



**Escanaba Forest Management Unit
Compartment Review Presentation
Compartment # 55 Entry Year: 2013
Compartment Acreage: 1049 County: Menominee**

Revision Date: July 18, 2011

Stand Examiner: Joe Durbin, FMD; Bill Rollo, Wildlife Division

Legal Description: T35N R25W, Sections 03 and 10

Management Goals: This compartment is part of the Green Bay Lake Plain Management Area and is located about 15 miles northeast of Stephenson, Michigan. It is a mixture of upland and lowland types. Upland types are about 77 % of the compartment and include mostly northern hardwoods with aspen and spruce/fir forest types. Lowland types are about 23% and include mostly lowland deciduous and lowland brush with mixed conifer and lowland deciduous timber types. The water type is the Big Cedar River and Elwood Creek. There are several unnamed streams through the compartment and no lakes.

Approximately 339 acres comprising 11 stands are proposed for treatment. Of the proposed treatments, approximately 101 acres (4 stands) are clearcut with reserves, 203 acres (5 stands) are partial cuts and 35 acres (2 stands) are proposed for treatment of invasive species—not the entire stands are to be treated, only the infested areas.

Soil and Topography: Topography is level to gently rolling. The soils are primarily well-drained sands, loams and mucks/peats. The major soil series include the complexes of Deford-Wainola-Rousseau, Tawas-Deford, Onaway-Rousseau and Bowers-Ingalls and series of Solona and Wainola.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is part of a mostly contiguous block of state ownership with a few private holdings mainly along the Big Cedar River and the county road “Camp O” Road. Most private ownership is recreational for hunting, fishing and trapping and only seasonally occupied with access through state-owned land. One parcel has a permanent residence located in the southern portion of the compartment along county road Town Road.

Unique, Natural Features: The Big Cedar River meanders north to south through the eastern portion of the compartment. Also, Elwood Creek flows west to east through the southern portion.

Archeological, Historical, and Cultural Features: There are no known features.

Special Management Designations or Considerations: Portions of the compartment along the Big Cedar River are proposed SCA riparian corridor.

Watershed and Fisheries Considerations: The Big Cedar River meanders north to south through the eastern portion of the compartment. Elwood Creek flows west to east through the southern portion. Several unnamed tributaries flow to the river. No named lakes lie with the compartment.

Wildlife Habitat Considerations: This compartment is within the Green Bay Lake Plain Management Area. The area demonstrates a natural propensity to grow white pine and balsam fir--species which are found in the understory of many aspen and maple stands. These mesic conifer species will be encouraged in a number of stands that are being treated as final-stage shelterwood cuts. These treatments will release the

advanced regeneration that was promoted by harvests last decade. Upland conifer stands are utilized by 60-80 wildlife species in the U.P. Northern hardwood stands exhibit good vegetative diversity in this area, and diverse tree species (beech, hemlock, upland cedar, yellow birch, etc.) will continue to be encouraged in such stands to benefit wildlife. The riparian corridor along the Big Cedar River will be maintained as a special conservation area to promote mature forest conditions for wildlife that utilize this habitat. These mature forest areas near the river will provide large diameter trees, snags, cavity trees, and dead woody debris on the forest floor—attributes that are important to a large number of wildlife species.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel. There is approximately 50 feet of relief in the compartment. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Trenton Group underlies the glacial drift and is quarried for dolomite/stone west of Escanaba. A gravel pit is located on state land in the southern portion of section 10 along the Town Road. No economic oil and gas production has been found in the UP.

Vehicle Access: The main access into the compartment is from the south through a locked gate off the Town Road and the Camp “O” Road. The Forest Islands ORV Trail uses this forest road. The portion east of the Big Cedar River is accessed from County Road 551--Cedar River Road. Access is also available from the north via a forest road used by the Forest Islands ORV Trail.

Survey Needs: For the proposed treatments, potentially seven survey corners maybe needed.

Recreational Facilities and Opportunities: Forest Island ORV Trail utilizes several forest roads within the compartment. Other recreational opportunities within this compartment include hunting, trapping, fishing and horseback riding.

Fire Protection: Access is very good throughout most of this compartment and the timber types in the area are generally low risk for fire hazard. Some of the interior more remote areas may present a greater fire hazard.

