DNR DNR DNR

Compartment Review Presentation

Baraga Forest Management Unit

Compartment 11066 Entry Year 2017 Acreage: 691

County Ontonagon

Management Area: Central Houghton

Revision Date: 2014-12-01

Stand Examiner:

Legal Description:

T51N R37W, Sections 30, 31 T51N R38W. Section 36

Identified Planning Goals:

Manage for northern hardwood. Expand the oak component.

Soil and topography:

There is a ridge in part of the compartment. The remainder is level to rolling. Soils are clays and clay loams: Ontonagon – Bohemian association, Iron River loam, and Watton – Iron River – Baraga association.

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

This compartment is surrounded by private land. Mass City is to the southwest. Most of the private land is managed for timber.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

This area was intensively mined and explored for mines. There are numerous old mine workings.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Adventure creek flows thought the west edge of the compartment. Buffer the stream banks to prevent slumping.

Wildlife Habitat Considerations:

Work to increase the oak and hemlock component.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) clay and silt and thin to discontinuous till over bedrock. The glacial drift thickness varies from 100 to 200 feet. The Precambrian Portage Lake Volcanics subcrop below the glacial drift. The Portage Lake does not have a current economic use. Several abandoned copper mines are located in the Compartment. The compartment was previously leased and one parcel is currently leased, associated with the abandoned Adventure Mine. State lands in the area are leased for metallic mineral exploration. Gravel pits are located in the Compartment and potential may be good in places. There is no economic oil and gas production in the UP.

Vehicle Access:

M-26 crosses the compartment. Access to the compartment is good. Internal access is fair.

Survey Needs:

Survey will be needed for harvest activities.

Recreational Facilities and Opportunities:

The Bill Nicholls Rail-Trail crosses the compartment. This is used for snowmobile in the winter and as an ORV route in the summer

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

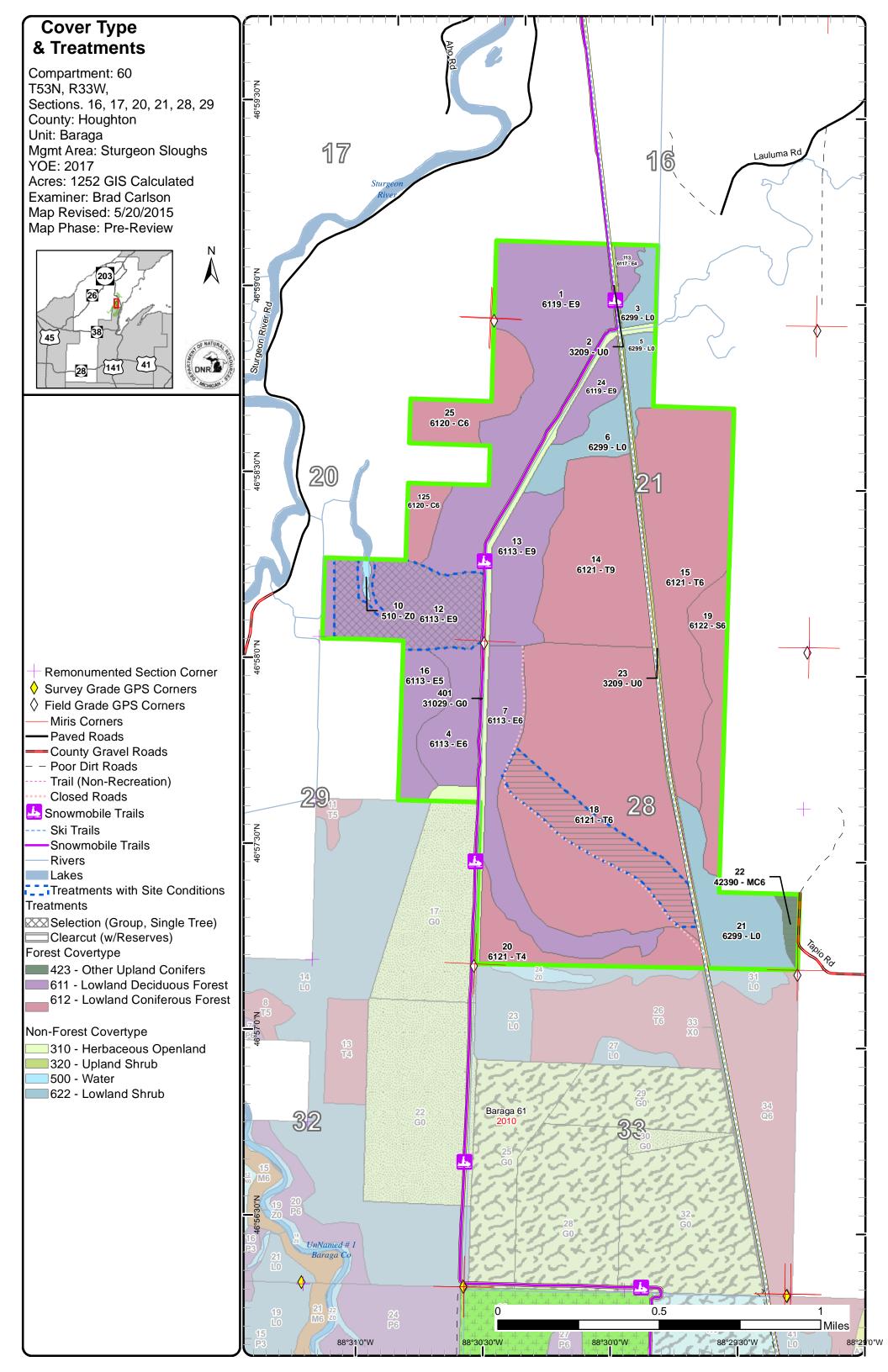
The following information is displayed, where pertinent, on the attached compartment maps:

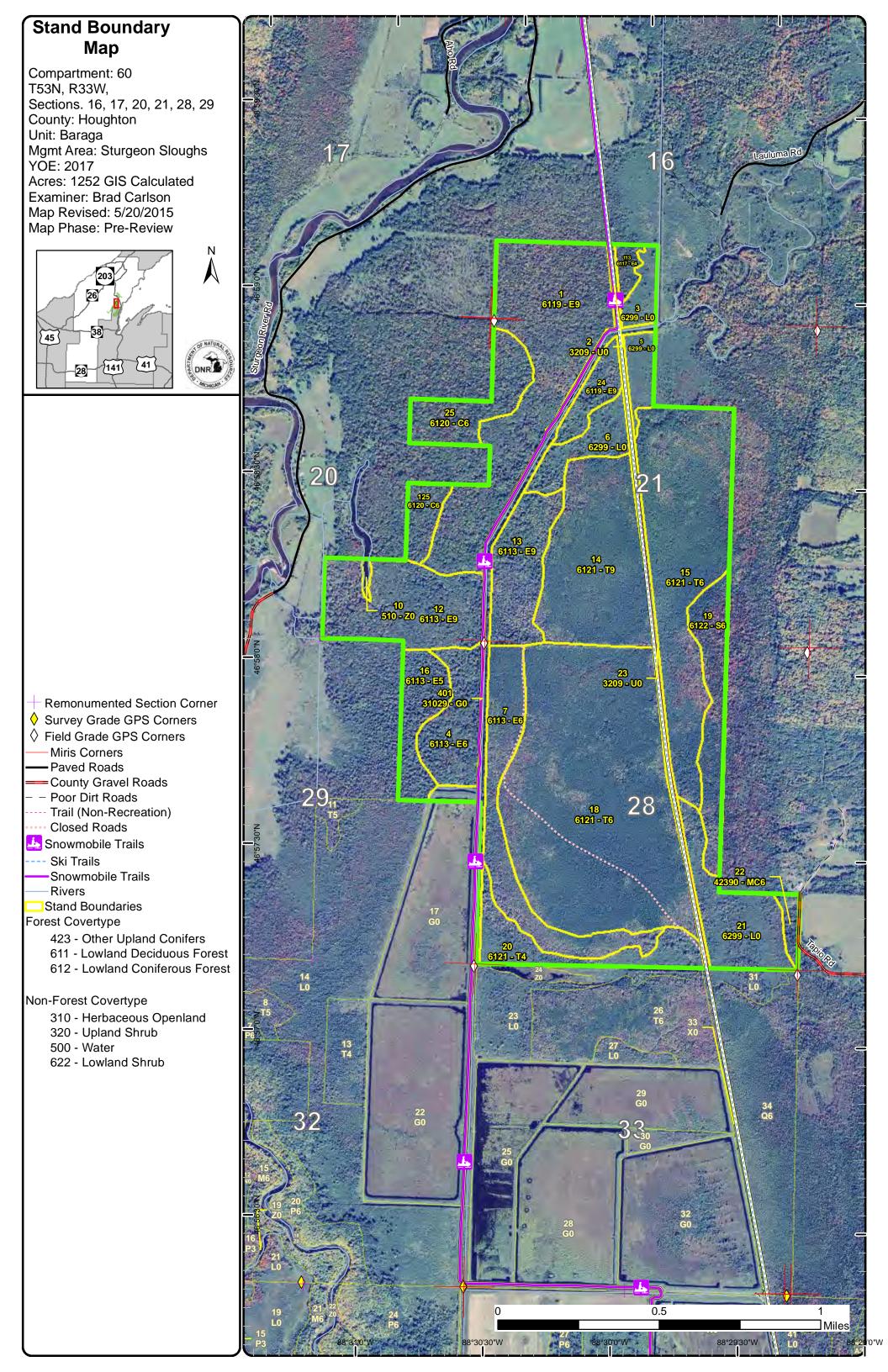
Base feature information, stand boundaries, cover types, and numbers

