

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41170 Entry Year 2019 Acreage: 1,959 County Alger

Management Area: Cusino Complex

Revision Date: 2017-07-06

Stand Examiner: Mario Molin

Legal Description:

T47N, R17W, Sec. 1, 11-14

Identified Planning Goals:

To provide sustainable forest eco-system management.

Soil and topography:

Upland hardwood areas of the compartment have mainly Garlic Sand, Kalkaska Sand, or Munising-Yalmer-Froling Complex, Calcareous Substratum of 0-15% slopes. Lower ground is generally Carbondale, Lupton and Tawas soils.

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

Mainly surrounded by state owned land and commercial forest land.

Unique Natural Features:

Currently under review by Michigan Natural Features Inventory (MNFI).

Archeological, Historical, and Cultural Features:

None known at present.

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

Stoner Creek is classified as Type 1 trout water. Although it can support native brook trout, we do not actively manage it. There is no fishery associated with the Eastern Lake Superior Fisheries Management area.

Wildlife Habitat Considerations:

This compartment lies northeast of Melstrand on the south side of H-58. Pre-settlement data show a composite of sugar maple, yellow birch, beech, and hemlock dominated the forest. Balsam fir and red maple were fairly common while white pine and elm were scattered. Cedar dominated the lowlands with elm, ash, spruce, and tamarack mixed in.

Current upland forests continue to be dominated by northern hardwoods. However, hemlock and yellow birch are substantially reduced and black cherry is much more prevalent than in the circa 1850 forests.

Wildlife habitat objectives include restoring hemlock into portions of this compartment, promoting the existing black cherry for mast production, and enhancing within and between stand structural diversity.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand & gravel, postglacial alluvium, coarse-textured till and peat and muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien (PdC) Formation subcrops below the glacial drift. The PdC could be used for stone. The nearest gravel pit is in Section 15 to the east and there should be potential. There is no commercial oil and gas production in the UP.

Vehicle Access:

The majority of the compartment is accessible by trail roads.

Survey Needs:

Unknown at this time

Recreational Facilities and Opportunities:

There are no developed DNR recreational facilities within the compartment; but the area is used for hunting.

Fire Protection:

There are no specific fire protection concerns within this compartment.

Additional Compartment Information:

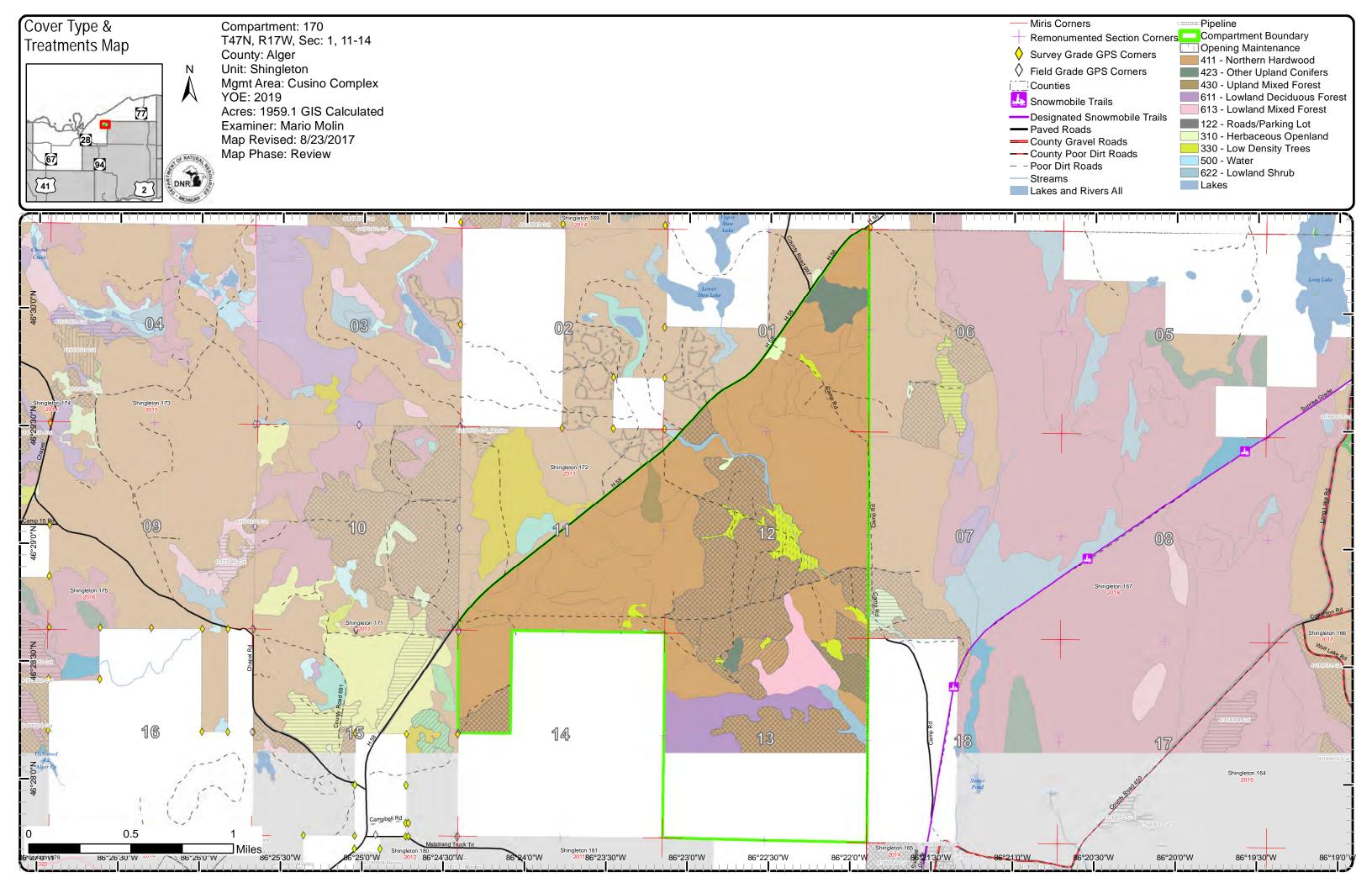
The following reports from the Inventory are attached:

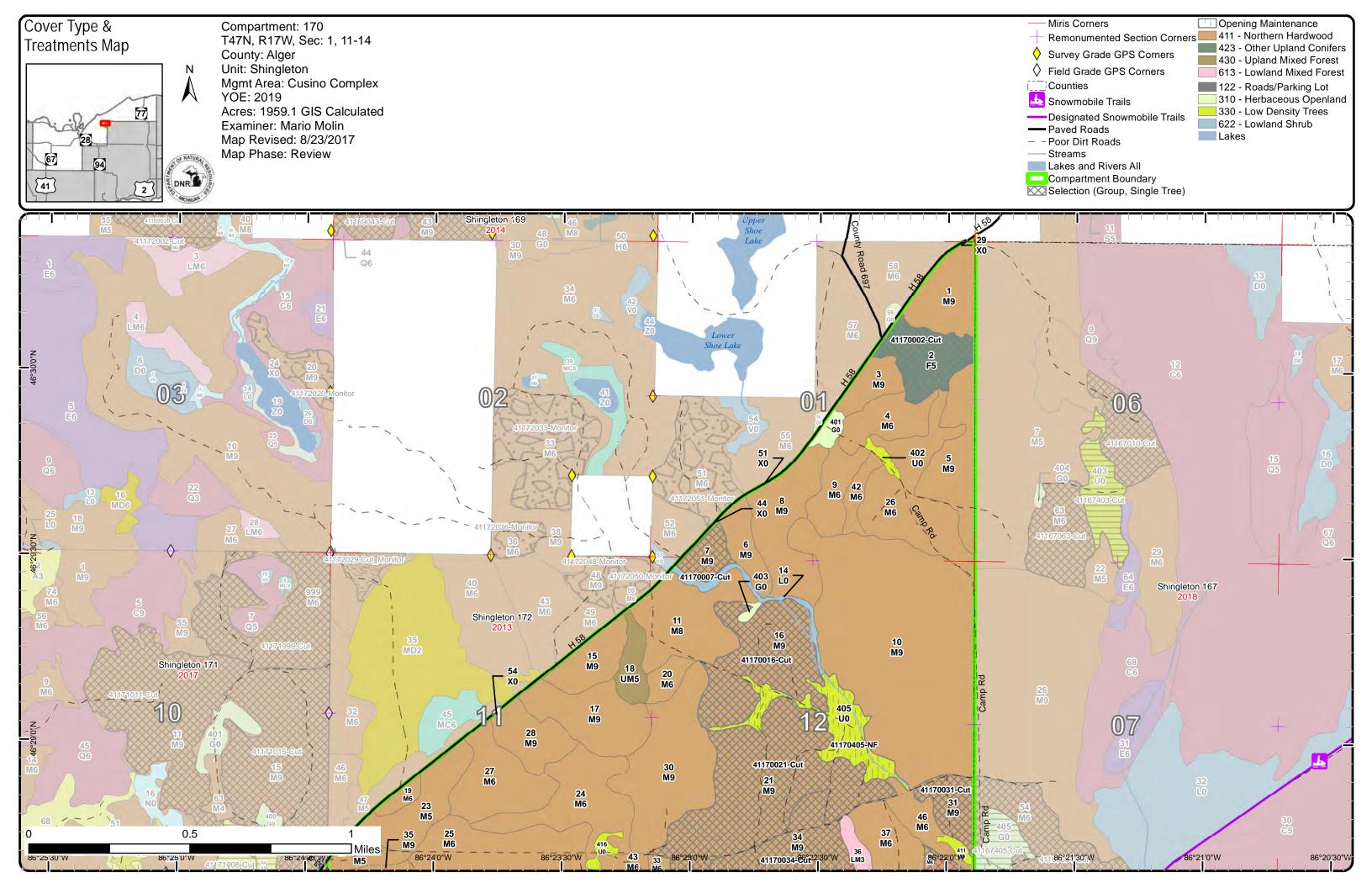
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