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**

Table 1 – Total Acres by Cover Type and Age Class

Joseph Durbin : Examiner



	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 +		Unretn Age
Aspen	0	79	0	90	48	0	0	0	0	0	0	0	0	0	0	218
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	19
Hemlock	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16
Herbaceous Openland	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Lowland Aspen/Balsam Poplar	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	28
Lowland Deciduous	0	0	10	0	0	0	0	25	48	0	0	0	0	0	0	84
Lowland Mixed Forest	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	28
Lowland Shrub	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Mixed Upland Deciduous	0	36	0	10	21	0	0	0	0	0	0	9	0	0	0	76
Northern Hardwood	0	0	0	0	0	0	40	262	47	23	0	55	0	0	0	426
Paper Birch	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Upland Mixed Forest	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
Upland Spruce/Fir	0	0	29	9	23	0	0	0	0	0	0	0	0	0	0	60
Water	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Total	80	116	48	137	92	0	0	73	287	95	38	0	82	0	0	1049



Table 2 – Proposed Treatment Summaries

Escanaba Mgt. Unit
Year of Entry 2013

Compartment 055
Total Compartment Acres: 1049

Acres by Treatment Type

Commercial Harvest - 303	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 35	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Lowland Deciduous	48	0	0	0	0	0	48
Lowland Mixed Forest	28	0	0	0	0	0	28
Northern Hardwood	25	202	0	0	0	0	227
Total	101	202	0	0	0	0	303



