

Compartment Review Presentation

Baraga Forest Management Unit

Compartment 11031 Entry Year 2017 Acreage: 1,295

County Houghton

Management Area: Central Houghton

Revision Date: 2015-03-10

Stand Examiner:

Legal Description:

T52N R35W, Section 6

T52N R36W, Section 1

T53N R35W, Section 2 T54N R35W, Section 34

Identified Planning Goals:

Soil and topography:

The soils in sections 1 and 6 are Trimountain Cobbly fine sandy loam, Trimountain-Paavola Complex, Trimountain-Paavola-Michigamme Complex. The topography in these sections is rolling to hilly. The soils around Lake Perrault are Kalkaska-Waiska Sands. The topography is level to rolling.

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

The parcels in Sections 1 and 6 are a solid block of State Forest land with state land to the west, and industry and small private ownerships to the north south and east. The predominant land use is commercial forest. The parcels in sections 2 and 34 are surrounded by industry land.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

The Military Road (Fort Howard to Fort Wilkins) crosses this compartment.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

There are several trout streams in the compartment – Elm River, and North Branch Bear Creek.

Wildlife Habitat Considerations:

Hard and soft mast in this compartment supports a good bear population. Mesic conifer regeneration is not impacted by deer browsing.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of an end moraine of fine-textured till. There is insufficient data to determine the glacial drift thickness. The Precambrian Copper Harbor Conglomerate subcrops below the glacial drift. The Copper Harbor was previously mined for small amounts of copper. The nearest gravel pit is located just to the southwest and there maybe some potential. Abandoned copper mines and crushed basalt piles are located five miles to the southwest. This area has not been leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Access is good. M-26, county roads and the Donken – Tapiola Road (DNR) provide access to the compartment. The internal road system, non county road, is good, but needs some improvement work.

Survey Needs:

Survey work will be needed.

Recreational Facilities and Opportunities:

The Bill Nicholls Rail-Trail crosses the compartment. This is a heavily used snowmobile trail, and a designated ORV route. The section 34 parcel includes Lake Perrault.

Fire Protection:

This is not a fire prone area.

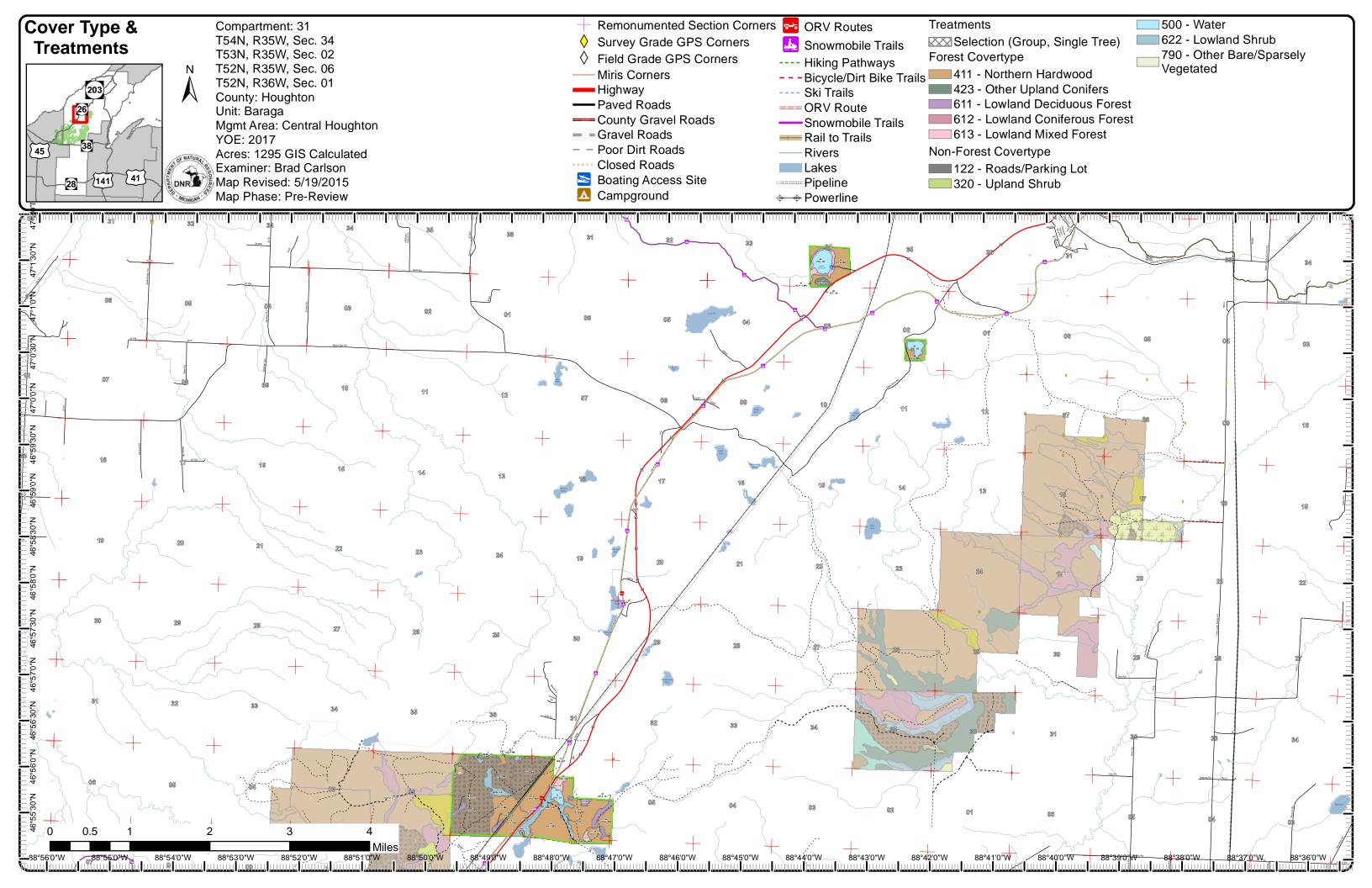
Additional Compartment Information:

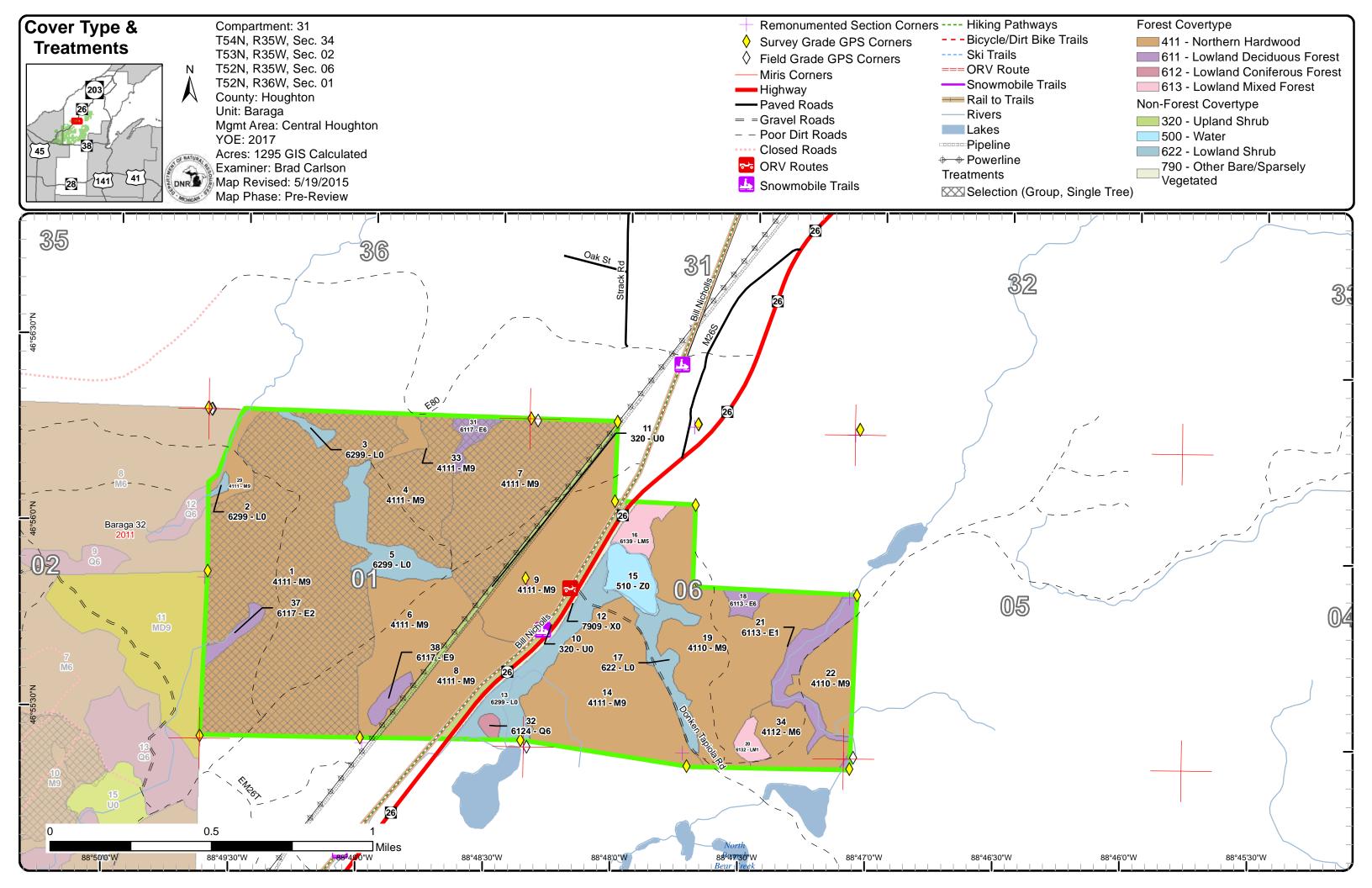
The following reports from the Inventory are attached:

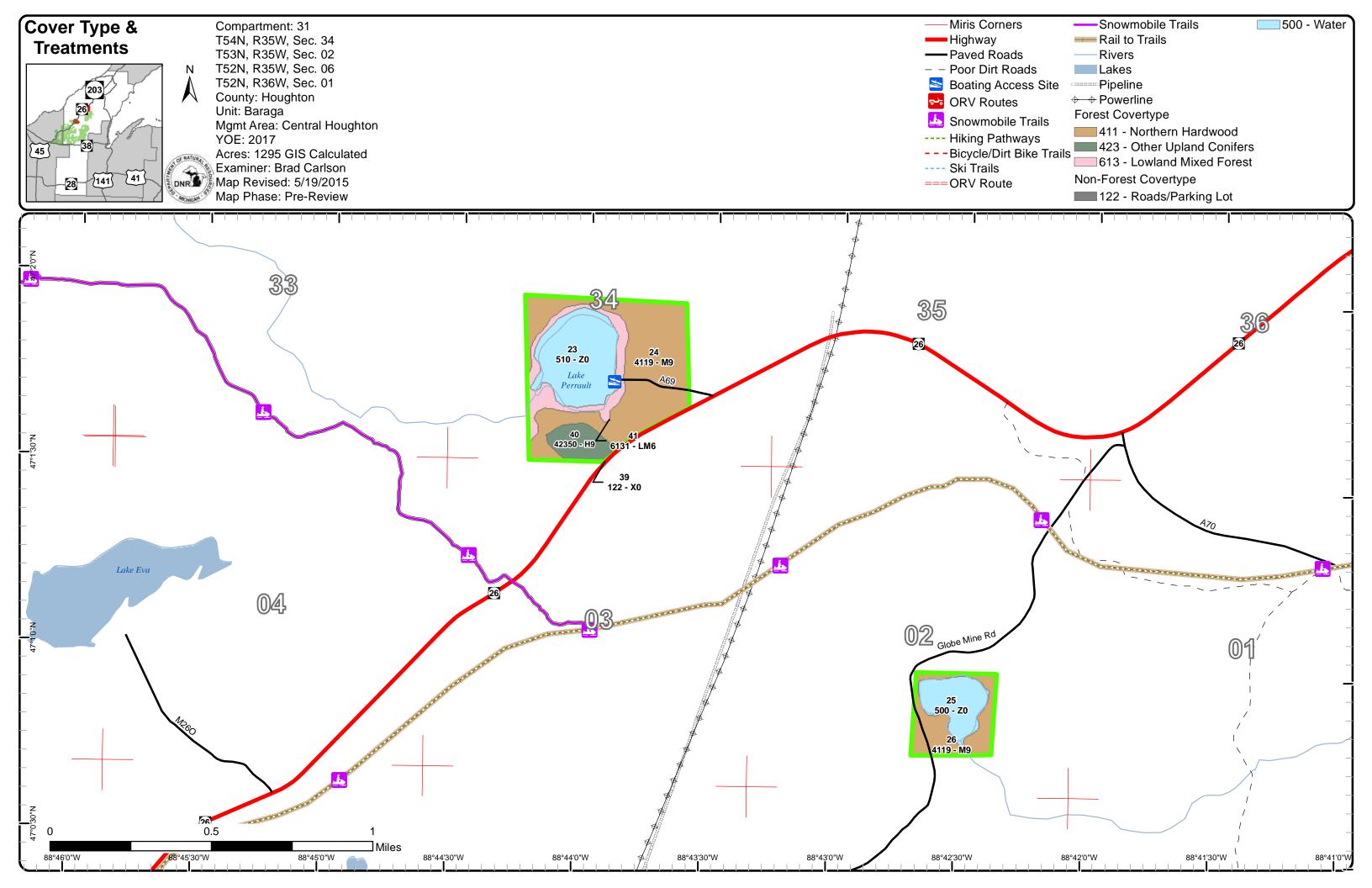
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

