



Compartment Review Presentation

Baraga Forest Management Unit

Compartment 11070

Entry Year 2017

Acreage: 2,147

County Ontonagon

Management Area: Norwich Plain

Revision Date: 2015-03-16

Stand Examiner:

Legal Description:

T51N, R39W, Sections 30, 31

T51N, R40W, Sections 24, 5, 26

Identified Planning Goals:

Manage to increase in stand diversity.

Soil and topography:

The compartment is level with deep cuts where the streams and feeders are. Silts are: Watton – Iron River – Baraga association (clay loams), and AuTrain – Rubicon association (sand)

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

Most of the surrounding land is managed for timber, except some land on the east side of the compartment that is used for hunting camps.

Unique Natural Features:

None.

Archeological, Historical, and Cultural Features:

None.

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

Both, Mill Creek and the East Branch Mill Creek are warm water streams. Leave enough trees at the top of the bank / slope to prevent soil slumping.

Wildlife Habitat Considerations:

Use buffers along streams to maintain these wildlife travel corridors.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) clay and silt. The glacial drift thickness varies from 10 to 50 feet. The Precambrian Freda Sandstone subcrops below the glacial drift. The Freda does not have a current economic use. Abandoned copper mines are located ten miles to the east. This area has not been leased for metallic exploration. Gravel pits are not likely to be found in this area. There is no economic oil and gas production in the UP.

Vehicle Access:

Access is through the USFS road system. There are internal logging roads, but overall access is fair.

Survey Needs:

None.

Recreational Facilities and Opportunities:

There are no recreational facilities in this compartment, and there do not appear to be any opportunities to develop any.

Fire Protection:

This is not a fire prone area.

Additional Compartment Information:

The following reports from the Inventory are attached:

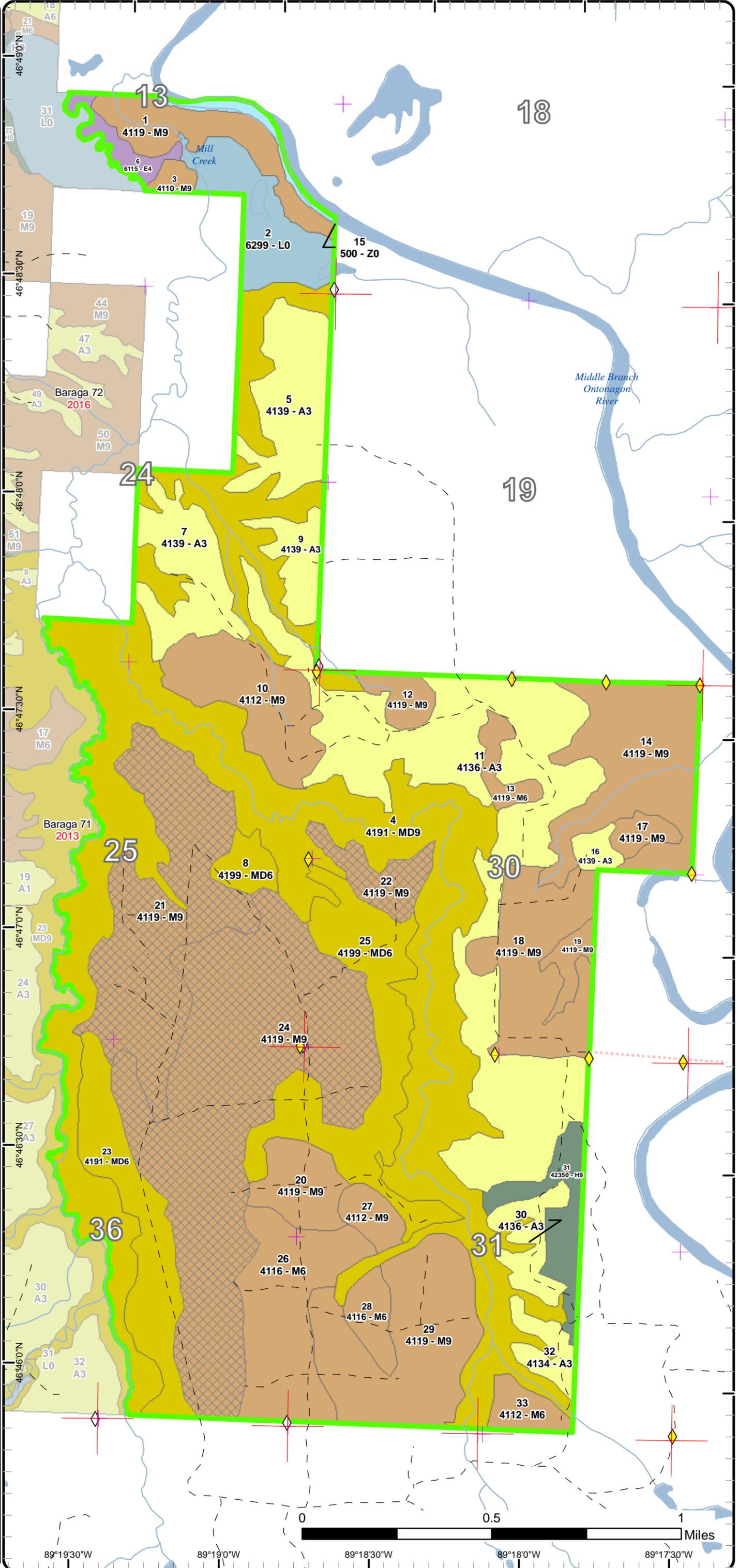
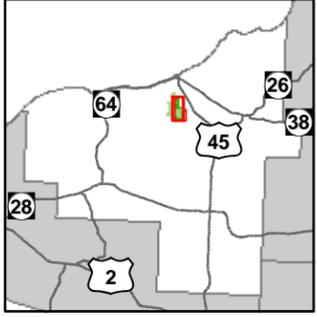
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

