



**Sault Forest Management Unit
Compartment Review Presentation**

Compartment #142 **Entry Year: 2012**
Compartment Acreage: 1,901 **County: Mackinac**

Revision Date: July 13, 2010

Stand Examiner: Matt Edison

Legal Description: T42N R7W Sec. 3, 4, & 5, Hendricks Township
T43N R7W Sec. 7, Hendricks Township

Identified Planning Goals ('Management Area' or 'RMU', if applicable): Lake Michigan Shoreline

Management Goals: The compartment has been managed in the past for red pine, northern hardwoods, and aspen. This entry period, management efforts will focus on the final harvest and regeneration of approximately half of the remaining mature red pine plantations. There is also opportunity to select cut some northern hardwoods to help improve stand composition by bringing into regulation. Other activities will be the continuous monitoring of existing red pine plantations for prospective pests. All treatments will include proper visual/ aesthetic management considerations along travel areas.

Soil and Topography: Level to gently rolling topography with the exception of the steep escarpment ridge that runs just south of and parallel to US-2. Wallace sands dominate the entire compartment north of US-2. Histosols and Aquents, Markey-Carbondale Muck, Leafriver-Croswell complex, and Esau-Zela complex soils are present in the lower topography south of US-2.

Ownership Patterns, Development, and Land Use in and Around the Compartment: There are large private holdings along the Lake Michigan shoreline and US-2. There are also a few scattered small private holdings.

Unique, Natural Features: MNFI has identified potential for several protected species in this compartment.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations: Pipeline ROW corridors pass through the compartment. The shoreline areas and travel along US-2 require special management considerations.

Watershed and Fisheries Considerations: This compartment contains upper stream reaches of Paquin Creek. Paquin Creek is a cold-water stream that supports stream-resident fish community of brook trout, pearl dace, slimy sculpin, central mudminnow, brook stickleback. Paquin Creek is also important that it supports natural reproduction of Lake Michigan potadromous fishes such as steelhead, Chinook salmon, and coho salmon. Implementation of BMP's will aid in preventing sediment input from road crossings and upland areas are critically important to protect spawning areas for trout and other stream-resident fishes. Buffering the river is also critical to ensure future inputs of woody material to the stream channel, discourage aspen regeneration close to the stream channel, and provide shading to protect water temperature from warming to a degree that will inhibit trout survival.

Wildlife Habitat Considerations: Compartment 142 extends from the northern shore of Lake Michigan at Epoufette north approximately 2 miles. It is divided into two main parts by a steep hill on the south side of US-2. Areas below the hill near the lake level are dominated by cedar where water is close to the surface. This area is used as deer yard during the winter. Much of the area north of the hill is sandy and managed as red pine plantations. Remaining areas contain aspen and hardwoods. Beech bark disease has caused a great deal of mortality in some areas of hardwood. Wildlife management objectives will focus on protecting lowland conifer cover in the deer yard, maintaining aspen stands, and promoting age class and structural diversity in hardwood stands. Some pockets of hardwood regeneration will occur in hardwoods where mature beech pockets currently exist. If thinning occurs, leave at least 2 live beech will be left per acre if present, and snags should be left. Yellow birch, cherry, and conifers will also be retained where present as well as some large wolfy trees. These objectives will benefit a number of wildlife including woodpeckers, broad-winged hawk, coyote, black bear, wolf, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel. There is upwards to 100 feet of Glacial Drift thickness. The Silurian Engadine Group subgroups below the Glacial Drift. The Engadine is quarried for stone/limestone elsewhere in the UP. The nearest gravel pit is two miles to the east. There may be some gravel potential in the compartment. There is no economic oil and gas production in the UP. Portions of the land is surface only.

Vehicle Access: Access is very good throughout the entire compartment. US-2, Hiawatha trail, Paquin Creek Rd., and Epoufette Bay Rd. are the main roads in the compartment. Pipeline ROW's and two-tracks offer access to the compartment interior.

Survey Needs: No survey needs for proposed treatments this entry period.

Recreational Facilities and Opportunities: Snowmobile trail runs through the compartment along pipeline ROWs and Paquin Creek Rd. Deer, grouse, rabbit, and bear hunting are common in this compartment. Mushroom and Blueberry picking is also possible along pipeline ROWs.

Fire Protection: There is potential for fire ignition in this compartment from the heavy recreational use. There are extensive areas of pine fuels in this compartment. Access in this compartment is very good, with no area being greater than .5 miles from US-2, Hiawatha Trail, or Paquin Creek Rds. Pipeline ROW's and two-tracks offer extensive access into the compartment interior and act as fire breaks. Available water sources would include: Paquin Creek and Lake Michigan.