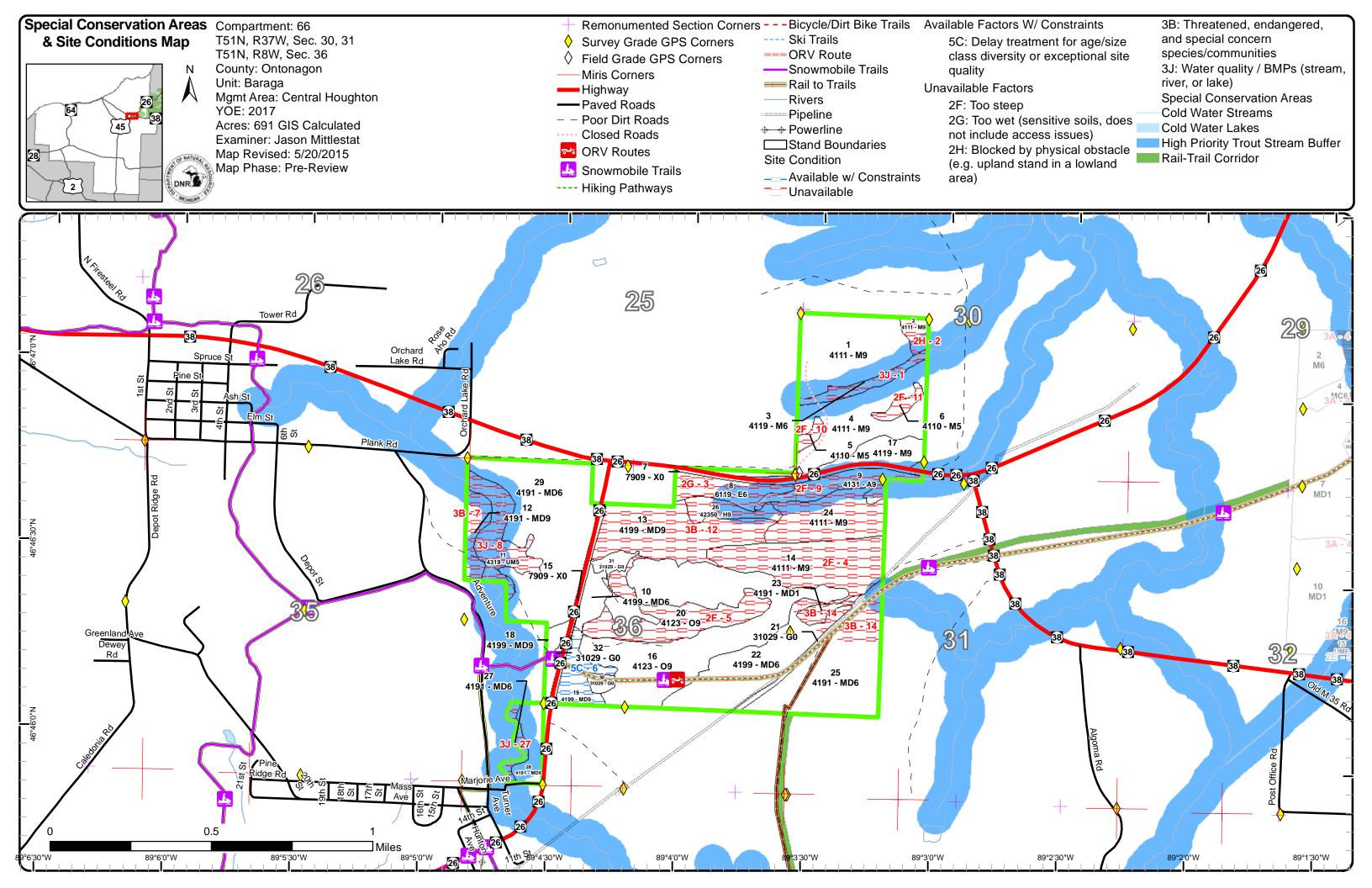
Proposed treatments

Site condition boundaries

Details on the road access system







Report 1 – Total Acres by Cover Type and Age Class

Baraga Mgt. Unit

Jason Mittlestat : Examiner

Compartment 60

Compartment 66 Year of Entry 2017



Age Class

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Aspen	10	0	$\overline{}$	0	0	_		0	<u> </u>	0	0	0		0				16	16	{
Bare/Sparsely Vegetated	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
Hemlock	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9	
Herbaceous Openland	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
Lowland Deciduous	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	14	
Mixed Upland Deciduous	0	0	0	0	0	86	54	42	44	13	0	4	0	0	0	0	0	26	269	
Northern Hardwood	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	181	194	
Oak	0	0	0	0	0	0	0	0	124	0	0	0	0	0	0	0	0	0	124	
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	22	
Total	39	0	0	0	13	100	54	42	177	13	0	26	0	0	0	0	0	223	687	ĺ



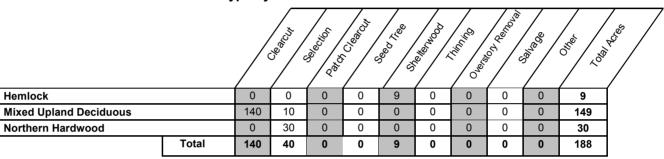
Report 2 – Treatment Summary

Baraga Mgt. Unit

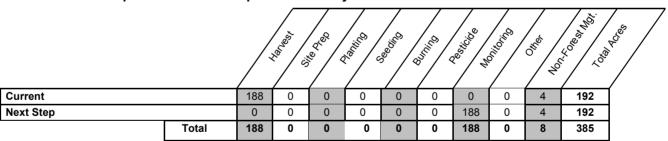
Compartment 66 Year of Entry: 2017 **Total Compartment Acres: 691 Acres of Harvest**

> Commercial Harvest - 0 Harvests with Site Condition - 18 Next Step Harvest - 0 Habitat Cut - 4

Cover Type by Harvest Method



Proposed and Next Step Treatments by Harvest Method



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

13 11066013-43.8 4199 - Other Mixed Sawtimber 78 81-110 Harvest Clearcut with 412 - Oak Types Even-Aged Proposal -**CCut Upland Deciduous** Well Retention Approval Pendina Edits

Site Condition: Community/Species of Concern or T&E **Habitat Cut: No**

Prescription Cut all trees greater the 4.6" at DBH except pine, hemlock and marked oak. Leave tree mark oak 10-30 BA, focusing on large mast producing

