



ESCANABA FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 029 ENTRY YEAR: 2011

Compartment Acreage: 1206 County: Menominee

Revision Date: August 5, 2009

Stand Examiner: Joe Durbin, Forester FMFM; Bill Rollo and Craig Albright, Wildlife Division

Legal Description: T34N R28W Sections 5, 6, and 7.

Management Goals: This compartment is a mix of upland and lowland forest and non-forested types. Upland types are primarily aspen, northern hardwood, red and white pine and oak. Lowland types are mostly cedar and swamp conifer, lowland hardwood and lowland brush. Where appropriate and possible, white pine will be encouraged to regenerate. Of the proposed treatments, 93 acres (3 stands) of over-mature aspen are recommended for final harvest with reserves, 11 acres (1 stand) of white pine is recommended for thinning, 7 acres (1 stand) of white pine is recommended for selection cut and 83 acres (5 stands) of upland hardwood are recommended for selectioncut or shelterwood treatment. Several stands are known to contain pockets of oak wilt and will be treated appropriately.

Soil and Topography: The topography is mostly gently rolling to level. The soils are primarily well drained to excessively well-drained sands and poorly-drained deep muck and peat. The major soil series are Onaway, Rubicon, Lupton, Tawas and Rousseau. The Menominee River flows along the southern boundary of the compartment and the state of Michigan owns approximately 3/8 mile of river frontage.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is part of a block of state land that is about 12 miles west and south of Stephenson, Michigan. State-owned land and several private parcels lie north, west and east of this compartment. The southern boundary is the Menominee River and Wisconsin. Several private in-holdings are used primarily for recreation and cross state-owned land to access their property. Apparently there are no permanent residents within the compartment. One private structure lies on state land and the trespass is in the process of rectification.

Unique, Natural Features: This compartment borders the Menominee River. Burke Creek flows through the eastern portion of the compartment and into the Menominee River.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None known

Special Management Designations or Considerations: The floodplain forest along the Menominee River contains tree species (silver maple, hackberry, hickory, witch hazel, etc.) that typically are found more southerly. Maintenance of this diversity is desired.

Watershed and Fisheries Considerations: In the eastern portion of the compartment, Burke Creek and two tributaries flow from north to south to the Menominee River. The Menominee River is the southern boundary.

Wildlife Habitat Considerations: This compartment contains mixed upland forest of aspen, oak, and pine in the north and grades into northern and lowland hardwood forest in the south near the Menominee River. Maintenance of vegetative diversity will be a key consideration in harvest treatments. Depending upon the

cover type, various tree species (such as oak, hemlock, cedar, pine, and spruce) will be maintained in harvest units.

Many stands in this compartment were designated a “Special Conservation Area” (SCA) during past compartment reviews to promote mature forest conditions in a largely early-successional landscape (22% of the compartment is aspen less than 30 years old). SCA stands in the northern portion of the compartment are recommended for removal from this designation at this time because they are largely lowland brush or lowland mixed forest without mature forest attributes. Stands adjacent the Menominee River and Burke Creek in the southern portion of the compartment will remain in SCA status to provide older forest conditions near the riparian corridors.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of end moraines of medium and coarse-textured till and lacustrine (lake) sand & gravel. The glacial drift thickness varies between 10 and 50 feet. The Cambrian Munising Formation underlies the glacial drift. The Munising may have been used as a building stone previously and it overlaps Precambrian aged rocks, which may have metallic and nonmetallic mineral potential. This Compartment is three miles south of an active metallic mineral leased area. A gravel pit is located in Section 7 and potential appears to be good on the uplands. No economic oil and gas production has been found in the UP.

Vehicle Access: Sturgeon Landing Road, a gravel county road, enters the compartment at the west boundary. The Snakey Lake Road, a good dirt state forest road, accesses the southern portion of the compartment. Several 2-track roads originating at the Sturgeon Landing Road access the western and northern portions of the compartment.

Survey Needs: None for the recommended treatments.

Recreational Facilities and Opportunities: There are no developed recreation facilities. Popular recreation includes hunting, fishing, trapping and snowmobiling.