Additional Compartment Information:

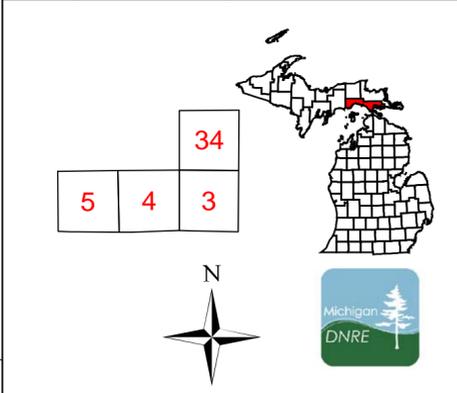
- **The following reports from the Inventory are attached:**
 - ◆ **Total Acres by Cover Type and Age Class**
 - ◆ **Proposed Treatment Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**
 - ◆ **Stand Details (Forested and Nonforested)**
 - ◆ **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**

Cover Type & Treatment Map

Compartment 142
 T42N, R07W, Sec. 3, 4, 5
 T43N, R07W, Sec. 34
 County: Mackinac
 Unit: Sault Ste. Marie
 YOE: 2012
 Acres: 1,901 GIS Calculated
 Stand Examiner: Matt Edison
 Map Revised: 8/13/2010
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- Remunented Section Corners
- Cable
- Pipe
- Power
- Highway
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Closed Roads
- Trails
- US Highway
- Snowmobile Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Selection (Group, Single Tree)
- Other Treatment - See Comments

Forest Stands

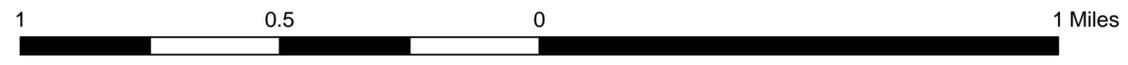
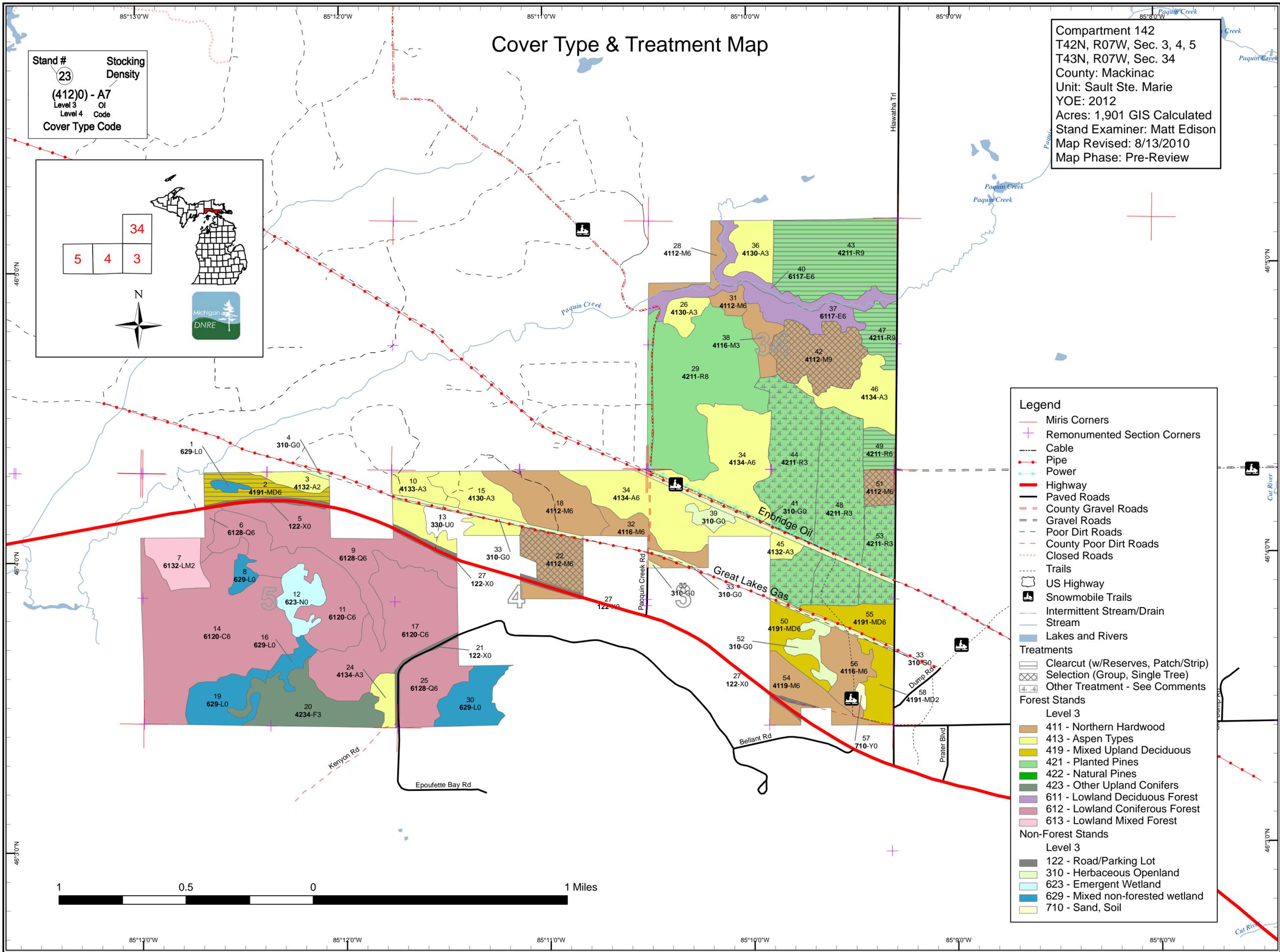
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