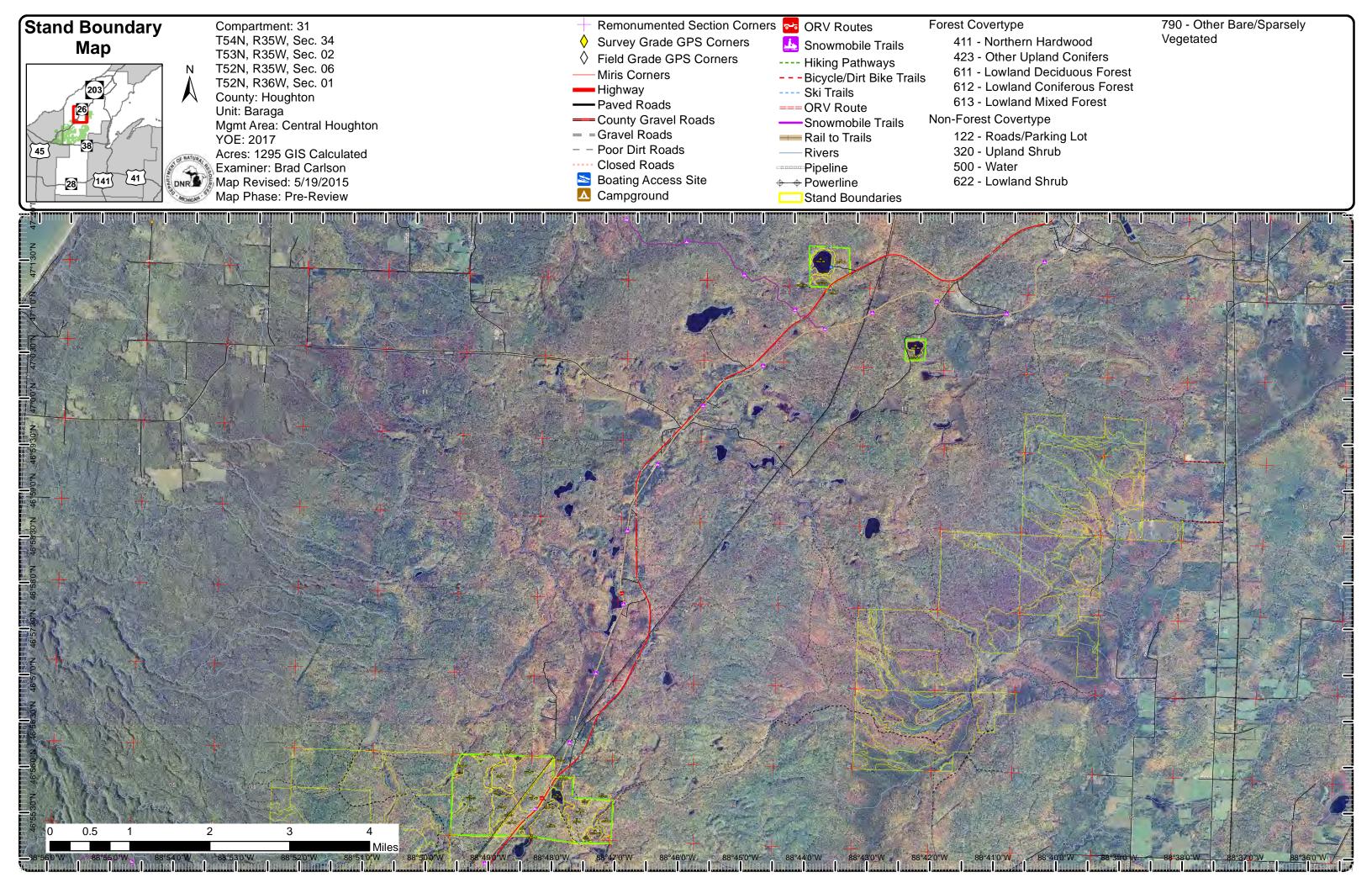
The following information is displayed, where pertinent, on the attached compartment maps:

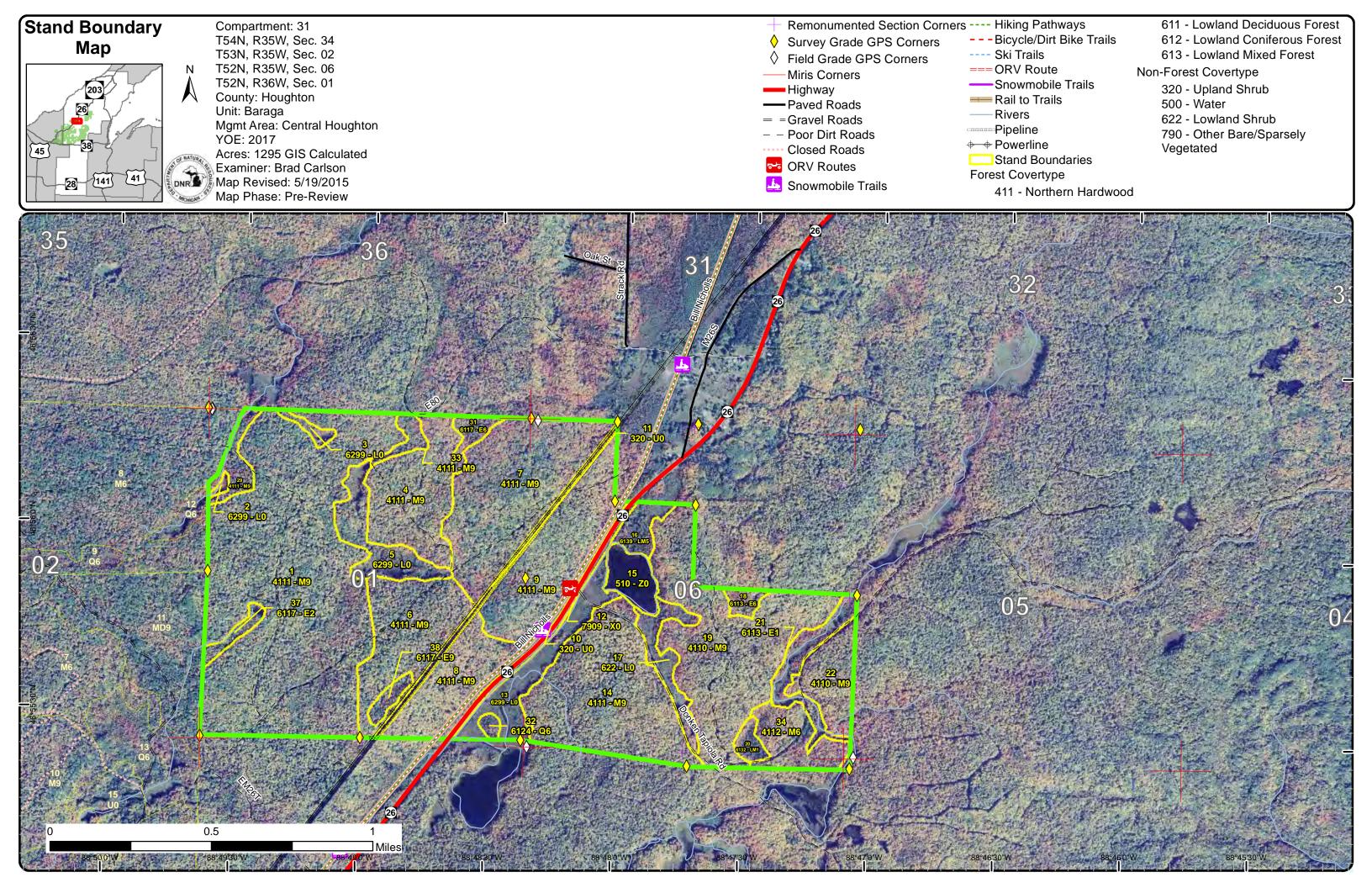
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