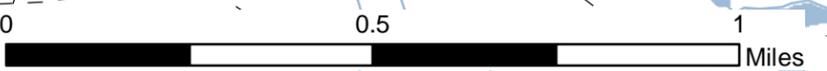
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments

Compartment: 70
 T51N, R40W, Sec. 13, 24, 25, 36
 T51N, R39W, Sec. 30, 31
 County: Ontonagon
 Unit: Baraga
 Mgmt Area: Norwich Plain
 YOE: 2017
 Acres: 2147 GIS Calculated
 Examiner: Brad Carlson
 Map Revised: 5/20/2015
 Map Phase: Pre-Review



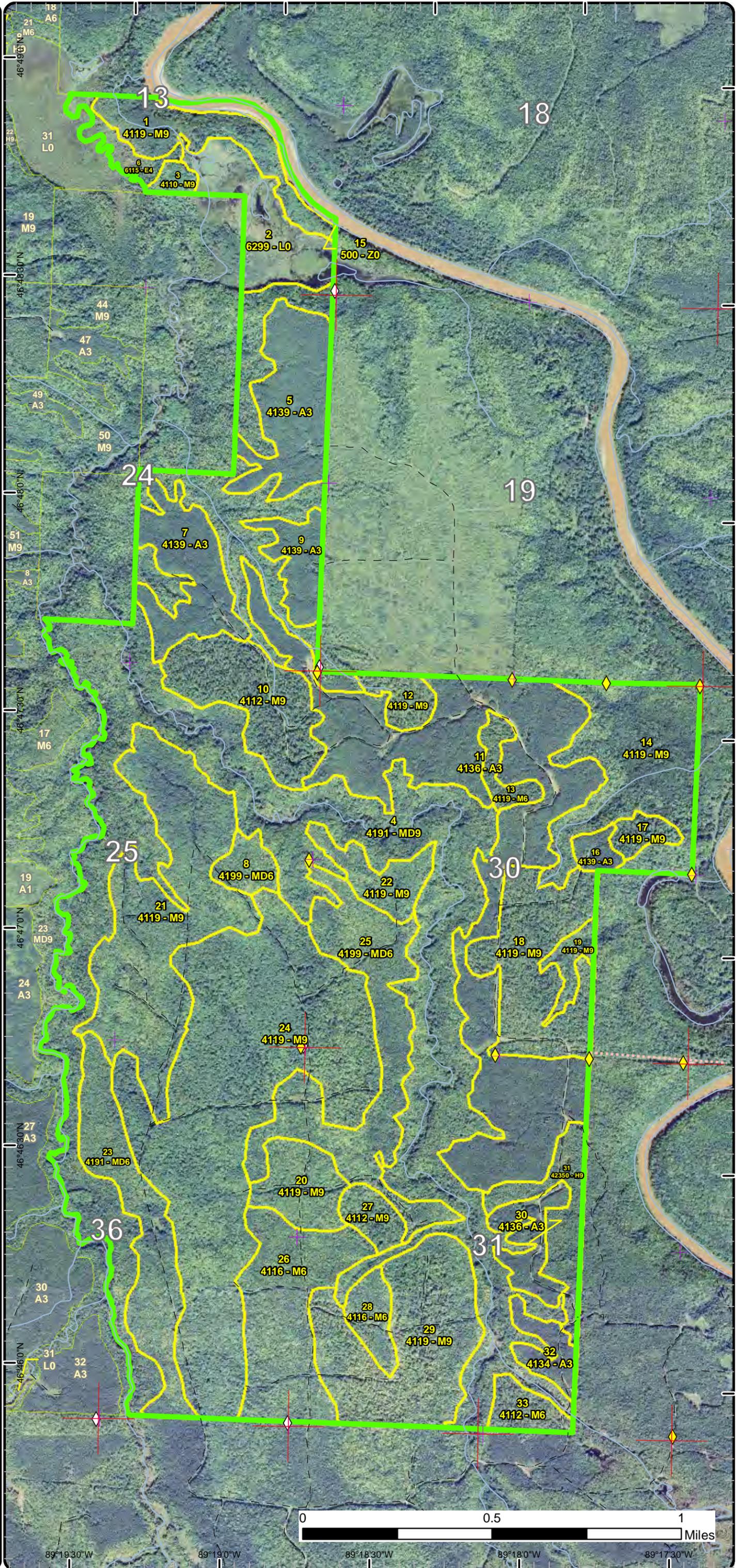
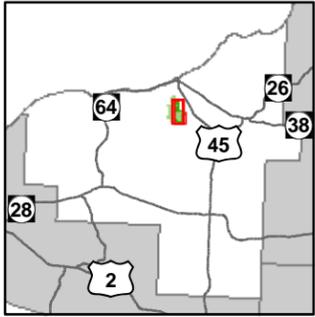
- ✚ Remonumented Section Corner
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Miris Corners
- - - Poor Dirt Roads
- ⋯ Closed Roads
- Rivers
- Lakes
- Treatments
- ▨ Selection (Group, Single Tree)
- Forest Covertypes
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- Non-Forest Covertypes
- 500 - Water
- 622 - Lowland Shrub



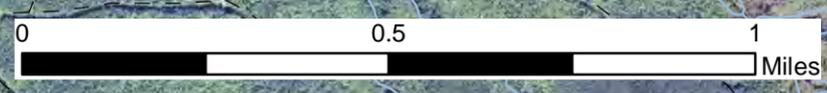
89°19'30"W 89°19'0"W 89°18'30"W 89°18'0"W 89°17'30"W