Fire Protection: The compartment has good access on gravel county and dirt roads. For the recommended treatments, no heavy slash areas are anticipated. A thirty acre pine plantation lies in section 6 and several pine types are scattered within the compartment but do not present high fire potential.

Additional Compartment Information: Resolution of the Chaltry camp trespass is in-progress.

****** Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

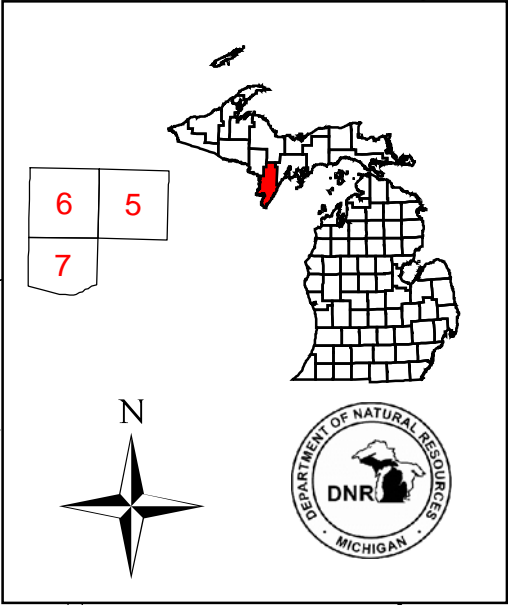
- Cover Type by Age Class**
- Cover Type by Management Objective**
- Compartment Volume Summary**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**

****** The following information is displayed on the attached compartment maps:**

- Base feature information, stand numbers, cover types**
- Proposed treatments**
- Proposed road access system**
- Suggested potential old growth**

Cover Type & Treatment Map

Compartment 29
 T34N, R28W, Sec. 5, 6, 7
 County: Menominee
 Unit: Escanaba
 YOE: 2011
 Acres: 1,206 GIS Calculated
 Stand Examiner: Joe Durbin
 Map Revised: 8/15/2009
 Map Phase: Pre-Review



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

Legend

- Miris Corners
- Paved Road
- == County Gravel Road
- == Gravel Road
- - - Poor Dirt Road
- Intermittent Stream/Drain
- Stream
- Trails
- Lakes and Rivers

Treatments

- ▨ Clearcut (w/Reserves, Patch/Strip)
- ▨ Shelter Wood (w/Reserves)
- ▨ Thinning (Crown, Low, Systematic)
- ▨ Selection (Group, Single Tree)