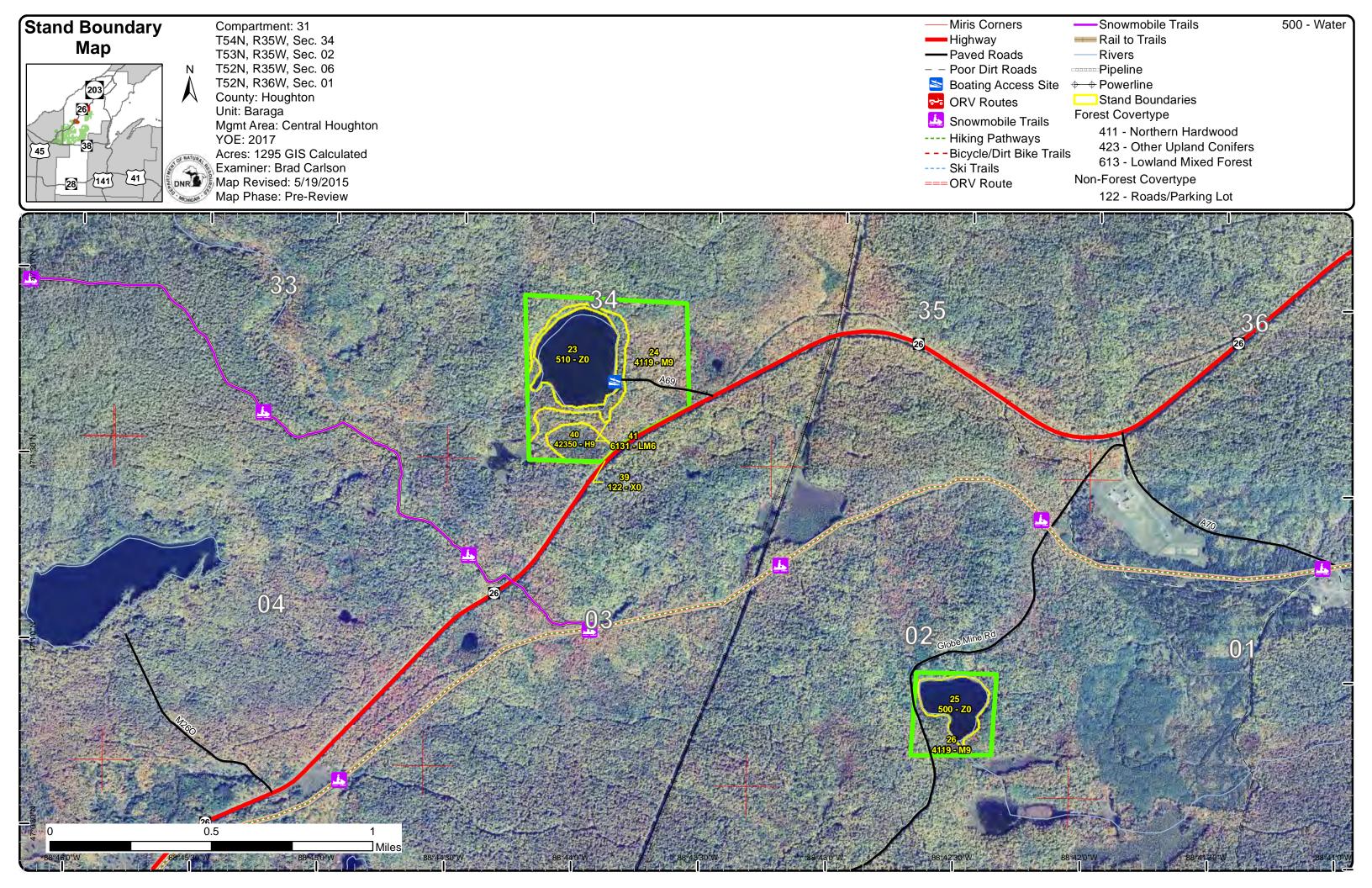


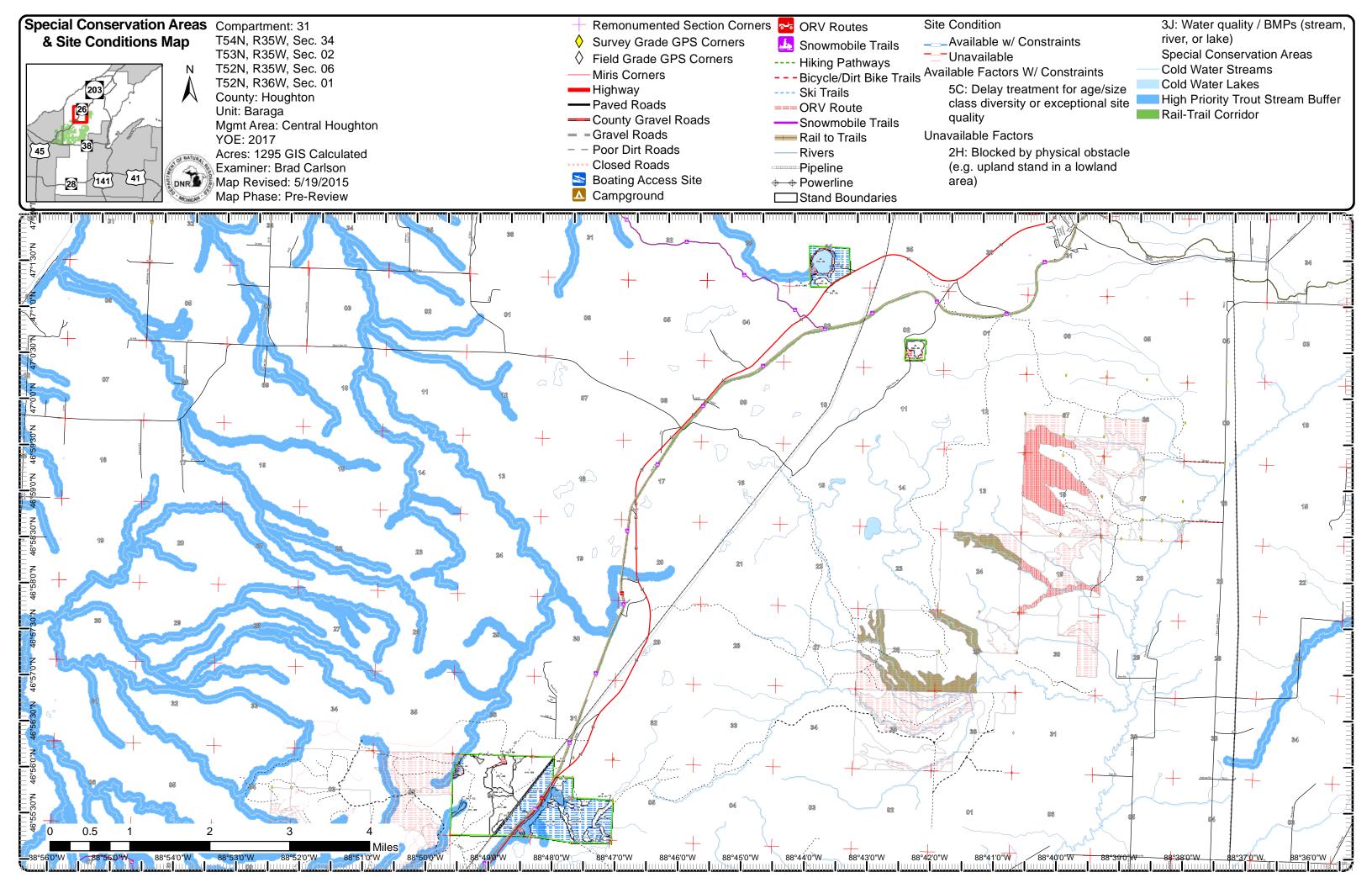


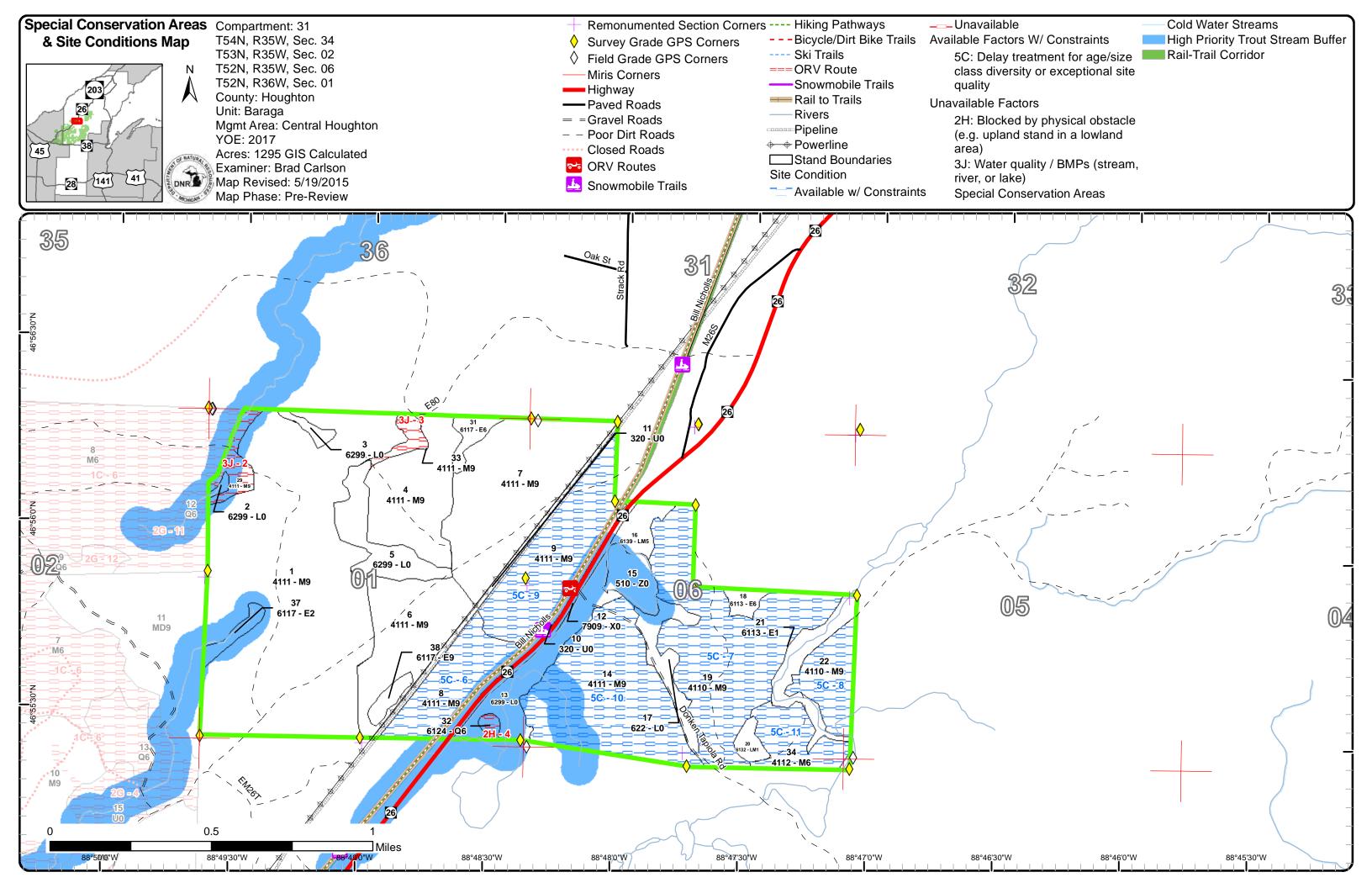


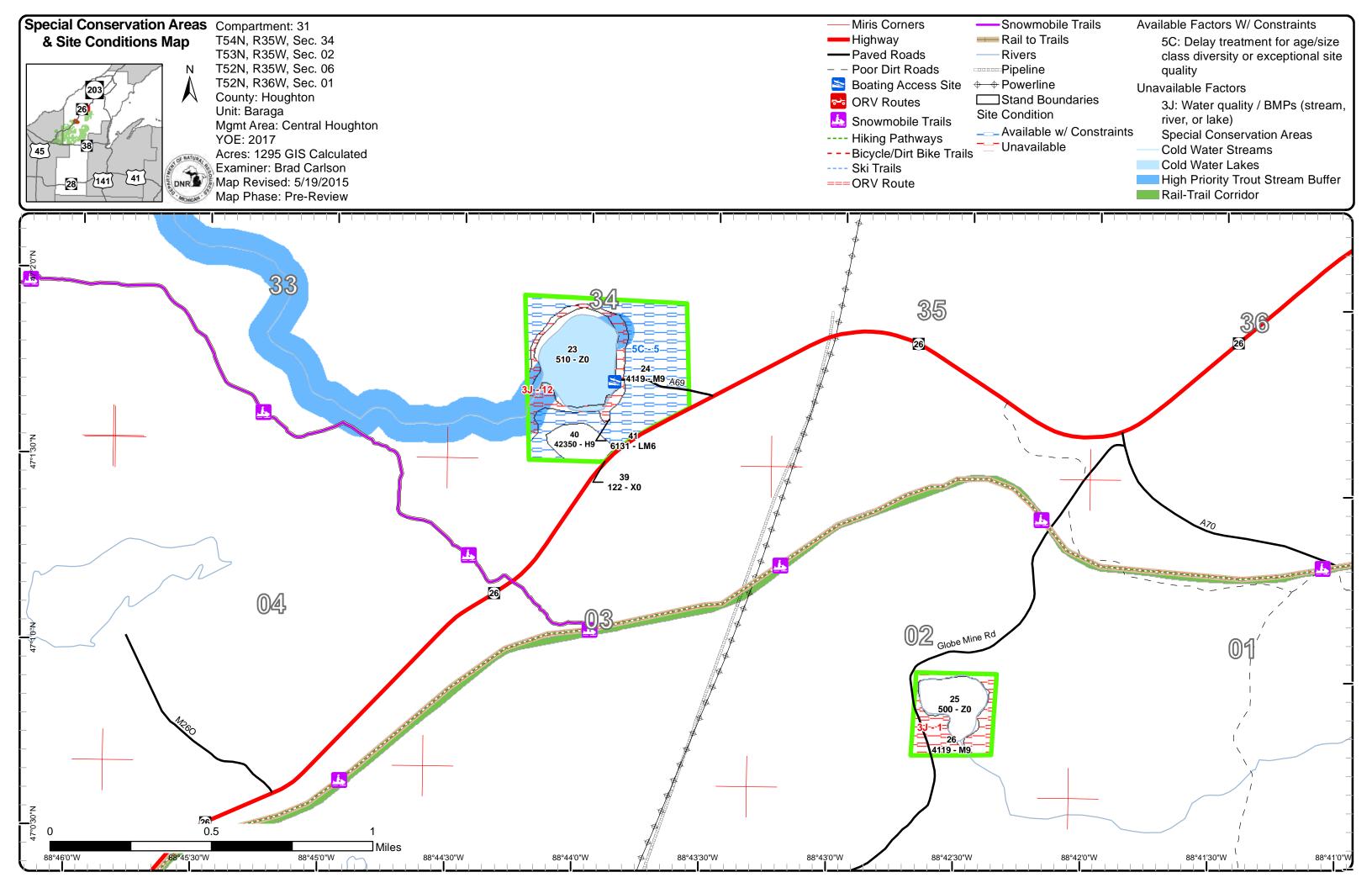












Compartment 31 Year of Entry 2017

Baraga Mgt. Unit **Brad Carlson: Examiner**



Age Class

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Bare/Sparsely Vegetated	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	ı
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12	ı
Lowland Conifers	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	ı
Lowland Deciduous	0	0	0	21	6	0	5	7	0	0	0	0	0	0	0	0	0	5	44	ı
Lowland Mixed Forest	0	0	0	6	0	11	0	0	0	0	0	0	0	0	0	0	0	18	35	l
Lowland Shrub	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	ı
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1006	1006	ı
Upland Shrub	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	ı
Urban	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	ı
Water	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	l
Total	194	0	0	27	6	14	5	7	0	0	0	0	0	0	0	0	0	1041	1294	1



Report 2 – Treatment Summary

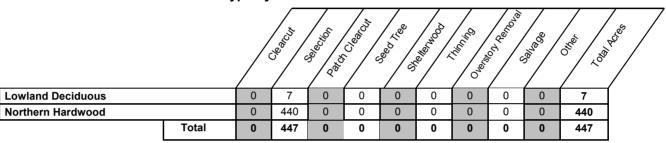
Baraga Mgt. Unit Year of Entry: 2017

Acres of Harvest

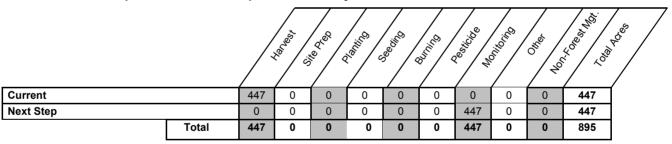
Compartment 31
Total Compartment Acres: 1,295

Commercial Harvest - 447 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Harvest Method



Compartment: 31
Year of Entry: 2017

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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