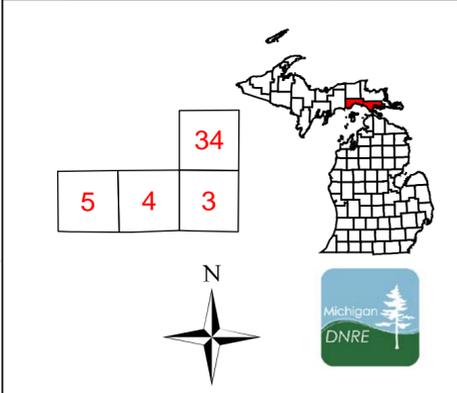
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand, Soil



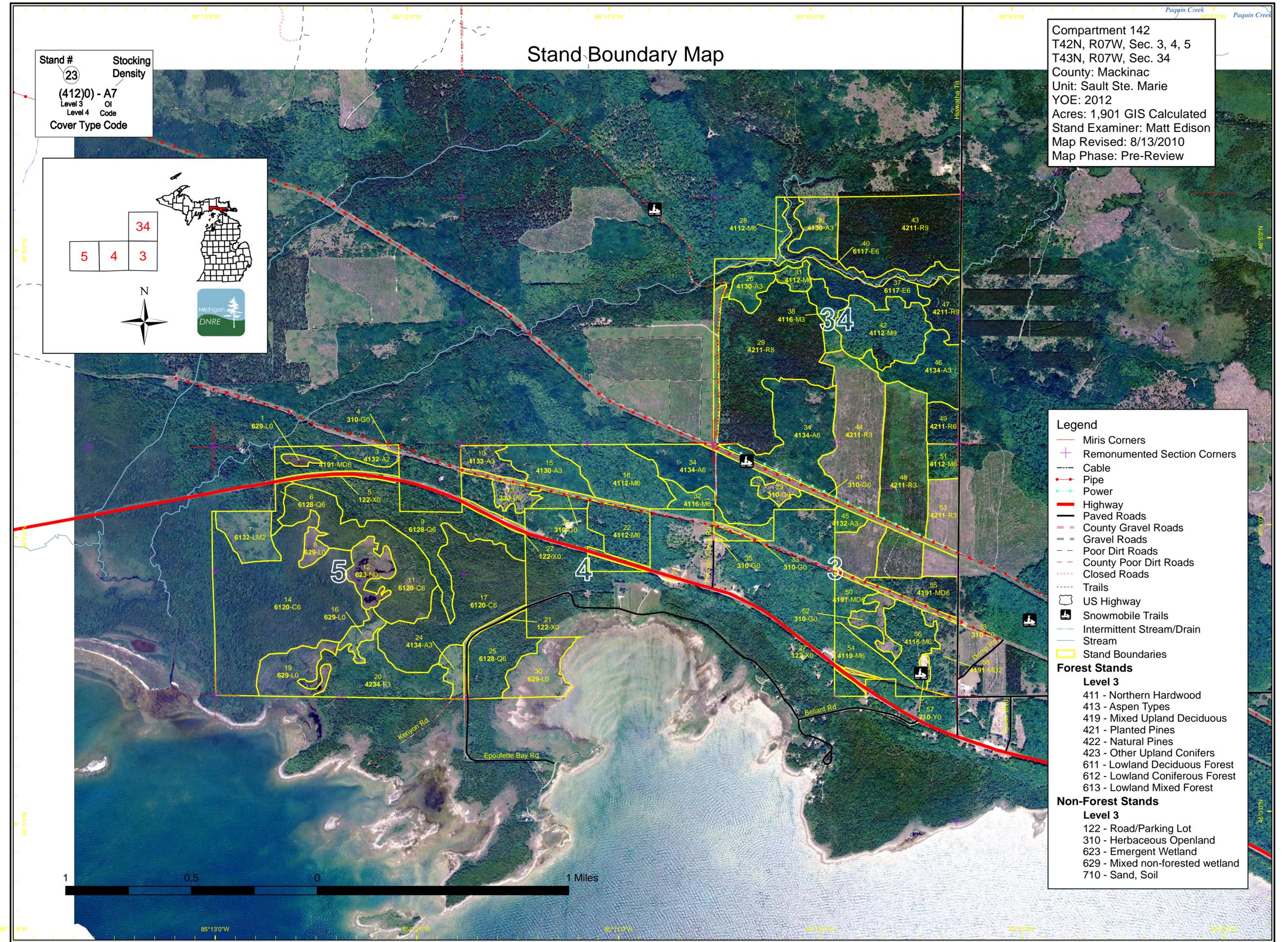
Stand Boundary Map

Compartment 142
 T42N, R07W, Sec. 3, 4, 5
 T43N, R07W, Sec. 34
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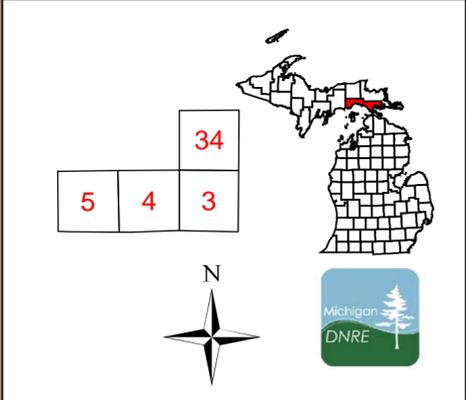
- Legend**
- Miris Corners
 - ⊕ Remonumented Section Corners
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 - Pipe
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Dedicated & Proposed Special Conservation Area Map

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 T42N, R07W, Sec. 3, 4, 5
 T43N, R07W, Sec. 34
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 YOE: 2012