Forest Stands

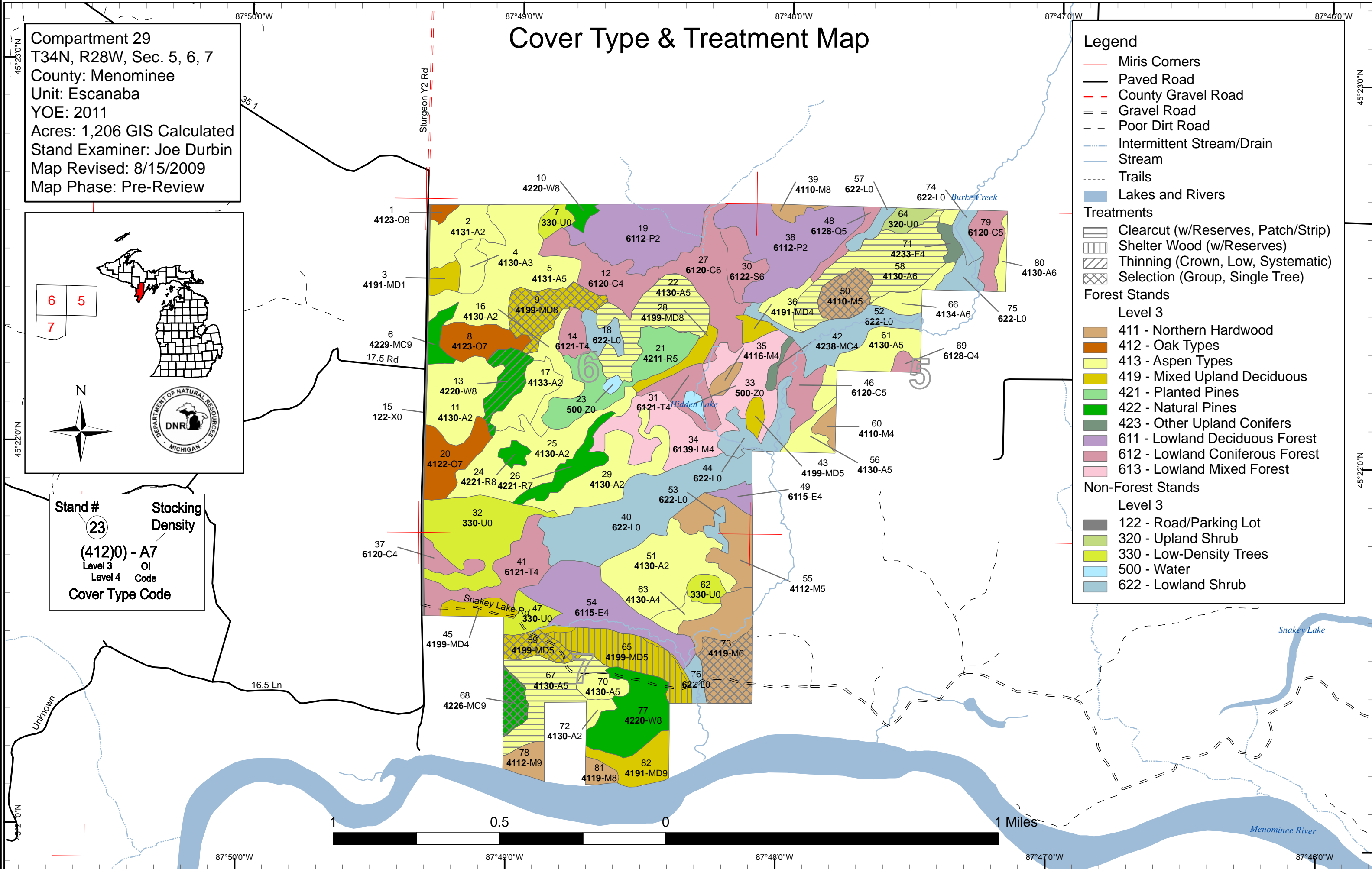
Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 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

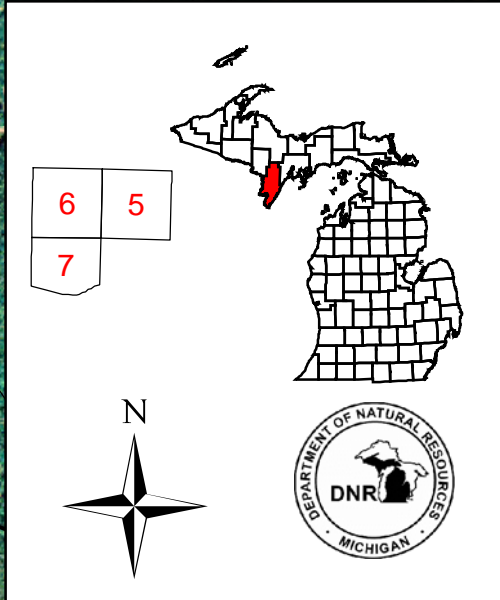
- 122 - Road/Parking Lot
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