1	11031001-Cut	282.7	4111 - S.Maple, Hard Mast Association	Sawtimber Well	99	111- 140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	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 to an average BA of 40 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".

Complete Market

Next Step Treatments:

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

Regen:

Other If areas heavy to oak 1-5 acres are found, seed tree harvest with a residual 10-30 sq ba of oak, reserving hemlock, cedar and pine. DNR Sale

Comment: Prep. Old next step comments:

Proposed Start Date: 10/1 /2016

4110 - Sugar 11031004-Cut 57.2 4111 - S.Maple, Sawtimber 111-Harvest Single Tree Uneven-Proposal -Hard Mast Selection Well 140 Maple Aged Approval Association Association 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".

If areas heavy to oak 1-5 acres are found, seed tree harvest with a residual 10-30 sq ba of oak, reserving hemlock, cedar and pine. DNR Sale

Next Step

Treatments:

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

Regen:

<u>Other</u>

Comment: Stand was marked in 2007, sold, and never harvested. Old next step comments:

Proposed Start Date: 10/1 /2016

4111 - S.Maple, 11031007-Cut 999 Sawtimber 99 141-Harvest Single Tree 4110 - Sugar Uneven-Proposal -Hard Mast Well 170 Selection Maple Aged Approval Association Association 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".

If areas heavy to oak 1-5 acres are found, seed tree harvest with a residual 10-30 sq ba of oak, reserving hemlock, cedar and pine. DNR Sale Prep.

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

Report 4 -- Treatments Compartment: 31 s Year of Entry: 2017 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Objective Method d Name CoverType Density Age Range Type Structure **Status** 11031031-Cut 6117 - Lowland 611 - Lowland 31 7.4 Poletimber 111-Harvest Single Tree Uneven-Proposal -Deciduous, Mixed Deciduous Well 140 Selection Aged Approval Coniferous Forest 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

Next Step

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".

Treatments:

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

Baraga Mgt. Unit

Regen:

Specs:

Other Acreage may vary due to wet ground. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Total Treatment Acreage Proposed:

447.3

Baraga Mgt. Unit Brad Carlson : Examiner Compartment: 31
Year of Entry: 2017

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

	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)	22	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Stand rings Eleven I	Mile Lake. Steep hillsides do	wn to lake	e.			
	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Riparian corridor						
	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Riparian corridor						
	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Flowing water on 4 s	sides.					