Specs: oak (18" and above).

Next Step Treatments:

Acceptable Oak Aspen, Maple, Fir

Regen:

Other Retention for this stand will be greater than 3% and will consist of reserve tree species. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

22 11066022-42.0 4199 - Other Mixed Poletimber 111-Harvest Clearcut with 4199 - Other Even-Aged Proposal -**Upland Deciduous** Mixed Upland Well 140 Retention Approval **CCut** Deciduous Pending Edits

Habitat Cut: No Site Condition: Community/Species of Concern or T&E

Prescription Cut all trees greater the 4.6" at DBH except pine, hemlock and marked oak. Leave tree mark oak 10-30 BA, focusing on large mast producing

Specs: oak (18" and above)

Next Step **Treatments:**

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

Regen:

Other Retention for this stand will be greater than 3% and will consist of reserve tree species. Try to avoid using the snowmobile trail as much as possible (hauling only Monday through Thursday daytime only). If trail must be used work with clubs for signing. Old next step comments: Comment:

Proposed Start Date: 10/1 /2016

23 11066023-NF 4191 - Mixed 31022 - Warm Sapling 22 1-50 NonForestMgt **Brush Cutting** Proposal -**Upland Deciduous** Season Grass Approval Poor with Conifer Pending Edits

Habitat Cut: Yes Site Condition: Community/Species of Concern or T&E

Prescription wildlife- brush hog and fruit tree pruning.

Specs:

Next Step Treatments:

<u>Acceptable</u>

Regen:

Other

Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Selection

Compartment: 66

Aged

Approval

Pending Edits

Mixed Upland

Deciduous

Report 4 -- Treatments

Habitat Cut: No Site Condition: Community/Species of Concern or T&E

Well

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 Specs: 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

140

Complete Marker".