87°50'0"W 87°49'0"W 87°48'0"W 87°47'0"W 87°46'0"W

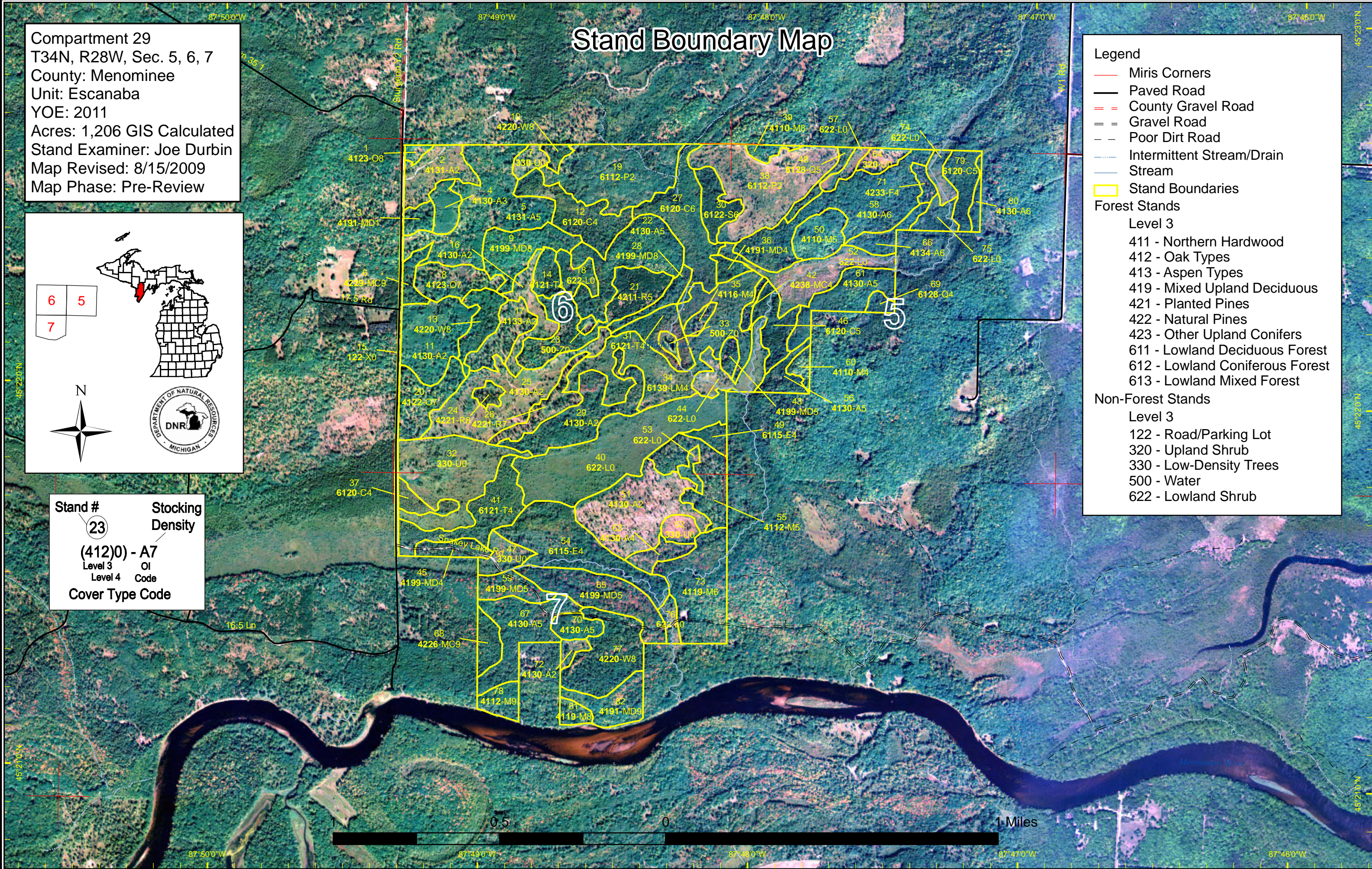
Stand Boundary Map

Compartment 29
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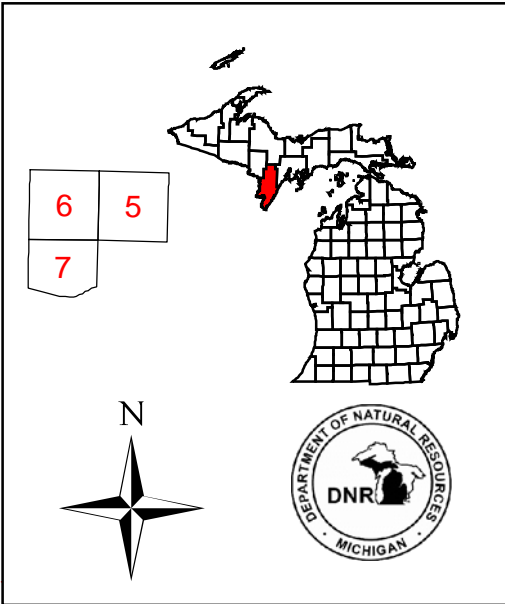
- Legend**
- Miris Corners
 - Paved Road
 - County Gravel Road
 - Gravel Road
 - Poor Dirt Road
 - Intermittent Stream/Drain
 - Stream
 - Stand Boundaries
- Forest Stands**
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 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