 Acres: 1,901 GIS Calculated
 Stand Examiner: Matt Edison
 Map Revised: 8/13/2010
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 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - Stand Boundaries
 - Proposed Special Conservation Areas**
 - ▨ SCA - Special Conservation Area
 - ▩ SCA Removal
 - Dedicated Special Conservation Areas**
 - Great Lakes Islands
 - Deer Wintering Areas
 - Cold Water Streams
 - ▨ Visual Management Areas
 - Coastal Environmental Areas
 - Ecological Reference Areas
 - Forest Stands**
 - Level 3**
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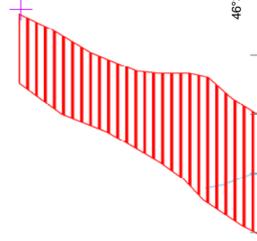
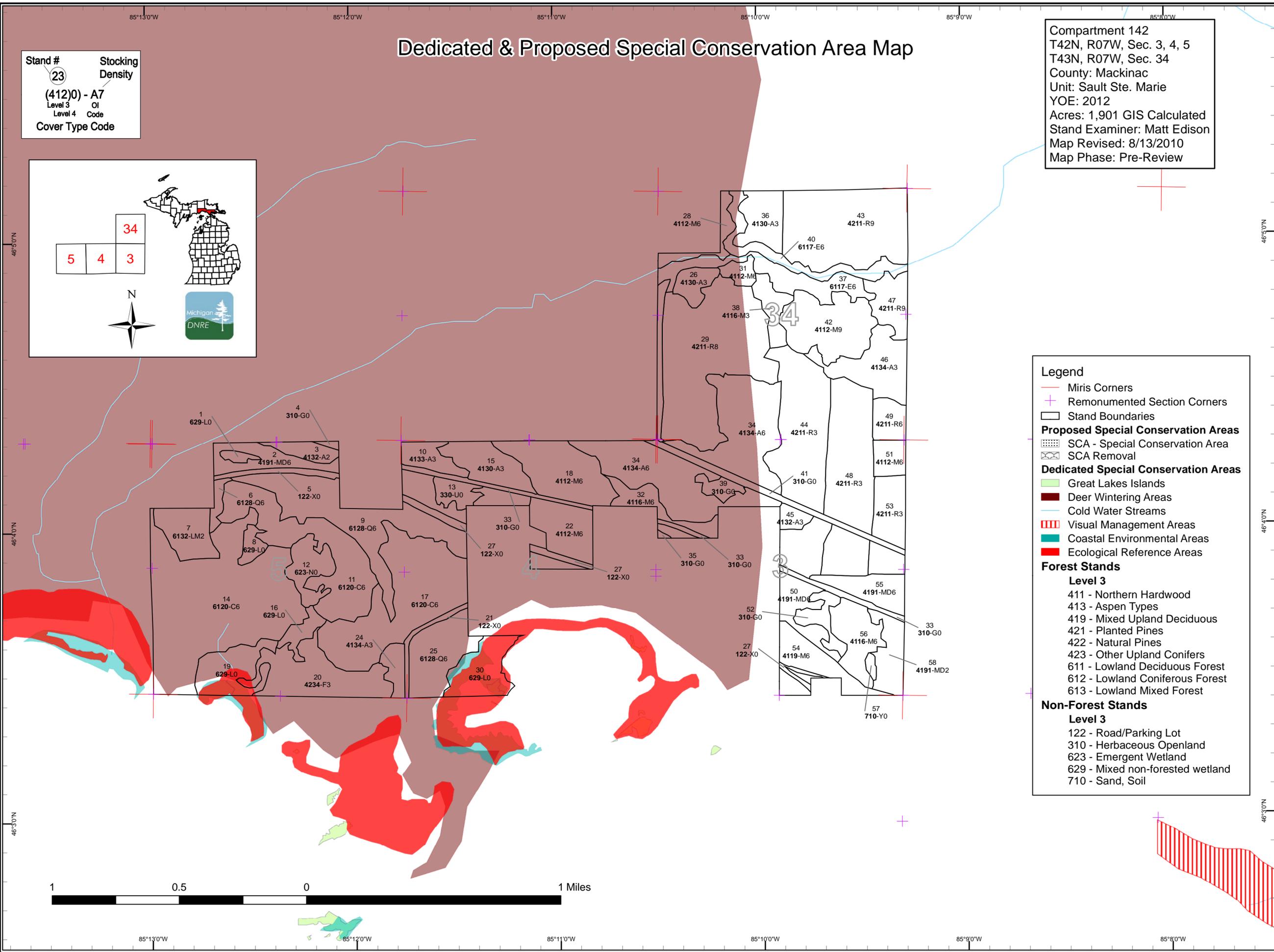