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
9	33055009- CCw/R	25.1	4119 - Mixed Northern Hardwoods	Medium Density Pole	75	Harvest	Clearcut with Reserves	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
<p><u>Prescription</u> Clear-cut with Reserves. Final cut of shelter-wood harvest initiated last entry. Cut all hardwood species, balsam fir, spruce and tamarack, except retain hemlock, cedar, pine and beech and mark to retain scattered ash and birch trees in lowland swales for seed source.</p> <p><u>Specs:</u></p> <p><u>Other</u> This is the final treatment of a previous shelter-wood cut. Forest Islands ORV Trail does not traverse through the stand but the trail is to be well signed for logging activity and logger must use extreme care when operating in the stand to avoid ORV users. No decking is allowed along the trail and hauling is restricted to week days only during the ORV season--weekend hauling (high ORV use) is not allowed.</p> <p><u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration includes a mixture of suckers, stump sprouts and seed origin seedlings of current species. Check for regeneration success next entry OI.</p> <p><u>Steps:</u></p>									
17	33055017-SC	32.4	4112 - Maple, Beech, Cherry Association	High Density Pole	69	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Select cut to 70-80 residual basal area. Retain hemlock, yellow birch and beech. Create some canopy gaps to encourage regeneration.</p> <p><u>Specs:</u> Maintain species diversity. Follow in-stand retention guidelines.</p> <p><u>Other</u> Stand is located along County Road-551. Maintain appropriate buffer along drainage.</p> <p><u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration includes a mixture of stump sprouts and seed origin seedlings of current species. Balsam fir and white pine will probably regenerate well. Check for regeneration success next entry OI.</p> <p><u>Steps:</u></p>									
21	33055021- CCw/R	27.8	6139 - Mixed Lowland Forest	Low Density Pole	66	Harvest	Clearcut with Reserves	6139 - Mixed Lowland Forest	Cmpt. Review Proposal
<p><u>Prescription</u> Clear-cut with Reserves. Final cut of shelter-wood harvest initiated last entry. Cut all hardwood species, balsam fir, spruce and tamarack, except retain hemlock, cedar, pine, yellow birch and beech and mark to retain scattered ash and birch trees in lowland swales for seed source.</p> <p><u>Specs:</u></p> <p><u>Other</u> This treatment is the final harvest of a previously started shelter-wood cut. Maintain appropriate buffer along drainage.</p> <p><u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration includes a mixture of suckers, stump sprouts and seed origin seedlings of current species. Check for regeneration success next entry OI.</p> <p><u>Steps:</u></p>									
22	33055022-SC	7.4	4112 - Maple, Beech, Cherry Association	High Density Pole	61	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Select-cut to 70-80 residual basal area. Retain hemlock and beech. Follow in-stand retention guidelines.</p> <p><u>Specs:</u></p> <p><u>Other</u> Follow in-stand retention guidelines. Forest Islands ORV Trail does not traverse through the stand but the trail is to be well signed for logging activity and logger must use extreme care when operating in the stand to avoid ORV users. No decking is allowed along the trail and hauling is restricted to week days only during the ORV season--weekend hauling (high ORV use) is not allowed.</p> <p><u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration includes a mixture of stump sprouts and seed origin seedlings of current species. Check for regeneration success next entry OI.</p> <p><u>Steps:</u></p>									
23	33055023- CCw/R	12.9	6115 - Lowland Ash	High Density Pole	81	Harvest	Clearcut with Reserves	6115 - Lowland Ash	Cmpt. Review Proposal
<p><u>Prescription</u> Clear cut with Reserves--Cut all trees except cedar, hemlock, pine and yellow birch. Also, mark scattered (green tree) trees to retain for seed source.</p> <p><u>Specs:</u></p> <p><u>Other</u> Maintain appropriate buffer along drainage.</p> <p><u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration includes a mixture of suckers, stump sprouts and seed origin seedlings of current species. Check for regeneration success next entry OI.</p> <p><u>Steps:</u></p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	33055024-SC	125.1	4112 - Maple, Beech, Cherry Association	High Density Log	75	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Select-cut to 80-90 residual basal area. Retain hemlock and most of the beech. Follow in-stand retention guidelines. Create some canopy gaps <u>Specs:</u> for regeneration.</p> <p><u>Other</u> Follow in-stand retention guidelines. Forest Islands ORV Trail is to be well signed for logging activity and logger must use extreme care when <u>Comments:</u> operating in the stand to avoid ORV users. No decking is allowed along the trail and hauling is restricted to week days only during the ORV season--weekend hauling (high ORV use) is not allowed. Promote down woody debris in this stand since it is located behind a gated road and do not allow firewood gathering.</p> <p><u>Next</u> Acceptable regeneration includes a mixture of stump sprouts and seed origin seedlings of current species. Check for regeneration success next <u>Steps:</u> entry OI.</p>									
37	33055037-SC	11.0	4112 - Maple, Beech, Cherry Association	High Density Log	90	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Select-cut to residual basal area of 80-90. Retain hemlock, cedar and beech. Maintain species diversity. Follow in-stand retention guidelines. <u>Specs:</u> Create some canopy gaps for regeneration.</p> <p><u>Other</u> Forest Islands ORV Trail does not traverse through the stand but the road is to be well signed for logging activity and logger must use extreme <u>Comments:</u> care when operating in the stand to avoid ORV users. No decking is allowed along the trail and hauling is restricted to week days only during the ORV season--weekend hauling (high ORV use) is not allowed.</p> <p><u>Next</u> Acceptable regeneration includes a mixture of stump sprouts and seed origin seedlings of current species. Check for regeneration success next <u>Steps:</u> entry OI.</p>									
38	33055038- CCw/R	35.5	6115 - Lowland Ash	High Density Pole	82	Harvest	Clearcut with Reserves	6115 - Lowland Ash	Cmpt. Review Proposal
<p><u>Prescription</u> Clear-cut with Reserves. Final cut of shelter-wood harvest initiated last entry. Cut all hardwood species, balsam fir, spruce and tamarack, <u>Specs:</u> except retain hemlock, cedar, pine, yellow birch and beech and mark to retain scattered ash and birch trees in lowland swales for seed source.</p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration includes a mixture of suckers, stump sprouts and seed origin seedlings of current species. Check for regeneration <u>Steps:</u> success next entry OI.</p>									
40	33055040-SC	26.4	4110 - Sugar Maple Association	High Density Pole	70	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Select-cut to residual basal area of 80-90. Retain hemlock, cedar and beech. Maintain species diversity. Follow in-stand retention guidelines. <u>Specs:</u> Create some canopy gaps for regeneration. Clear-cut Scotch pine plantation in the northeastern portion of the stand and thin the white spruce plantation east of the Scotch pine plantation to 90-100 residual basal area.</p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration includes a mixture of stump sprouts and seed origin seedlings of current species. Check for regeneration success next <u>Steps:</u> entry OI.</p>									
44	33055044- Spray	26.2	4130 - Aspen	Medium Density Saplin	6	Pesticide	Injector	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Pest control. Spray/inject all autumn/Russian olive shrubs. Cut and remove scotch pine trees. Most of the olive is in the southern portion of the <u>Specs:</u> stand along the boundary of stand 44. Most of the scotch pine is in the northern portion of the stand near the boundary of stand 40. How will pest treatments be funded?</p> <p><u>Other</u> SCA located along river. <u>Comments:</u></p> <p><u>Next</u> Periodically check for effectiveness of treatment. <u>Steps:</u></p>									

**Table 3 -- Treatments Prescribed
with No Limiting Factor**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
46 33055046-Spray	9.1	4134 - Aspen, Spruce/Fir	Medium Density Saplin	8	Pesticide	Hand Sprayer	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription: Pest control. Treat scattered pockets of phragmites. Phragmites was found along the north side of Camp "O" road.