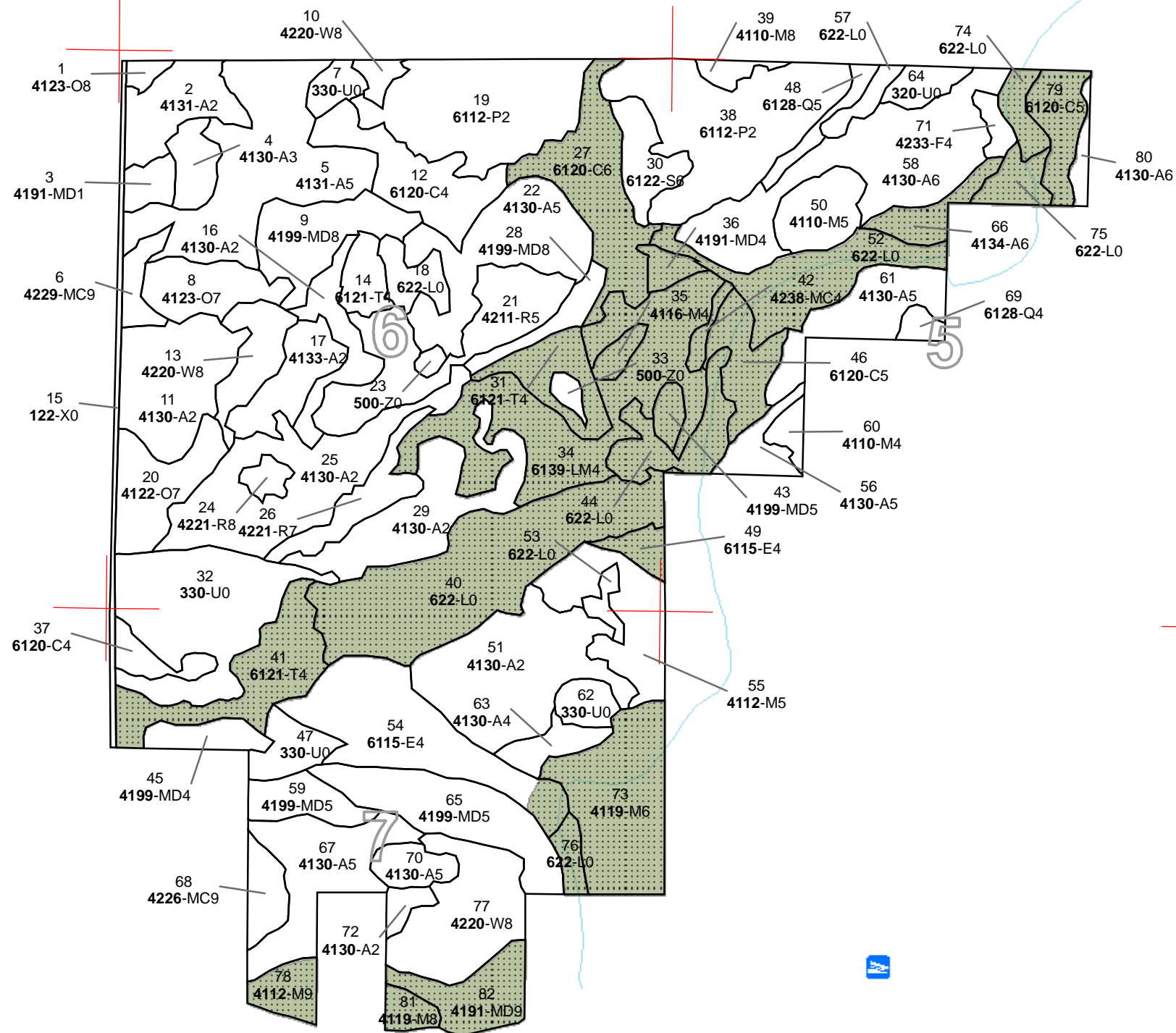


Dedicated & Proposed Special Conservation Area Map

Compartment 29
 T34N, R28W, Sec. 5, 6, 7
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 Unit: Escanaba
 YOE: 2011
 Acres: 1,206 GIS Calculated
 Stand Examiner: Joe Durbin
 Map Revised: 8/15/2009
 Map Phase: Pre-Review



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



Legend

- Miris Corners
- Proposed Special Conservation Area
- SCA - Special Conservation Area
- Dedicated Special Conservation Areas
- Boat Access Sites
- IFMAP Special Conservation Areas
- Non Dedicated Natural Areas and National Natural Landmarks
- Cold Water Streams
- Stand Boundaries

Forest Stands

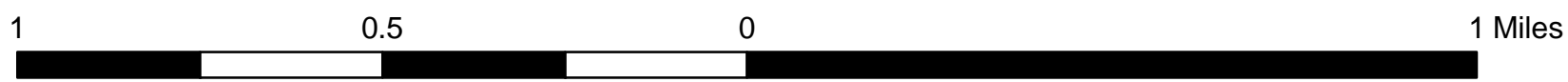
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87°50'0"W 87°49'0"W 87°48'0"W 87°47'0"W 87°46'0"W

45°22'0"N

45°21'0"N

45°22'0"N

45°21'0"N

Escanaba Mgt. Unit

Covertypes, Acres, and Age summary
(Level 3 Cover Type)

Compartment 029 Year of Entry 2011

Report Date: 08/05/2009



	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 +	Uneven Age	
Aspen Types	0	118	3	145	13	0	25	76	0	0	0	0	0	0	0	380
Low-Density Trees	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Lowland Coniferous Forest	0	0	0	0	0	0	0	0	12	38	45	19	21	0	0	136
Lowland Deciduous Forest	0	45	39	0	0	0	0	0	0	41	0	0	0	0	0	126
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	52	0	0	0	0	52
Lowland Shrub	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124
Mixed Upland Deciduous	0	0	0	5	0	0	0	4	16	6	3	0	0	0	58	91
Natural Pines	0	0	0	0	0	0	0	0	10	27	14	5	0	0	15	70
Northern Hardwood	0	0	0	0	0	0	0	0	26	0	6	0	0	0	52	84
Oak Types	0	0	0	0	0	0	0	0	0	2	17	0	0	0	14	33
Other Upland Conifers	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	6
Planted Pines	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	30
Road/Parking Lot	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Upland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	198	163	42	183	13	0	25	82	63	113	138	25	21	0	139	1206