Table 1 – Total Acres by Cover Type and Age Class

Data updated before 2:00 PM



	Age Class														Total
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +	
Aspen	0	0	29	103	160	0	0	0	0	0	0	0	0	0	292
Cedar	0	0	0	0	0	0	0	0	0	0	0	269	75	0	344
Herbaceous Openland	56	0	0	0	0	0	0	0	0	0	0	0	0	0	56
Low-Density Trees	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Lowland Conifers	0	0	0	0	0	0	0	0	5	39	0	76	0	0	120
Lowland Deciduous	0	0	0	0	0	34	25	0	0	0	0	0	0	0	59
Lowland Mixed Forest	0	0	25	0	0	0	0	0	0	0	0	0	0	0	25
Lowland Shrub	79	0	0	0	0	0	0	0	0	0	0	0	0	0	79
Marsh	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Mixed Upland Deciduous	0	0	21	41	0	0	21	0	0	0	0	0	0	0	83
Northern Hardwood	0	0	0	14	0	57	0	132	51	0	0	0	0	0	255
Red Pine	0	31	192	0	0	0	0	0	257	0	0	0	0	0	480
Sand, Soil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Spruce/Fir	0	0	0	52	0	0	0	0	0	0	0	0	0	0	52
Urban	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Total	192	31	267	211	160	92	46	132	307	5	39	269	151	0	1901



Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

Sault Ste. Marie Mgt. Unit
Year of Entry 2012

Compartment 142
Total Compartment Acres: 1901

Acres by Treatment Type

Commercial Harvest - 240	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 224
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Mixed Upland Deciduous	21	0	0	0	0	0	21
Northern Hardwood	0	92	0	0	0	0	92
Red Pine	128	0	0	0	0	0	128
Total	148	92	0	0	0	0	240