Specs:

Other: How will pest treatments be funded?

Comments:

Next: Periodically check for effectiveness of treatment.

Steps:

**Total Treatment
Acreage Proposed: 338.8**

Table 4 -- Treatments Prescribed with a Limiting Factor



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: 0

**Out of YOE -- Treatments
Prescribed with No Limiting Factor**

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
33002_OutOfY OE-Cut	0.7				Harvest	Clearcut with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal

Prescription Final harvest this stand, leaving some seed trees. Harvest this stand with stand 13 in comp 1.

Specs:

Other Decent quality tamarack and spruce stand.

Comments:

Next Manage this stand for a mix of tamarack and spruce primarily, but a mix with other lowland species is acceptable.

Steps:

**Total Treatment
Acreage Proposed: 0.7**



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Pole	17.7	34		Red and white pine stand in the north western portion of the stand. Mr/A type along the eastern border of the stand (includes red maple poles, quaking aspen log, white pine log, red pine log, hemlock log). Other observed species: balsam fir, red maple, red pine, white spruce.
2	4134 - Aspen, Spruce/Fir	High Density Pole	30.7	35		Stand about 60% upland and 40% lowland. In north eastern portion of stand is an upland area of Mr/p birch which could be treated next entry. Several pockets of hemlock with some red and white pine are scattered within the stand. Other observed species: hemlock, cedar. Some lowland areas have tag alder and ash.
3	6115 - Lowland Ash	High Density Pole	25.4	79	111-140	Stand includes other small timbered stands: black spruce saplings/poles stand in NE corner and paper birch/red maple poles central area and pockets of hemlock and cedar log/pole. Observed quite a bit of blown-down/leaning cedar. Other observed species: black spruce, white pine, yellow birch, hemlock, balsam fir.
4	42350 - Upland Hemlock	Medium Density Log	15.6	92		Hemlock and white pine on ridge Last treated in 1988.
5	4191 - Mixed Upland Deciduous with Conifer	Medium Density	36.4	4	51-80	Red maple are decent but some are browsed. Some areas are nice regeneration to quaking aspen and balm. Stand is about 65-70% upland and 35-30% lowland. Occasional pockets of hemlock and scattered hemlock, cedar, green ash and red maple. Other species observed: red pine, balm and green ash.
6	42330 - Upland Fir	Medium Density	8.5	22		Scattered white pine and hemlock residual log/poles. Last treated in 1988.
8	4112 - Maple, Beech, Cherry Association	High Density Log	41.0	80	81-110	Nice quality logs and poles Some hard and soft snags observed. Leatherwood common Mostly upland (about 90% upland, 10% lowland). Stand last treated in 2006. Other species observed: beech, black cherry.
9	4119 - Mixed Northern Hardwoods	Medium Density Pole	25.1	75	81-110	Mostly upland with some lowland (70%-30%). Nice red maple stumps sprouts (4-6 feet tall) in some areas. Low areas have more ash component. Other species observed: white spruce, beech.
10	4112 - Maple, Beech, Cherry Association	High Density Pole	33.3	70	81-110	Stand is mostly upland (70%) with northern portion lowland with a small stream. Northwestern portion is more paper birch/red maple type. Lowland areas are more ash. Some upland areas could be selectcut now but could wait until next entry. Stand last treated in 2000. Other observed species: beech, balsam fir, white pine, yellow birch, cedar and quaking aspen.
11	4110 - Sugar Maple Association	High Density Log	6.0	80	111-140	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat. Nice quality sugar maple poles and log trees. Some den trees and snags. Cedar along river. Other species observed: paper birch.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	4190 - Mixed Upland Deciduous with Cedar	High Density Log	8.8	110	141-170	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat. Flood plain of river. Found grape vine, hard and soft snags and den trees. Other specie observed: paper birch.
13	4119 - Mixed Northern Hardwoods	High Density Pole	22.8	70	81-110	Mostly 70% upland with about 30% lowland. Regeneration mostly unsuccessful due to high residual basal area and deer browse. Lowland areas are mostly impeded drainage and ash swales. Other species observed: beech, yellow and paper birch, balsam fir, hemlock--all poles.
14	4119 - Mixed Northern Hardwoods	High Density Log	11.7	90	111-140	SCA--Big Cedar River riparian corridor and small stream buffer. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat. Observed overmature quaking aspen log trees and scattered white spruce log trees Other species observed: white spruce log, quaking aspen log, hemlock poles, cedar poles, beech saplings, paper birch poles.
15	42360 - Upland Cedar	Medium Density Log	7.5	115	111-140	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat. Flood plain. Lots of grape vine in places. Other species observed: white spruce, basswood.
16	4130 - Aspen	High Density Sapling	80.8	26		North half cut in 1990; south half cut in 1984. Mostly upland but some lowland in NW portion of the stand. Scattered beech and in pockets on ridge tops. No sign of beech bark disease. Other species observed: red maple saplings/stump sprouts.
17	4112 - Maple, Beech, Cherry Association	High Density Pole	32.4	69		Mostly upland 80% with lowland 20% in wetter areas and swales. Last treated in 1990. Pockets of hemlock and cedar. A small opening is filling in. A small red pine log area near opening. Occasional beech and yellow birch poles and saplings.
19	4110 - Sugar Maple Association	High Density Log	54.7	115	111-140	SCA--Big Cedar River riparian corridor and visual road buffer. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat. Stand is variable with pockets of hemlock and cedar and pockets red pine and beech. Portions of stand are flood plain. Observed areas with very large hardwood trees with snags and den trees. Very few white pine. Found grape vines scattered through stand along the river. Observed a vernal pool adjacent to an old logging road leading to the river bank. No sign of eagle nest. Other species observed: white spruce logs, cedar poles, yellow and paper birch poles.