Next Step Treatments:

Mark

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

Baraga Mgt. Unit

Hard Mast

Association

Regen:

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d 24

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

25 11066025-53.8 4191 - Mixed Poletimber 55 81-110 Harvest Clearcut with 4199 - Other Even-Aged Proposal -**Upland Deciduous** Mixed Upland **CCut** Well Retention Approval with Conifer Deciduous Pendina Edits

Habitat Cut: No Site Condition: Community/Species of Concern or T&E

Prescription Cut all trees greater the 4.6" at DBH except pine, hemlock and marked oak. Leave tree mark oak 10-30 BA, focusing on large mast producing

Specs: oak (18" and above).

Next Step Treatments:

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

Regen:

Other Retention for this stand will be greater than 3% and will consist of reserve tree species. Try to avoid using the snowmobile trail as much as possible (hauling only Monday through Thursday daytime only). If trail must be used work with clubs for signing. Old next step comments: Comment:

Proposed Start Date: 10/1 /2016

11066026-26 9.1 42350 - Upland Sawtimber 71 81-110 Harvest Shelterwood with 4312 -Two-Aged Proposal -Hemlock Well Hemlock, Mixed Approval Retention **CCut** Deciduous Pending Edits

Habitat Cut: No Site Condition: Community/Species of Concern or T&E

Prescription Cut all trees greater the 4.6" at DBH except pine, hemlock and marked oak. Leave tree mark oak 10-30 BA, focusing on large mast producing

Specs: oak (18" and above)

Next Step Treatments:

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

Regen: Other

Retention for this stand will be greater than 3% and will consist of reserve tree species. Old next step comments:

Comment

Proposed Start Date: 10/1 /2016

Total Treatment Acreage Proposed:

192.4

Baraga Mgt. Unit

Jason Mittlestat : Examiner

Compartment: 66
Year of Entry: 2017

Dominant Site Conditions

2G 2H 3B 3J 5C Aspen Bare/Sparsely Vegetated Hemlock Herbaceous Openland **Lowland Deciduous** 14 Mixed Upland Deciduous 71 13 4 Northern Hardwood 5 30 8 Oak

14

5

Upland Mixed Forest

Total Forested Acres

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.

110

22

34

13

Site No.	Dominant Site Cond 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)	8	2F: Too steep	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified
	Comments:						
2	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	5	2F: Too steep	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 5 – Site Conditions

Baraga Mgt. Unit

Jason Mittlestat : Examiner

Compartment: 66 Year of Entry: 2017

4	Unavailable	2F: Too steep 43 Unspecified		Unspecified	Unspecified	Unspecified	
	Comments:						
5	Unavailable	2F: Too steep	31	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3B: Threatened, endangered, and special concern species/communities	10	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	22	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	2F: Too steep	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	2F: Too steep	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 5 – Site Conditions

Baraga Mgt. Unit

Jason Mittlestat : Examiner

Compartment: 66 Year of Entry: 2017

11	Unavailable	2F: Too steep	4	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
12	Unavailable	3B: Threatened, endangered, and special concern species/communities	83	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
14	Unavailable	3B: Threatened, endangered, and special concern species/communities	18	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
27	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	1C: Other dept or div proc/practices	2F: Too steep	2G: Too wet (sensitive soils, does not include access issues)	Unspecified
C	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
Comments				

Baraga Mgt. Unit Compartment: 66
Year of Entry 2017



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.

Conservation Type Area		Description	HCVA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area				
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxyge stocked trout populations and those of other coldwater fis year to year. Coldwater streams in Michigan typically procontributions of groundwater to their stream flows. Such s designated as trout resources by Fisheries Order 210.	h species (e.g., slimy sculpin) to persist from ride these conditions due to substantial				
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosys influences the aquatic ecosystem and vice-versa. Becaus streams and open water wetlands, riparian areas harbor a communities are ecologically and socially significant in that as aesthetics, habitat, bank stability, timber production, and	e of the unique conditions adjacent to lakes, a high diversity of plants and wildlife. Riparian eir effects on water quality and quantity, as well				