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	45142022-Cut	29.0	4112 - Maple, Beech, Cherry Association	High Density Pole	61	Harvest	Single Tree Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand down to 80-90 ba. Concentrate on salvaging declining beech. Leave 3-5 beech per acre wherever possible.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.</p>									
22	45142022-Cut	29.0	4112 - Maple, Beech, Cherry Association	High Density Pole	61	Harvest	Single Tree Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand down to 80-90 ba. Concentrate on salvaging declining beech. Leave 3-5 beech per acre wherever possible.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.</p>									
42	45142042-Cut	50.6	4112 - Maple, Beech, Cherry Association	High Density Log	73	Harvest	Single Tree Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin residual ba down to 70-80 where beech volume is lower. In areas of high beech with bbd, salvage what beech is available and mark regeneration gaps where merchantable wood allows. Leave some live beech where possible (3-5 per acre where possible)</p> <p><u>Other Comments:</u> Alot of beech volume is dead or dying. Very nice quality stand of maple. Thin where possible to release advanced regeneration. Probably a small contract sale/ firewood.</p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.</p>									
43	45142043-Cut	94.2	42110 - Planted Red Pine	High Density Log	72	Harvest	Clearcut	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut stand with no retention of live trees except for witness trees. Standing trees within the stand after harvest create a hazard for aerial spraying of the stand for release and pest management.</p> <p><u>Other Comments:</u> The stream along the south edge of the stand will be buffered by 100'.</p> <p><u>Next Steps:</u> After harvest treatment is completed, the stand may be prescribed burned if necessary for site prep depending on amount of slash left on site. Trenching and hand planting of red pine seedling to acceptable regeneration levels will need to be completed within 2 years of the Timber Cutting Report date. After establishment of red pine regeneration, regeneration surveys need to be scheduled for 1 year and 3 years for monitoring of regeneration. Release as necessary determined by TMS.</p>									
47	45142047-Cut	20.1	42110 - Planted Red Pine	High Density Log	72	Harvest	Clearcut	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut stand with no retention of live trees except for witness trees. Standing trees within the stand after harvest create a hazard for aerial spraying of the stand for release and pest management.</p> <p><u>Other Comments:</u> The stream along the north edge of the stand will be buffered by 100'.</p> <p><u>Next Steps:</u> After harvest treatment is completed, the stand may be prescribed burned if necessary for site prep depending on amount of slash left on site. Trenching and hand planting of red pine seedling to acceptable regeneration levels will need to be completed within 2 years of the Timber Cutting Report date. After establishment of red pine regeneration, regeneration surveys need to be scheduled for 1 year and 3 years for monitoring of regeneration. Release as necessary determined by TMS.</p>									



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
49	45142049-Cut	13.2	42211 - Natural Red Pine, Mixed Deciduous	High Density Pole	72	Harvest	Clearcut	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut stand with no retention of live trees except for witness trees. Standing trees within the stand after harvest create a hazard for aerial spraying of the stand for release and pest management.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> After harvest treatment is completed, the stand may be prescribed burned if necessary for site prep depending on amount of slash left on site. Trenching and hand planting of red pine seedling to acceptable regeneration levels will need to be completed within 2 years of the Timber Cutting Report date. After establishment of red pine regeneration, regeneration surveys need to be scheduled for 1 year and 3 years for monitoring of regeneration. Release as necessary determined by TMS.</p>									
51	45142051-Cut	11.4	4112 - Maple, Beech, Cherry Association	High Density Pole	66	Harvest	Single Tree Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin overall ba to 80-90. Concentrate on salvaging beech wherever possible. Leave 1-3 beech per acre where possible. Leave 1-2 larg red pine per acre where possible.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce, red pine and white pine.</p>									
44	45142044-Other	97.4	42110 - Planted Red Pine	High Density Sapling	13	Other	Unspecified	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Monitor for RHPS and other pests.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Stand has been released and sprayed for RHPS previously.</p> <p><u>Next Steps:</u> If monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS. Continue to monitor.</p>									
48	45142048-Other	85.8	42110 - Planted Red Pine	High Density Sapling	16	Other	Unspecified	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Monitor for RHPS and/or other pests.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Plantation has been released during previous entry and sprayed for RHPS.</p> <p><u>Next Steps:</u> If monitoring shows that treatment is recommended, then spray when/ if necessary with appropriate pesticide as recommended by Forest Health Specialist/TMS. Continue to monitor.</p>									
53	45142053-Other	31.1	42110 - Planted Red Pine	High Density Sapling	9	Other	Unspecified	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Monitor for RHPS and/or other pests.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Plantation has been released during previous entry and sprayed for RHPS.</p> <p><u>Next Steps:</u> If monitoring shows that treatment is recommended, then spray when/ if necessary with appropriate pesticide as recommended by Forest Health Specialist/TMS. Continue to monitor.</p>									

**Total Treatment
Acreage Proposed: 461.9**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2 45142002-Cut	20.7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	59	Harvest	Clearcut with Reserves	Aspen, Birch	Cmpt. Review Proposal

Prescription Clearcut with any present Hemlock and White Pine as reserves. Leave 1-3 birch per acre.
Specs:

Other Comment: Very steep slope adjacent to us. and south of pipeline. Very small piece would even be operable.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

Limiting Factor and No Treatment Reason 2E: Too steep
 Very Steep Adjacent to US hwy 2.