20	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	20.6	30		North and south portions are upland with the central portion lowland with ash and tag alder. Patches of cedar poles and some scattered hemlock poles and beech poles, other areas have pockets of quaking aspen and balm. Grassy opening has filled in with balsam fir and balm. Other species observed: beech poles hemlock poles/logs, cedar poles, balm saplings.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	6139 - Mixed Lowland Forest	Low Density Pole	27.8	66	51-80	Mostly upland 70% with lowland 30%. Last treatment shelterwood in 2006-07. Regeneration success slow due to high residual basal area and deer browse though some stump sprouts have grown above browse height. Other species observed: yellow and paper birch.
22	4112 - Maple, Beech, Cherry Association	High Density Pole	7.4	61	141-170	Mostly upland but some lowland, too. Other species observed: cedar poles, black ash poles, balsam fir poles, paper birch poles.
23	6115 - Lowland Ash	High Density Pole	12.9	81	81-110	Stand mostly lowland 80% but some upland 20%. EAB could devastate this stand. Low ridge with road in SE corner of the stand. Other species observed: balm log, yellow and paper birch poles.
24	4112 - Maple, Beech, Cherry Association	High Density Log	125.1	75	111-140	Stand is rolling terrain. Mostly upland 90% with some lowland 10%. More hemlock in NW portion in the understory. Occasional woly beech trees. Wetter portions with cedar, ash and/or hemlock. Some areas are heavier to sugar maple with nice quality poles and logs. Stand last treated in 1999-2000. Other species observed: white ash, basswood, beech, paper and yellow birch, hemlock, cedar, quaking aspen--all species poles and/or logs.
25	4112 - Maple, Beech, Cherry Association	High Density Pole	22.1	75	111-140	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat. Mostly upland but some areas with impeded drainage and flood plain. Most of the banks are high and areas are eroding on the curves. Some areas have more paper birch and pockets of hemlock and some of cedar. Other species observed: yellow birch poles, hemlock and white pine logs and beech, white ash, cedar, and ironwood poles.
27	4319 - Mixed Upland Forest	Low Density Sapling	9.8	12		Mostly upland 80% with some lowland 20%. Crown closure is variable but mostly 25-50% with areas that are 50-75 and some 0-25%. Pockets are hemlock and/or cedar residual from last treatment. Some cedar residual have blown over. Some lower areas have scattered tag alder.
28	4130 - Aspen	Medium Density	62.0	4		Stand about 50% upland and 50 lowland. Most of the lower ground is along the perimeter. Residual trees are beech, ash and elm. Some of the elm have died. Some lower areas have ash stump sprouts growing well and above the browse line and tag alder. Most of the stand is medium stocked but some areas are well stocked while other areas are poorly stocked but filling in.
29	4110 - Sugar Maple Association	High Density Log	7.1	75	141-170	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat. Most of stand high bank but northeast portion is flood plain. Occasional cedar along bank. Beaver working aspen trees near river. A few beech and ironwood seedlings/sapling throughout the stand but not enough to tally. Other species observed: white ash, basswood, red maple, quaking aspen, paper birch and beech.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	6120 - Lowland Cedar	Medium Density Log	11.4	110	171-200	Mostly cedar in the northern portion but more ash in the southern portion. Observed no deer sign inhabiting area but flushed several grouse. Other species observed: elm, green ash and paper birch.
32	6112 - Lowland Aspen	High Density Pole	28.3	25		Most of stand (north and south portions) is upland but with occasional impeded drainage but the central portion is lowland ash type. NE corner is mature P type with balm and aspen and could be treated in the future. The more upland areas have somewhat larger trees 7-8" dbh. Other species observed: balsam fir, white spruce, red maple, cedar--all poles.
33	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	10.0	18		Mostly lowland but some upland along the east boundary of stand. Mostly full canopy but some areas more open with tag alder. Southern portion mostly ash and northern and central areas more balm. Other species observed: paper birch, white spruce, quaking aspen and cedar.
34	42330 - Upland Fir	Low Density Sapling	28.7	16		Stand is variable. Most of the stand is 25-50% stocked, but some areas are fully stocked while other are quite open but filling in with balsam fir. Other species observed: white pine, beech and tamarack.
35	4140 - Other Upland Deciduous	High Density Pole	5.4	69	141-170	SCA--Small unnamed stream riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat. Several pockets of cedar. Other species observed: balsam fir, yellow birch.
36	4191 - Mixed Upland Deciduous with Conifer	Low Density Sapling	9.9	20		Stand a real mix of types--areas of balm, aspen, hemlock balsam fir, cedar, open and a sand pit. Other species observed: beech, red maple.
37	4112 - Maple, Beech, Cherry Association	High Density Log	11.0	90	111-140	Last treated in 1980's. Other species observed: beech, hemlock, cedar, balsam fir logs/poles.
38	6115 - Lowland Ash	High Density Pole	35.5	82	81-110	Site is not really lowland but not upland either--perhaps just high water certain times of the year. First stage of shelterwood harvest in 2002. Regeneration was poor due to high residual basal area. Other species observed: yellow and paper birch, white spruce, beech, cedar, basswood.
40	4110 - Sugar Maple Association	High Density Pole	26.4	70	111-140	Found occasional large wolfy beech in the stand. Other species observed: yellow birch, cedar and beech. NE corner has 2 small plantations. East plantation is white spruce 32 years old, ave 6 inches dbh 2-3 stick/tree. West plantation is scotch pine also 32 or 33 years old and very poor form, dead tops and very crooked. It is the seed source for scotch pine seedlings in the opening to the south and it should be treated by clearcut by chipping, if possible. Also, found autumn/Russian olive in this plantation.