**PROPOSED TREATMENTS
NO LIMITING FACTORS**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
9 33029009-SelectCut	18.9	4199 - Other Mixed Upland Deciduous	Medium Density Log	90	Harvest	Single Tree Selection	Oak, Aspen
<p><u>Rev Cmnt:</u> Oak seedlings are present but overtopped and should be released. Deer brows has damaged many of the oak seedlings. Paper birch and aspen are dying. Red maple is poor quality.</p> <p><u>Rev Spec:</u> Selectcut to 60-70 square feet of residual basal area. Harvest most of the paper birch and aspen. Follow in-stand retention guidelines. Long term MO is Oak-hardwood-aspen mix.</p> <p><u>Next Steps:</u> Acceptable regeneration includes a mixture of the current species including white pine.</p>							
13 33029013-Thin	11.1	42200 - Natural White Pine	Medium Density Log	98	Harvest	Low Thinning	Natural White Pine
<p><u>Rev Cmnt:</u> Release white and red pine and oak.</p> <p><u>Rev Spec:</u> Thin to 70-80 residual basal area. Harvest aspen, birch, red maple and thin pine. Follow in-stand retention guidelines. Retain oak and hemlock, if present. Long term MO is W.</p> <p><u>Next Steps:</u> This is a thinning--no followup required.</p>							
22 33029022-ClearCut	30.7	4130 - Aspen	Medium Density Pole	65	Harvest	Clearcut with Reserves	Aspen, Mixed Conifer
<p><u>Rev Cmnt:</u> A patch of younger A3 near the red pine plantation could also be retained.</p> <p><u>Rev Spec:</u> Clearcut with reserves. Cut all merchantable aspen, paper birch, maple, fir and spruce and pine, except as noted below. Retain all oak and enough scattered large red and white pine, spruce and birch to meet retention guidelines.</p> <p><u>Next Steps:</u> Acceptable regeneration includes a mixture of current species. Some areas have advanced fir regeneration.</p>							
50 33029050-SelectCut	12.0	4110 - Sugar Maple Association	Medium Density Pole	78	Harvest	Single Tree Selection	Sugar Maple Association
<p><u>Rev Cmnt:</u> Stand line near stand 62 is approximate using the photo. A more accurate line will be determined during field work when setting up the timber sale. Watch for stick nests.</p> <p><u>Rev Spec:</u> Selectcut to 70-80 square feet of residual BA/A. Follow in-stand retention guidelines. Cut most of the aspen but occasionally leave a large aspen for diversity. Also retain oak and, if present, hemlock. Long term MO is M.</p> <p><u>Next Steps:</u> Acceptable regeneration is a mixture of current species. Some areas have heavy advanced fir regeneration.</p>							
58 33029058-Clearcut	37.2	4130 - Aspen	High Density Pole	63	Harvest	Clearcut with Reserves	Aspen
<p><u>Rev Cmnt:</u> Do not cut the minor stand of cedar, hemlock and pine in the northeast corner of the stand. Maintain a buffer along the stream which flows in the SW portion of the stand. Watch for stick nests in the stand. This stand boundary with stand 50 is only approximate. A more accurate line will be determined during sale setup.</p> <p><u>Rev Spec:</u> Clearcut with reserves. Cut all aspen, birch, maple, ash, balsam fir, basswood and spruce. Do not cut oak, hemlock or cedar. Long term MO is A.</p> <p><u>Next Steps:</u> Acceptable regeneration will be a mix of the present species.</p>							

**PROPOSED TREATMENTS
NO LIMITING FACTORS**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
59 33029059-SelectCut	9.3	4199 - Other Mixed Upland Deciduous	Medium Density Pole	79	Harvest	Single Tree Selection	Oak, Pine
<u>Rev Cmnt:</u> Red maple is poor quality. Red oak is generally good quality poles and logs.							
<u>Rev Spec:</u> Selectcut to 70-80 residual basal area. Harvest aspen, white birch and some of the red maple and white/green ash. Retain 50% of the oak and some super-canopy white pine. Follow in-stand retention guidelines. Long term MO is Oak/hardwood/pine mix.							
<u>Next Steps:</u> Acceptable regeneration includes a mix of the current species.							

65 33029065-SWDw/R	24.2	4199 - Other Mixed Upland Deciduous	Medium Density Pole	74	Harvest	Shelter Wood with Reserves	Oak, Pine
<u>Rev Cmnt:</u> A low swale of tag alder/low brush runs near the south side of the stand about 2/3 of the length of the stand.							
<u>Rev Spec:</u> Shelterwood with Reserves. Harvest maple, aspen, paper birch, fir and spruce. Remove defective pine. Retain oak and pine.							
<u>Next Steps:</u> Acceptable regeneration includes a mix of current species. If fails, scarify for oak and pine regeneration.							

67 33029067-CC/Res	25.1	4130 - Aspen	Medium Density Pole	53	Harvest	Clearcut with Reserves	Aspen, Mixed Pine
<u>Rev Cmnt:</u> Snakey Lake Road passes through stand.							
<u>Rev Spec:</u> Clearcut with reserves. Harvest aspen, birch, red maple and some of the white pine. Retain oak and some spruce and pine to meet retention guidelines. Long term MO is aspen/pine mix.							
<u>Next Steps:</u> Acceptable regeneration includes a mix of current species.							

