer trails across stand.
68	4130 - Aspen	High Density Sapling	4.1	29			On edge between sapling and pole size.
69	6120 - Lowland Cedar	High Density Pole	21.5	99			Wet variable stand.
70	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	5.4	104			Boggy stand.
71	42390 - Mixed Non-Pine Upland Conifers	High Density Pole	4.8	27			
74	4130 - Aspen	High Density Pole	5.0	27			On edge of pole/sapling size. Self thinned.





Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	310 - Herbaceous Openland	6.5	N/A	Unspecified	Powerline ROW
5	629 - Mixed non-forested wetland	13.0	N/A	Unspecified	
6	622 - Lowland Shrub	67.6	No	Unspecified	
10	622 - Lowland Shrub	4.5	N/A	Unspecified	boggy patch surrounding bog lake
12	50 - Water	1.3	N/A	Unspecified	
15	330 - Low-Density Trees	1.6	No	Unspecified	
17	622 - Lowland Shrub	27.1	No	Unspecified	
19	622 - Lowland Shrub	3.2	No	Unspecified	
21	622 - Lowland Shrub	1.9	N/A	Unspecified	seasonal water fluctuations
23	622 - Lowland Shrub	2.7	N/A	Unspecified	
26	3204 - Mast Producing Shrub	1.4	No	Unspecified	Maple encroaching under driplines of hardwood edge and cherry.
27	622 - Lowland Shrub	3.7	N/A	Unspecified	
29	310 - Herbaceous Openland	2.1	No	Unspecified	Carry in boat launch to Strouble Lake
30	330 - Low-Density Trees	7.3	N/A	Unspecified	Large hwd clumps plus scattered Ch, WP, F, etc encroaching. Some open areas.
31	310 - Herbaceous Openland	1.3	No	Unspecified	
32	622 - Lowland Shrub	1.9	N/A	Unspecified	
35	622 - Lowland Shrub	3.2	N/A	Unspecified	
37	622 - Lowland Shrub	1.4	N/A	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
39	622 - Lowland Shrub	45.5	N/A	Unspecified	
42	3204 - Mast Producing Shrub	53.2	Yes	Medium (NonForested)	Scattered cherry, white pine and scotch pine. Scotch pine clumps are seeding in. North of Strouble Lake Road is leased to Hendricks Twp for day use. Contains boat launch, fire rings, picnic tables, grill and a new outhouse. The area was used heavily by geese this spring.
46	320 - Upland Shrub	2.3	No	Unspecified	Cherry clumps, various dbh, with HM seeding in underneath. Low to bedrock on north.
47	622 - Lowland Shrub	12.8	N/A	Unspecified	
50	320 - Upland Shrub	1.9	No	Unspecified	Cherry clumps with some true G. One oak and several chestnut still present, 2' - 3' tall in old turnaround.
56	122 - Road/Parking Lot	2.3	N/A	Unspecified	
57	310 - Herbaceous Openland	3.0	No	Unspecified	Mostly along H-40, under powerline. Low to bedrock along north line.
58	310 - Herbaceous Openland	3.5	No	Unspecified	Open field beside Caffey Cemetary. Some Jack pine seeding in.
59	622 - Lowland Shrub	2.3	N/A	Unspecified	
63	330 - Low-Density Trees	24.2	No	Unspecified	Variable opening. Mainly open with lilac and apple in horseshoe of RP plantation. Small balm clone along road. Scattered scotch pine seeded in from previous plantations. Scattered cherry clumps; scattered white pine; east of road has a few other scattered tree species and 2 rows of norway spruce. Some leaf dumping in areas along the scotch pine.
67	122 - Road/Parking Lot	5.0	N/A	Unspecified	
72	310 - Herbaceous Openland	2.8	No	Unspecified	
73	622 - Lowland Shrub	13.8	N/A	Unspecified	
75	50 - Water	20.3	N/A	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
multiple - see	Unique Site - SCA	45136_SCA	49.4	This is a 5 chain no cut buffer around the ERA of Ryerse Lake. It was instituted to insure the integrity of the lake and bog and associated species.



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.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.
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.