Stand Boundary Map

Compartment: 70
 T51N, R40W, Sec. 13, 24, 25, 36
 T51N, R39W, Sec. 30, 31
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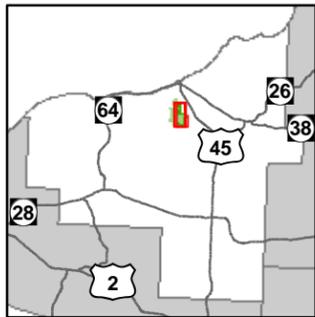
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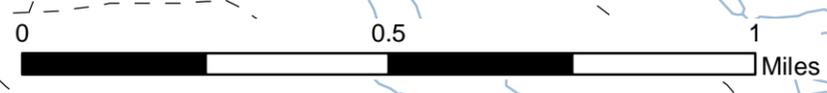
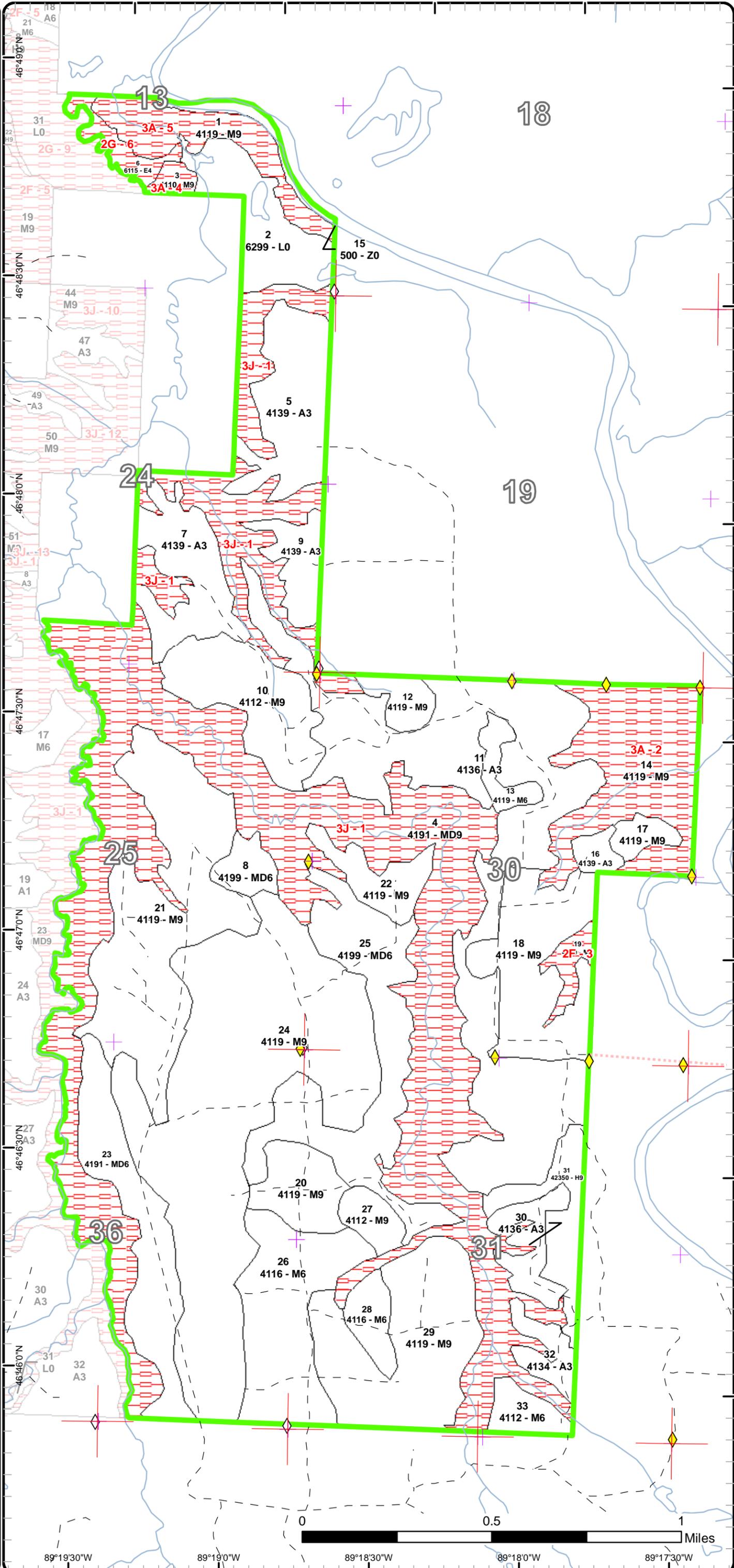
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Special Conservation Areas & Site Conditions Map

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- Miris Corners
- - - Poor Dirt Roads
- ⋯ Closed Roads
- Rivers
- ▭ Stand Boundaries
- Site Condition
- Unavailable
- Special Conservation Areas



89°19'30"W 89°19'0"W 89°18'30"W 89°18'0"W 89°17'30"W

Report 1 – Total Acres by Cover Type and Age Class

Baraga Mgt. Unit
Brad Carlson : Examiner

Compartment 70 Year of Entry 2017



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	0	391	0	0	0	0	0	0	0	0	0	0	0	0	0	0	391
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31
Lowland Deciduous	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Lowland Shrub	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Mixed Upland Deciduous	0	0	0	0	109	66	0	0	0	0	0	0	0	0	0	0	0	502	677
Northern Hardwood	0	0	0	0	0	93	0	0	0	45	0	0	0	0	0	0	0	843	981
Water	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Total	55	0	0	391	121	159	0	0	0	45	0	1376	2147						