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Escanaba Mgt. Unit

5 – Forested Stands

Compartment: 055
Year of Entry: 2013

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	42330 - Upland Fir	Medium Density Pole	22.7	30		Mostly upland about 65% but some lowland about 35%. Stand is mostly balsam fir type with some areas more lowland ash and there is a drain/swale in the middle of the stand that is grassy with tag alder. Some portions are nearly mature but too small to map and could be residual trees from treatment in 1990. No spruce budworm damage in the stand. SE corner of stand is green ash type. Other species observed: cedar, paper birch.
43	4130 - Aspen	High Density Sapling	9.1	20		Mostly upland 80% with some lowland 20%. Most of stand is aspen but some areas are heavier to balm.
44	4130 - Aspen	Medium Density	8.2	6		Mostly well stocked but some areas are more open. Russian/autumn olive is dense in most of stand.
46	4134 - Aspen, Spruce/Fir	Medium Density	9.1	8		Mostly upland 75% with some lowland 25%. Found phragmites along the north side of Camp O Road. Other species observed: green ash poles and red maple saplings/stump sprouts.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
7	629 - Mixed non-forested wetland	13.5	No	Unspecified	marsh grass Small creek through stand.
18	50 - Water	20.6	No	Unspecified	Big Cedar River
26	6220 - Alder/willow	17.6	No	Unspecified	Hemlock and hardwood on islands along the west border could be managed with the adjacent compartment to the west.
30	50 - Water	1.3	No	Unspecified	Big Cedar River
39	50 - Water	1.8	No	Unspecified	Big Cedar River
41	3102 - Grass	17.4	No	Low (NonForested)	<p>SCA--Big Cedar River riparian corridor. Forest conditions will be maintained to promote snags and dead woody debris for wildlife habitat.</p> <p>Grassy opening with scattered tag alder in the south eastern portion of stand and white spruce along the perimeter Occasional scotch pine seedlings/sapling mostly in the northern portion of the stand. Recent deer blind in middle of the stand on low hill</p>
45	6220 - Alder/willow	8.3	No	Low (NonForested)	<p>SCA--Elwood Creek riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.</p> <p>Portions are fully stocked Ash in the flood plain in the north east portion of the stand and portions along the creek.</p>