S t	Baraga Mgt. Unit			Report 8	– Forested	Stands Compartment: 66 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4111 - S.Maple, Hard Mast Association	Sawtimber Well	43.8	74	81-110	harvested in 2007/08 as part of "Two Stitch Hardwoods" (11-017-07-01)
2	4111 - S.Maple, Hard Mast Association	Sawtimber Well	4.8	74	111-140	Stand is the same as stand 1 but drops off a rock ledge that cannot be accessed
3	4119 - Mixed Northern Hardwoods	Poletimber Well	7.9	71	51-80	OI Stand Year Origin was 555 Steep Slopes with drainage- inoperable.
4	4111 - S.Maple, Hard Mast Association	Sawtimber Well	44.9	74	81-110	harvested in 2007/08 as part of "Two Stitch Hardwoods" (11-017-07-01)
5	4110 - Sugar Maple Association	Poletimber Medium	2.7	74	51-80	Rock knob, steep slopes, inoperable.
6	4110 - Sugar Maple Association	Poletimber Medium	4.0	74	51-80	Rock knob, steep slopes, inoperable.
8	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	14.2	45	81-110	Lots of wet areas with smaller dia. ash.
9	4131 - Aspen, Oak	Sawtimber Well	16.3	72	81-110	Steep slopes, drainage, inoperable ground. Aspen is dying out and converting to hdwd.
10	4199 - Other Mixed Upland Deciduous	Poletimber Well	7.7	45	51-80	OPIC - FMD: OI Stand Year Origin was 555
11	4319 - Mixed Upland Forest	Poletimber Medium	22.3	100	81-110	Slopes along Adventure Creek.
12	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	9.5	61	141-170	Access is through Private.
13	4199 - Other Mixed Upland Deciduous	Sawtimber Well	43.8	78	81-110	
14	4111 - S.Maple, Hard Mast Association	Sawtimber Well	42.7	73	81-110	Ridge with numerous mine shafts, test pits and adits. Data from stand 24. Inoperable ground. Some rock bluffs/outcrops.
16	4123 - Red Oak	Sawtimber Well	93.0	71	81-110	NICE OAK WITH MANY QUALITY SMALL LOGS IN STAND. Was harvested in 2007/08 as part of "Two Step Hardwoods" (11-018-07-01)
17	4119 - Mixed Northern Hardwoods	Sawtimber Well	12.9	31	81-110	wet ground, some dieback starting to appear 2014.
18	4199 - Other Mixed Upland Deciduous	Sawtimber Well	5.2	44	81-110	OI Stand Year Origin was 555 Most of maple is in the north part of stand.
19	4199 - Other Mixed Upland Deciduous	Sawtimber Well	13.3	80	111-140	Cut w/ adj. stand in 2027. Steep slope along hwy. south end of stand is wet with heavy ash.

s t	Baraga	Mgt. Unit		Report 8	– Forested	Stands Compartment: 66 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4123 - Red Oak	Sawtimber Well	31.3	71	111-140	Ridge, mine shafts and adits. Poor quality and stunted.
22	4199 - Other Mixed Upland Deciduous	Poletimber Well	42.0	60	111-140	POOR OVER STORY WITH NICE POLES COMING UP UNDER.
23	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	4.1	22	1-50	Snowmobile trail runs adjacent to stand Stand is converting to forested.
24	4111 - S.Maple, Hard Mast Association	Sawtimber Well	30.0	73	111-140	
25	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	53.8	55	81-110	POOR OVER STORY WITH NICE POLES COMING UP UNDER Aspen is on the decline, lots of wet areas, cut now with reserves.
26	42350 - Upland Hemlock	Sawtimber Well	9.1	71	81-110	
27	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	4.0	100	111-140	Adventure Creek, steep slopes.

100

45

11.4

77.9

81-110

81-110

4191 - Mixed Upland

Deciduous with Conifer

4191 - Mixed Upland

Deciduous with Conifer

28

29

Poletimber

Well

Poletimber

Well

Harvested in 2007/08 as part of "Two Step Hardwoods" (11-018-07-01)

Possibly cut in 2027, Lots of wet areas with small dia. ash.

Report 9 - Nonforested Stands

Compartment: 66 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
7	7909 - Nonstocked (OI)	9.5	No	HIGHWAY M-26 AND M-38
15	7909 - Nonstocked (OI)	7.0	No	HIGHWAY M-26
21	31029 - Grass (OI)	7.3	No	Power Line ROW
30	31029 - Grass (OI)	2.8	No	Site of old Greenland Dump. This site was closed by DEQ, and has a restrictive covenant.
31	31029 - Grass (OI)	10.4	No	Grass area, State Police radio tower on south end.
32	31029 - Grass (OI)	1.0	No	