Report 2 – Treatment Summary

Baraga Mgt. Unit
Year of Entry: 2017

Acres of Harvest

Compartment 70
Total Compartment Acres: 2,147

Commercial Harvest - 426
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

		Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Northern Hardwood		0	426	0	0	0	0	0	0	0	426
	Total	0	426	0	0	0	0	0	0	0	426

Proposed and Next Step Treatments by Harvest Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		426	0	0	0	0	0	0	0	0	426
Next Step		0	0	0	0	0	426	0	0	0	426
	Total	426	0	0	0	0	426	0	0	0	851



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
21	11070021-Cut	136.7	4119 - Mixed Northern Hardwoods	Sawtimber Well	63	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal - Approval Pending Edits

Habitat Cut: No**Site Condition: None**

Prescription Selectively thin hardwoods to 70-90 sqft of BA. Favor oak, hemlock, white pine and cedar where present. Oak should be released on 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker". Some wet areas, Acres may be reduced due to wet ground, and/or steep slopes. Pockets of heavy aspen and/or ash should be clearcut (0-5 acres in size).

Next Step
Treatments:

Acceptable Any tree species that are currently represented in the over story.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

22	11070022-Cut	21.9	4119 - Mixed Northern Hardwoods	Sawtimber Well	61	141- 170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition: None**

Prescription Selectively thin hardwoods to 70-90 sqft of BA. Favor oak, hemlock, white pine and cedar where present. Oak should be released on 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker". Acres may be reduced due to wet ground, and/or steep slopes. Pockets of heavy aspen and/or ash should be clearcut (0-5 acres in size).

Next Step
Treatments:

Acceptable Any tree species that are currently represented in the over story.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

24	11070024-Cut	266.9	4119 - Mixed Northern Hardwoods	Sawtimber Well	59	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition: None**

Prescription Selectively thin hardwoods to 70-90 sqft of BA. Favor oak, hemlock, white pine and cedar where present. Oak should be released on 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to no less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker". If pockets of top dieback are encountered lower BA's (50-70) are acceptable.

Next Step
Treatments:

Acceptable Any tree species that are currently represented in the over story.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

**Total Treatment
Acreage Proposed: 425.5**

Dominant Site Conditions

	2G	3A	3J
Aspen			
Hemlock			
Lowland Deciduous	12		
Lowland Shrub			
Mixed Upland Deciduous			502
Northern Hardwood		136	
Water			
Total Forested Acres	12	136	502
Relative Percent			

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	502	2F: Too steep	2G: Too wet (sensitive soils, does not include access issues)	3A: Potential old growth / biodiversity	5E: Long-Term Retention
Comments:							
2	Unavailable	3A: Potential old growth / biodiversity	91	2F: Too steep	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments:							
3	Unavailable	2F: Too steep	10	3J: Water quality / BMPs (stream, river, or lake)	3A: Potential old growth / biodiversity	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Baraga Mgt. Unit
Brad Carlson : Examiner

Compartment: 70
Year of Entry: 2017

4	Unavailable	3A: Potential old growth / biodiversity	6	2E: Road needed	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3J: Water quality / BMPs (stream, river, or lake)	Unspecified
Comments:							
5	Unavailable	3A: Potential old growth / biodiversity	40	2E: Road needed	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3J: Water quality / BMPs (stream, river, or lake)	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 6 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
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Baraga Mgt. Unit