Total Treatment Acreage Proposed: 20.7

Stand	Sault Ste. Marie Mgt. Unit		5 – Forested Stands			Compartment: 142
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
						General Comments:
2	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	20.7	59	81-110	Stand is steep ridge that runs along u.s. 2. Possibly harvest north portion next entry, mor4 aspen, but small dia. currently. Part along highway will not be merchantable.
3	4132 - Aspen, Jack Pine	Medium Density	9.9	27	51-80	Variable mixed stand of small poor quality deciduous and jp. The aspen is ok quality, but still quite small.
6	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	5.2	89	111-140	Variable stand on gradiating slope along u.s.2. Stand is mix of birch, mr, cedar, hemlock, wp and some aspen. Low ground and wet on southern end. Gradiates into purer cedar.
7	6132 - Mixed Lowland Forest with Cedar	Medium Density	24.5	14		Cut in 1996. Mack. mix of aspen, birch, bam, balsam. Cedar residual in pockets looks ok.
9	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	76.0	110		Mixed stand of variable quality cedar. Areas of w.p. overstory w/ hemlock, especially along escarpment. Obviously wetter along bottom lands along base of escarpment with numerous seeps.
10	4133 - Aspen, Mixed Pine	High Density Sapling	27.1	37		4-6" aspen mixed with a good amount of immature white pine. Some cherry and red maple scattered. Poor quality stand.
11	6120 - Lowland Cedar	High Density Pole	74.8	110		Mostly old, poorer quality cedar. Deer sign, but not a lot. Very wet ground around inside edge. Some open patches with tag. Hemlock preserve along fringe.
14	6120 - Lowland Cedar	High Density Pole	167.7	105		Large cedar stand. Varies from very wet in the east/northeast to not so wet and more species to west.
15	4130 - Aspen	High Density Sapling	34.7	26		CC in 1994. Mostlt aspen with a little mixed conifer, more to south.
17	6120 - Lowland Cedar	High Density Pole	101.0	100		Nice cedar stand. Some deer sign. Not much cedar regen. present. Wet along seep coming out from escarpment. variable with some areas heavier to balsam/ spruce.
18	4112 - Maple, Beech, Cherry Association	High Density Pole	48.0	69	51-80	Stand was thinned in 2006. A lot of residual beech is dying out and on the ground. Check for ba in 10 years. There is some very large striped maple and juneberry throughout the stand.
20	42340 - Upland Spruce/Fir	High Density Sapling	52.4	28		Cut in 1982. Stand of mixed immature aspen and balsam/spruce. Check in 10 years.
22	4112 - Maple, Beech, Cherry Association	High Density Pole	34.8	61	81-110	Stand was thinned in 1995, but has a lot of beech dying, which is lowering the current ba. Mostly is a pole stand now. Check for thinning in 10 years.
23	42111 - Planted Red Pine, Mixed Deciduous	High Density Sapling	9.3	10		Planted rp in 2000. Heavy rm brush. Consider for spray release.