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
11	Unique Site - SCA	33055011	6.0	SCA-Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
12	Unique Site - SCA	33055012	8.8	SCA-Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
14	Unique Site - SCA	33055014	11.7	SCA--Big Cedar River and small creek riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
15	Unique Site - SCA	33055015	7.5	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
19	Unique Site - SCA	33055019	54.7	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
25	Unique Site - SCA	33055025	22.1	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
29	Unique Site - SCA	33055029	7.1	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
35	Unique Site - SCA	33055035	5.4	SCA-Small stream riparian corridor-small stream feeder to Elwood Creek. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
7	Unique Site - SCA	NF_33055007-SCA	13.5	SCA-Small stream riparian corridor and buffer-small stream is a feeder to Elwood Creek. This area is part of a larger wetland complex located to the west and along a small feeder stream to Elwood Creek. This area provides habitat for sensitive grassy wetland plant and wildlife species.
26	Unique Site - SCA	NF_33055026-SCA	17.6	SCA-Small stream riparian corridor and buffer-small stream is a feeder to Elwood Creek. This area is part of a larger wetland complex located to the west and along a small feeder stream to Elwood Creek. This area provides habitat for sensitive wetland plant and wildlife species. On the included islands, mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.

**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
41	Unique Site - SCA	NF_33055041-SCA	6.2	SCA--Big Cedar River riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.
45	Unique Site - SCA	NF_33055045-SCA	8.3	SCA-Elwood Creek riparian corridor. Mature forest conditions will be maintained to promote large diameter trees, cavities, snags and dead woody debris for wildlife habitat.



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.

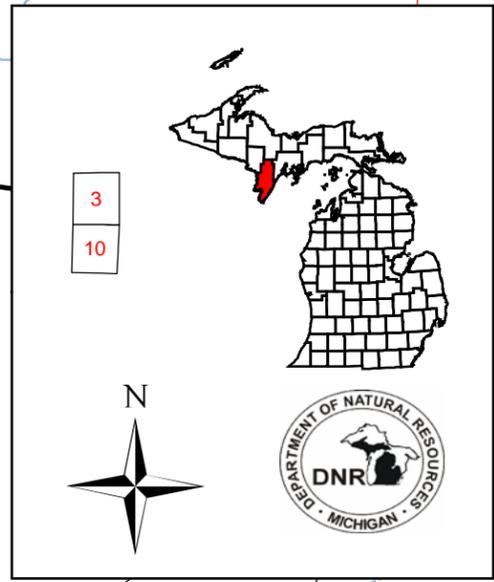
ERA = Ecological Reference Area
 HCVA = High Conservation Value Area
 SCA = Special Conservation Area

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.

Cover Type & Treatment Map

Compartment 55
 T35N, R25W, Sec. 3, 10
 County: Menominee
 Unit: Escanaba
 YOE: 2013
 Acres: 1,052 GIS Calculated
 Stand Examiner: Joe Durbin
 Map Revised: 7/28/2011
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- Remonumented Section Corners
- GPS Survey Corner
- Highway
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- State Highway
- Motorcycle (DNR Sticker)
- Motorcycle (SOS License)
- ORV Trail
- ORV Route
- ORV Trails
- ORV Routes
- Gate
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Selection (Group, Single Tree)
- Pesticide