Report 5 – Site Conditions

Baraga Mgt. Unit Brad Carlson : Examiner Compartment: 31
Year of Entry: 2017

5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	74	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Cut in 2026 to bala						
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Cut in 2026 to balance acres							
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	121	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Cut in 2026 to bala	ance acres					
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Cut in 2026 to bala	ance acres					
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	70	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	106	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 5	- Site C	Conditions
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Baraga Mgt. Unit

Brad Carlson : Examiner

Compartment: 31
Year of Entry: 2017

11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	27	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
12	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	18	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
С	omments:						

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: 31
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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area				
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen co stocked trout populations and those of other coldwater fish conditions for coldwater fishes may occur in Michigan lakes groundwater inflows, or are located in colder (northern) are Director's action and designated as trout resources by Fish	species to persist from year to year. Suitable if they are relatively deep, have substantial as of the state. Such lakes are established by				
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to year to year. Coldwater streams in Michigan typically provide these conditions due to subs contributions of groundwater to their stream flows. Such streams are established by Direct designated as trout resources by Fisheries Order 210.					
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosyste influences the aquatic ecosystem and vice-versa. Because streams and open water wetlands, riparian areas harbor a communities are ecologically and socially significant in thei as aesthetics, habitat, bank stability, timber production, and	of the unique conditions adjacent to lakes, high diversity of plants and wildlife. Riparian r effects on water quality and quantity, as well				

s t	Baraga	a Mgt. Unit		Report 8	- Forested	Stands Compartment: 31 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	282.7	99	111-140	Sel. Cut completed Feb., 2001 by Northern hardwoods/Rossi.
4	4111 - S.Maple, Hard Mast Association	Sawtimber Well	57.2	99	111-140	Rock Hole Hdwd 1988. 11-010-07-01 Donken Hdwd, never cut in 2007. Ready. Re-mark with a different color paint?
6	4111 - S.Maple, Hard Mast Association	Sawtimber Well	59.5	99	81-110	1988 Rock Hole Hdwd, 11-010-07-01 Donken Hdwd Units TCR 9/11/2012.
7	4111 - S.Maple, Hard Mast Association	Sawtimber Well	99.9	99	141-170	Nichols Trail Hdwd. Completed Spring 2002.
8	4111 - S.Maple, Hard Mast Association	Sawtimber Well	41.4	99	141-170	Nicholls Trail Hdwd, completed over 2 Winters. Done by Spring 2002. Stand is adjacent to the Bill Nicholls snowmobile trail on the west side.
9	4111 - S.Maple, Hard Mast Association	Sawtimber Well	70.3	99	111-140	NORTH OF DRAINAGE VERY STEEP TERRAIN. PARTLY BLUFF. Stand is adjacent to the Bill Nicholls snowmobile trail on the West side. Harvested in 2007/08 as part of "NorthEnd Hardwoods" (11-011-07-01)
14	4111 - S.Maple, Hard Mast Association	Sawtimber Well	105.8	99	111-140	harvested in 2007/08 as part of "NorthEnd Hardwoods" (11-011-07-01)
16	6139 - Mixed Lowland Forest	Poletimber Medium	11.0	40	Unspecified	Sparsely forested lowland drainage, heavy to tag alder.
18	6113 - Lowland Maple	Poletimber Well	5.1	50	Unspecified	Wet ground. E type.
19	4110 - Sugar Maple Association	Sawtimber Well	121.0	99	141-170	Selection cut completed Fall, 2000 by Northern Hardwoods/Rossi, Smokey Hdwds.
20	6132 - Mixed Lowland Forest with Cedar	Sapling Poor	5.7	20	Immature	Old beaver pond, growing in.
21	6113 - Lowland Maple	Sapling Poor	21.3	20	Immature	Drainage with saplings creeping in on edges.
22	4110 - Sugar Maple Association	Sawtimber Well	28.2	99	141-170	BA 110-160 (2015) Fair amount of under brush. Selection cut completed Fall, 2000 by Northern hardwoods/Rossi, Smokey Hdwds.
24	4119 - Mixed Northern Hardwoods	Sawtimber Well	73.9	99	111-140	
26	4119 - Mixed Northern Hardwoods	Sawtimber Well	21.5	99	111-140	Fringe around Eleven mile lake. Old Fish Division rearing pond.
29	4111 - S.Maple, Hard Mast Association	Sawtimber Well	11.3	99	111-140	Drainage.

s t	Baraga	Mgt. Unit		Report 8	- Forested	Stands Compartment: 31 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	7.4	60	111-140	Was set up for Donken Hdwd and never cut. E type that can be marked through.
32	6124 - Lowland Spruce- Fir	Poletimber Well	2.6	40	Unspecified	Small island stand.
33	4111 - S.Maple, Hard Mast Association	Sawtimber Well	6.2	99	111-140	11-010-07-01 Donken Hdwd Units. Drainage runs through the stand.
34	4112 - Maple, Beech, Cherry Association	Poletimber Well	27.1	60	111-140	Pole stand with wet pockets throughout. Heavy patches of hemlock and cedar.
37	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Medium	5.9	30	1-50	Beaver flooded timber.
38	6117 - Lowland Deciduous, Mixed Coniferous	Sawtimber Well	5.5	99	111-140	Very wet ground.
40	42350 - Upland Hemlock	Sawtimber Well	11.6	99	171-200	H9 stand.

6131 - Hemlock, White Pine, Maple, Birch

41

Poletimber Well

17.9

99

111-140

Report 9 - Nonforested Stands

Compartment: 31 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
2	6299 - Lowland Shrub (OI)	1.4	No	Beaver flooded timber.
3	6299 - Lowland Shrub (OI)	3.8	No	Beaver flooded timber
5	6299 - Lowland Shrub (OI)	27.7	No	beaver flooded timber.
10	320 - Upland Shrub	11.4	No	Nicholls Trail ROW
11	320 - Upland Shrub	10.5	No	Double Pole Power line
12	7909 - Nonstocked (OI)	11.7	No	M-26 ROW
13	6299 - Lowland Shrub (OI)	34.3	No	Drainage.
15	510- Water (OI)	15.2	No	DONKEN LAKE
17	622 - Lowland Shrub	18.0	No	Tag alder drainage.
23	510- Water (OI)	39.9	No	Lake Perault
25	500 - Water	19.0	No	ELEVENMILE LAKE. Old Fish Division rearing pond.
39	122 - Road/Parking Lot	1.5	No	M-26