S t a n d	Sault Ste. Marie Mgt. Unit		5 – Forested Stands			Compartment: 142
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
Data updated before 2:00 PM						
General Comments:						
24	4134 - Aspen, Spruce/Fir	High Density Sapling	9.8	28		Part of cc in 1982. Mostly aspen with scattered balsam.
25	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	38.8	90	81-110	Poorer quality cedar along lake shore. Very wet ground, with mix of mr, and some birch.
26	4130 - Aspen	High Density Sapling	11.5	21		Mix of aspen and maple regen. Scattered cherry. 10-20 ft. tall.
28	4112 - Maple, Beech, Cherry Association	High Density Pole	10.3	43	81-110	Stand runs along Paquin Creek and is mostly small pole sized beech/ maple. Not much merchantability now. some black cherry.
29	42110 - Planted Red Pine	Medium Density Log	129.0	72	111-140	Red pine thinned in 2009. rm nd beech brush understory. Leave for 10 years for age class considerations. cc next entry.
31	4112 - Maple, Beech, Cherry Association	High Density Pole	7.3	68	51-80	A lot of beech is already dead. Heavy beech regen. Check in 10 years after beech decline. Some striped maple scattered throughout.
32	4116 - Mixed N. Hardwood - Aspen	High Density Pole	19.1	45	81-110	Small dia. poles of mixed deciduous. Mr, aspen, cherry, beech of poor quality. Check in 10 years.
34	4134 - Aspen, Spruce/Fir	High Density Pole	132.5	32		CC in 1978-1983. Thick aspen poles, not yet mature. Check in 10.
36	4130 - Aspen	High Density Sapling	23.1	15		cc in 1995. mix of aspen with some birch, cherry and balsam.
37	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	34.5	44		Creek corridor of mixed deciduous and some conifer. White pine and hemlock in places. Tag alder wherever opening. Wet grass in open.
38	4116 - Mixed N. Hardwood - Aspen	High Density Sapling	14.3	26		Mixed stand of variable quality red maple, sugar maple, cherry, aspen, and balsam brush. Not much size yet, very brushy.
40	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	25.0	56		Creek corridor that is mix of everything. Ranges from rm/ birch to spruce/cedar w/ tag alder everywhere. No management potential ever.
42	4112 - Maple, Beech, Cherry Association	High Density Log	50.6	73	111-140	Nice stand of large mature maple and heavy mix of beech. Most beech has either died or is dying out due to bbd.
43	42110 - Planted Red Pine	High Density Log	94.2	72	111-140	thinned in 2006. Large diameter. Cc burn and replant this entry for age class diversity (holding stand opposite). Cut small clones of aspen to regenerate now. Leave any wp. Buffer edge along creek side for retention.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	42110 - Planted Red Pine	High Density Sapling	97.4	13		Planted in 1997. Thick good looking R3. Some natural jp mixed throughout.
45	4132 - Aspen, Jack Pine	High Density Sapling	6.1	15		Cc in 1995. Healthy aspen with mix of cherry and some jp.
46	4134 - Aspen, Spruce/Fir	High Density Sapling	37.6	26		cc in 1984, aspen with mix of maple and spruce and balsam.
47	42110 - Planted Red Pine	High Density Log	20.1	72	51-80	Large dia. rp. Mature stand approx. 80 ba, with rm understory. Kotar identifies as good pine site. ccand regenerate.
48	42110 - Planted Red Pine	High Density Sapling	85.8	16		Planted in 1994. Mixed with jp throughout.
49	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	13.2	72	111-140	Residual red pine w understory of mr and maple aspen. Look at for cc, decide whether to regenerate as rp or convert to aspen/mr.
50	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	20.0	25		Previous cc,mix bag of poor quality cherry, maple, birch, and balsam, and aspen. Check in 10 years.
51	4112 - Maple, Beech, Cherry Association	High Density Pole	11.4	66	81-110	stand is mix of rm, sm, beech, with some balsam and some scattered red pine. A lot of beech is dying out.n Leave and check in 10 years after beech.
53	42110 - Planted Red Pine	High Density Sapling	31.1	9		Planted in 2001. Some jp in places.
54	4119 - Mixed Northern Hardwoods	High Density Pole	30.9	67	81-110	Stand is mostly mr, with some yb and beech. Beech is dying. Thinned in 2006.
55	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	21.2	26		Stand is young jp with cherry and rm and some aspen that has filled in sandy opening. Should be merchantable in next 10-20 years.
56	4116 - Mixed N. Hardwood - Aspen	High Density Pole	27.9	45	81-110	Mixed bagof poor quality maple, birch, aspen, cherry with some scattered wp. Very sandy soil, poor site. Not merchantable yet unless chipped. Let go 10 years and see what happens.
58	4191 - Mixed Upland Deciduous with Conifer	Medium Density	20.9	19		Previous opening that has filled in with aspen, jp, and cherry. Could be mervhantable in 20 yrs?



Stand	Cover Type	Acres	Gen Cmts:
1	629 - Mixed non-forested wetland	3.2	
4	310 - Herbaceous Openland	1.2	
5	122 - Road/Parking Lot	6.8	
8	629 - Mixed non-forested wetland	6.7	
12	623 - Emergent Wetland	20.3	
13	3301 - Low Density Deciduous Tree	10.5	
16	629 - Mixed non-forested wetland	9.4	
19	629 - Mixed non-forested wetland	30.2	
21	122 - Road/Parking Lot	5.7	
27	122 - Road/Parking Lot	11.6	
30	629 - Mixed non-forested wetland	29.3	
33	310 - Herbaceous Openland	17.6	
35	310 - Herbaceous Openland	0.6	
39	310 - Herbaceous Openland	7.2	Pipeline r.ow.
41	3102 - Grass	16.8	Pipeline r.o.w.
52	310 - Herbaceous Openland	12.4	
57	710 - Sand, Soil	2.1	



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.

Data updated before 2:00 PM

Stand	SCA Type	SCA Name	Acres	Comments
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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.

Data updated before 2:00 PM

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
HCVA	Coastal Environmental Areas	The public designation process is defined by Part 323, Shorelands Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the Michigan Department of Environmental Quality (DEQ). This is an inactive program with no new areas currently under consideration by the DEQ.
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	Great Lakes Islands	Great Lakes Islands provide significant habitat for numerous species, including many rare plants and animals, several of which are endemic or largely restricted to the Great Lakes region. Due to their isolation, islands provide good examples of many Great Lakes-associated natural communities and ecosystems, and thus have potential to provide insights for understanding the consequences of human disturbance on the increasingly fragmented ecosystems of the mainland.
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.