Forest Stands

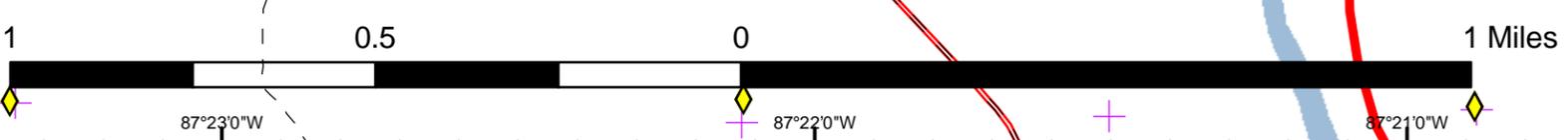
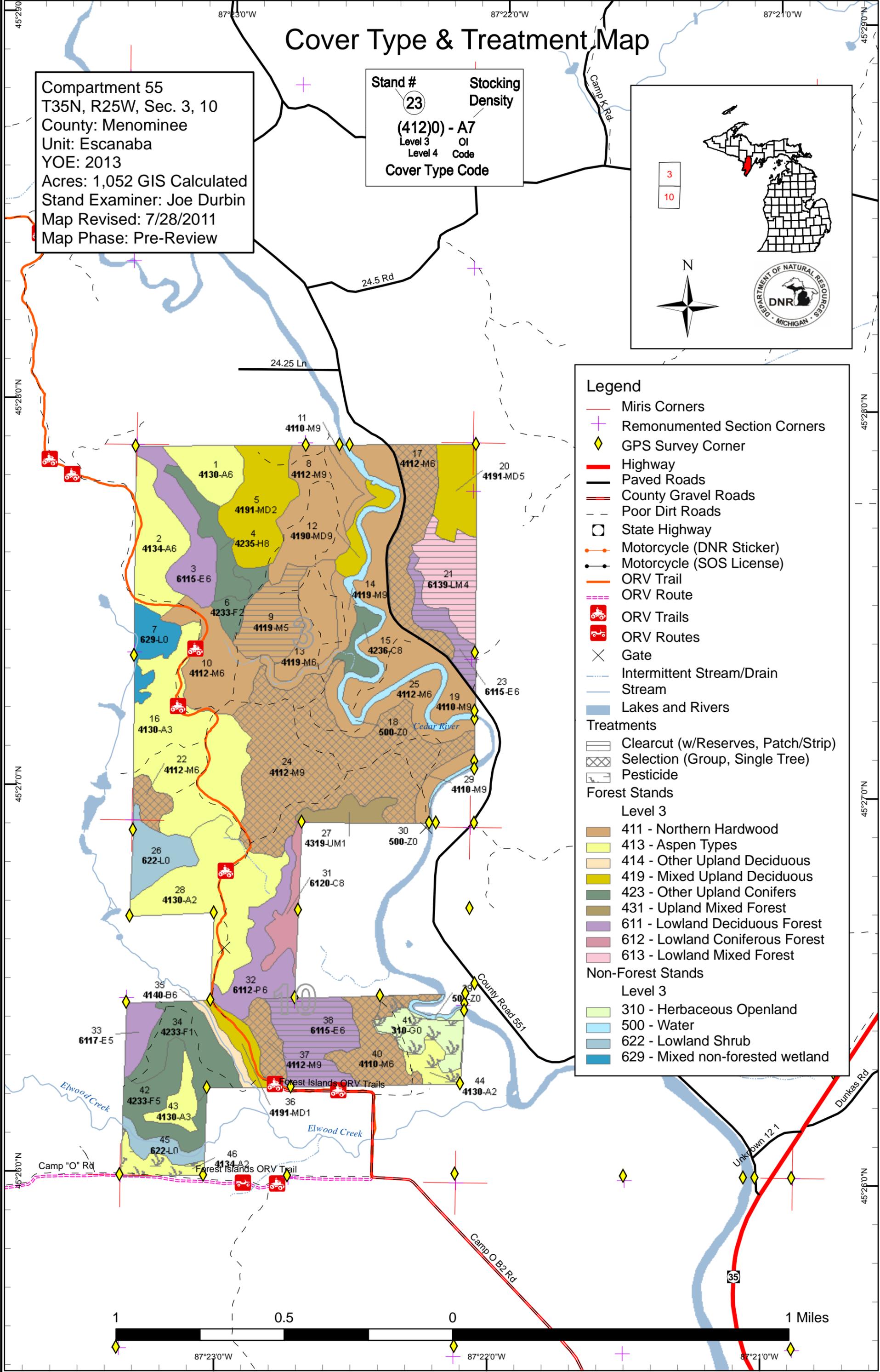
Level 3

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

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland



Stand Boundary Map

Compartment 55
 T35N, R25W, Sec. 3, 10
 County: Menominee
 Unit: Escanaba
 YOE: 2013
 Acres: 1,052 GIS Calculated
 Stand Examiner: Joe Durbin
 Map Revised: 7/28/2011
 Map Phase: Pre-Review

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

Legend

- Miris Corners
- ◆ Remonumented Section Corners
- ◆ GPS Survey Corner
- Highway
- Paved Roads
- County Gravel Roads
- - - Poor Dirt Roads
- State Highway
- ORV Trail
- ORV Route
- ORV Trails
- ORV Routes
- × Gate
- Intermittent Stream/Drain
- Stream
- Stand Boundaries

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland

Forest Stands

Level 3

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