Report 8 – Forested Stands

Compartment: 70
Year of Entry: 2017

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4119 - Mixed Northern Hardwoods	Sawtimber Well	39.5	91	111-140	Flat along Ontonagon River. Area floods in spring (5' water marks on trees).
3	4110 - Sugar Maple Association	Sawtimber Well	5.5	91	111-140	River bottom hdwd.
4	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	502.0	71	111-140	Steep slopes. Bmp.
5	4139 - Aspen, Mixed Deciduous	Sapling Well	56.7	21	Immature	cut in 1994
6	6115 - Lowland Ash	Poletimber Poor	12.2	30	Immature	was a non-forested in oi.
7	4139 - Aspen, Mixed Deciduous	Sapling Well	46.7	22	Immature	cut in 1993
8	4199 - Other Mixed Upland Deciduous	Poletimber Well	12.7	38	81-110	Hdwd and aspen regeneration 1969. Final harvest in 2037 with adj. hdwd.
9	4139 - Aspen, Mixed Deciduous	Sapling Well	21.5	20	Immature	was cut in 1995
10	4112 - Maple, Beech, Cherry Association	Sawtimber Well	58.6	88	81-110	Kidney Hdws 11-019-07-01 TCR 9/16/2011
11	4136 - Aspen, Mixed Conifer	Sapling Well	222.4	23	Immature	was cut in 1992
12	4119 - Mixed Northern Hardwoods	Sawtimber Well	12.8	88	81-110	Kidney Hdwd 11-019-07-01 TCR 9/16/2011. Some Dieback on edge of stand.
13	4119 - Mixed Northern Hardwoods	Poletimber Well	11.6	88	81-110	Kidney Hdws 11-019-07-01 TCR 9/16/2011. dieback and poor Quality
14	4119 - Mixed Northern Hardwoods	Sawtimber Well	91.0	88	111-140	Steep slopes along Ontonagon river and river bottom hdwd. Potential Type 2 old growth. Sensitive soils.
16	4139 - Aspen, Mixed Deciduous	Sapling Well	7.4	21	Immature	was cut in 1994 Log size oak is dying.
17	4119 - Mixed Northern Hardwoods	Sawtimber Well	9.0	88	81-110	Kidney Hdws 11-019-07-01 TCR 9/16/2011
18	4119 - Mixed Northern Hardwoods	Sawtimber Well	72.7	88	81-110	Kidney Hdwd 11-019-07-01 TCR 9/16/2011 Acquired - exchange with Champion Some dieback along edge of stand and road. Possible ash removal next rotation (2027).
19	4119 - Mixed Northern Hardwoods	Sawtimber Well	10.0	88	111-140	Steep slopes

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Baraga Mgt. Unit

Report 8 – Forested Stands

Compartment: 70
Year of Entry: 2017

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4119 - Mixed Northern Hardwoods	Sawtimber Well	28.6	50	81-110	Hdwd and aspen regeneration 1969 Some pockets of ash and/or aspen. Stand was split from the north and south stand.
21	4119 - Mixed Northern Hardwoods	Sawtimber Well	136.7	63	111-140	Hdwd and aspen regeneration 1969
22	4119 - Mixed Northern Hardwoods	Sawtimber Well	21.9	61	141-170	Hdwd and aspen regeneration 1969
23	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	66.2	45	81-110	Hdwd and aspen regeneration 1969. Possibly cut in 2037 with adj. timber.
24	4119 - Mixed Northern Hardwoods	Sawtimber Well	266.9	59	111-140	Selection cut, Backbone Hdwd, completed 9/2000.
25	4199 - Other Mixed Upland Deciduous	Poletimber Well	96.6	37	81-110	OI Stand Year Origin was 1978. Possibly cut in 2037. Stand was merged with south half.
26	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	77.6	45	81-110	Hdwd and aspen regeneration 1969
27	4112 - Maple, Beech, Cherry Association	Sawtimber Well	12.9	53	81-110	Spleen Hwd 11-020-07-01 TCR 2-3-2012 Select cut in 2027.
28	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	15.4	45	81-110	ASPEN REGENERATION 1969 Cut in 2027 with adj timber.
29	4119 - Mixed Northern Hardwoods	Sawtimber Well	95.7	66	81-110	Spleen Hdwd 11-020-07-01 TCR 2-3-2012. some dieback.
30	4136 - Aspen, Mixed Conifer	Sapling Well	21.4	23	Immature	was cut in 1992
31	42350 - Upland Hemlock	Sawtimber Well	31.3	99	141-170	lots of wet areas throughout stand.
32	4134 - Aspen, Spruce/Fir	Sapling Well	15.1	23	Immature	was cut in 1992
33	4112 - Maple, Beech, Cherry Association	Poletimber Well	14.3	77	81-110	Spleen Hdwd 11-020-07-01 TCR 2-3-2012. Next thinning 2027.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	6299 - Lowland Shrub (OI)	45.7	No	Sparse lowland trees.
15	500 - Water	8.6	No	Ontonagon River