68 33029068-SC	7.0	42260 - Natural Pine, Mixed Deciduous	High Density Log	75	Harvest	Single Tree Selection	Natural White Pine, Mixed Deciduous
<u>Rev Cmnt:</u>							
<u>Rev Spec:</u> Selectioncut to 80-90 square feet of basal area where pine is dense. Where aspen and maple are more abundant, the residual stand will be less than 70 square feet. Harvest aspen, red maple, paper birch, spruce, jack pine and balsam fir. Individual tree mark white and red pine to thin to remove poor quality and defective trees and provide growing room for residual trees. Follow in-stand retention guidelines. Long term MO is W.							
<u>Next Steps:</u> Acceptable regeneration includes a mix of current species.							

73 33029073-SelectCut	18.8	4119 - Mixed Northern Hardwoods	High Density Pole	73	Harvest	Single Tree Selection	S.Maple, Hard Mast Association
<u>Rev Cmnt:</u> Stand contains red and white oak and white pine. This portion of stand 73 is to be removed from the SCA. The portion of stand 73 along Burke Creek is to be retained in SCA.							
<u>Rev Spec:</u> Selection cut to 70-80 residual basal area. Encourage large tree development within stand. Remove short lived trees such as aspen and defective paper birch and red maple. Remove competing stems from around oak. Long term MO is M. Follow in-stand retention guidelines. Retain oak, pine and hemlock, if present.							
<u>Next Steps:</u> Acceptable regeneration includes current species.							

**Total Treatment
Acreage Proposed: 194.4**

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**



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Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 1 of 1
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Limiting Factor
and Comment:

Rev
Cmnt:

Rev
Spec:

Next
Steps:

No Treatment
Reason

**Total Treatment
Acreage Proposed: 0**



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.

Inventory Method: IFMAP

Stand	SCA Name	Acres	Comments
27	33029027	27.3	Recommend removal from SCA.
31	33029031	12.0	Recommend removal from SCA.
34	33029034	52.5	Recommend removal from SCA.
35	33029035	3.1	Recommend removal from SCA.
36	33029036	3.6	Recommend removal from SCA.
41	33029041	23.3	Recommend removal from SCA.
42	33029042	2.3	Recommend removal from SCA.
43	33029043	3.3	Recommend removal from SCA.
46	33029046	12.3	Recommend removal from SCA.
49	33029049	4.2	Recommend removal from SCA.
66	33029066	7.4	Recommend removal from SCA.
73	33029073	33.0	SCA--Burke Creek riparian corridor.
78	33029078	6.8	SCA--Menominee River Riparian Corridor
79	33029079	10.7	Recommend removal from SCA.
81	33029081	3.9	SCA--Menominee River riparian corridor.
82	33029082	13.6	SCA--Menominee River riparian corridor.
40	NF_33029040	59.4	Recommend removal from SCA.
44	NF_33029044	13.5	Recommend removal from SCA.

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Inventory Method: IFMAP

Stand	SCA Name	Acres	Comments
52	NF_33029052	23.2	Recommend removal from SCA.
74	NF_33029074	5.2	Recommend removal from SCA.
75	NF_33029075	6.2	Recommend removal from SCA.
76	NF_33029076-sca	7.2	SCA--Burke Creek riparian corridor.



DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
SCA	Potential Old Growth Areas	This category contains stands were identified for a broad range of reasons and were coded in the OI database as stand condition 8 as potential old growth (POG). Approximately 310,000 acres have been identified through the Operations Inventory (OI)/Compartment Review process. For stands in Year of Entry 2008 and forward, potential old growth is managed for the identified objective until it is: 1) vetted through the Biodiversity Conservation Planning Process (BCPP) and given a specific designation and objective (as an ERA, HCVA, or other type of SCA) and is released from the potential old growth designation; or 2) it is released from the potential old growth designation via the Compartment Review process.