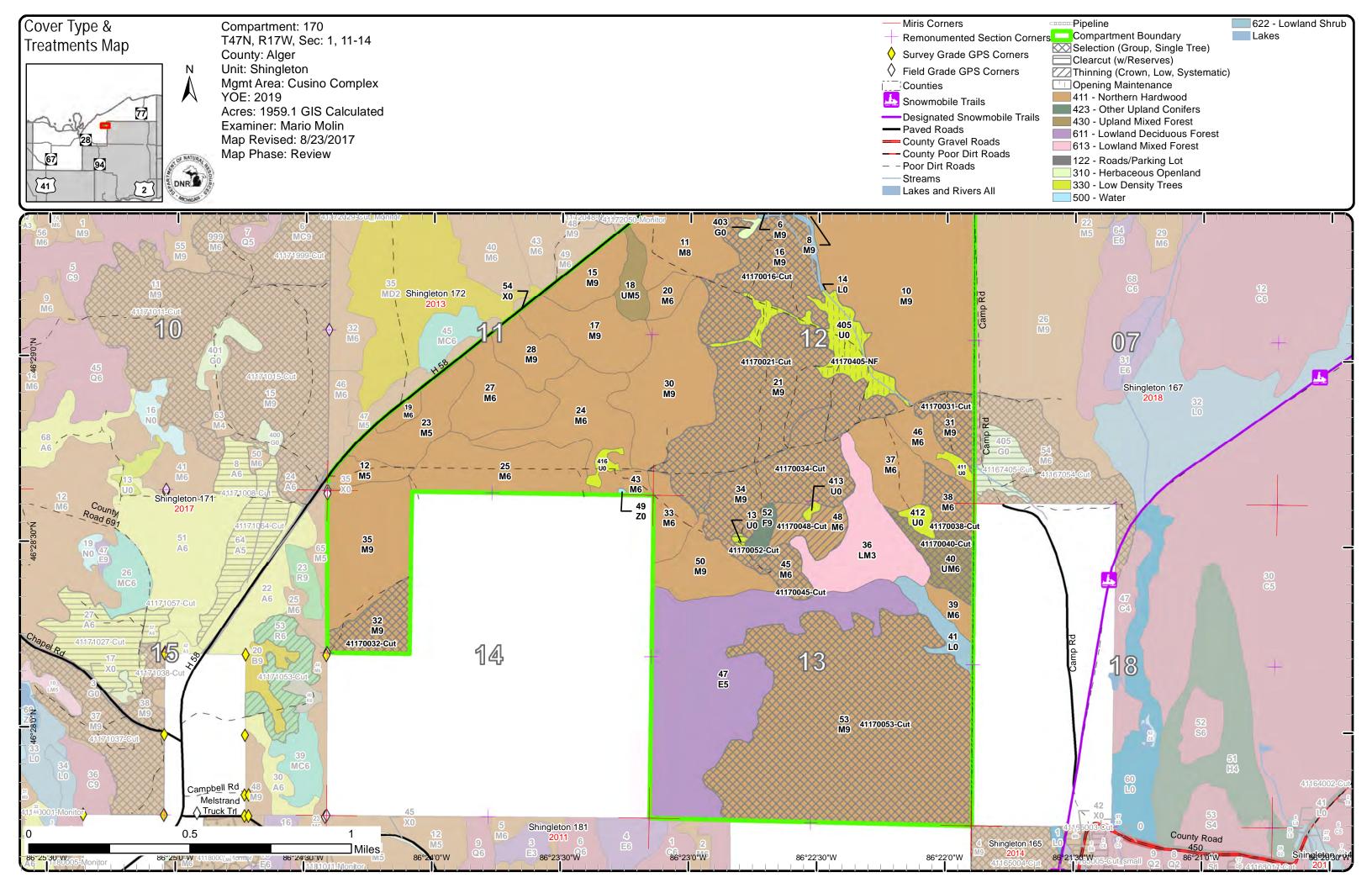
The following information is displayed, where pertinent, on the attached compartment maps:

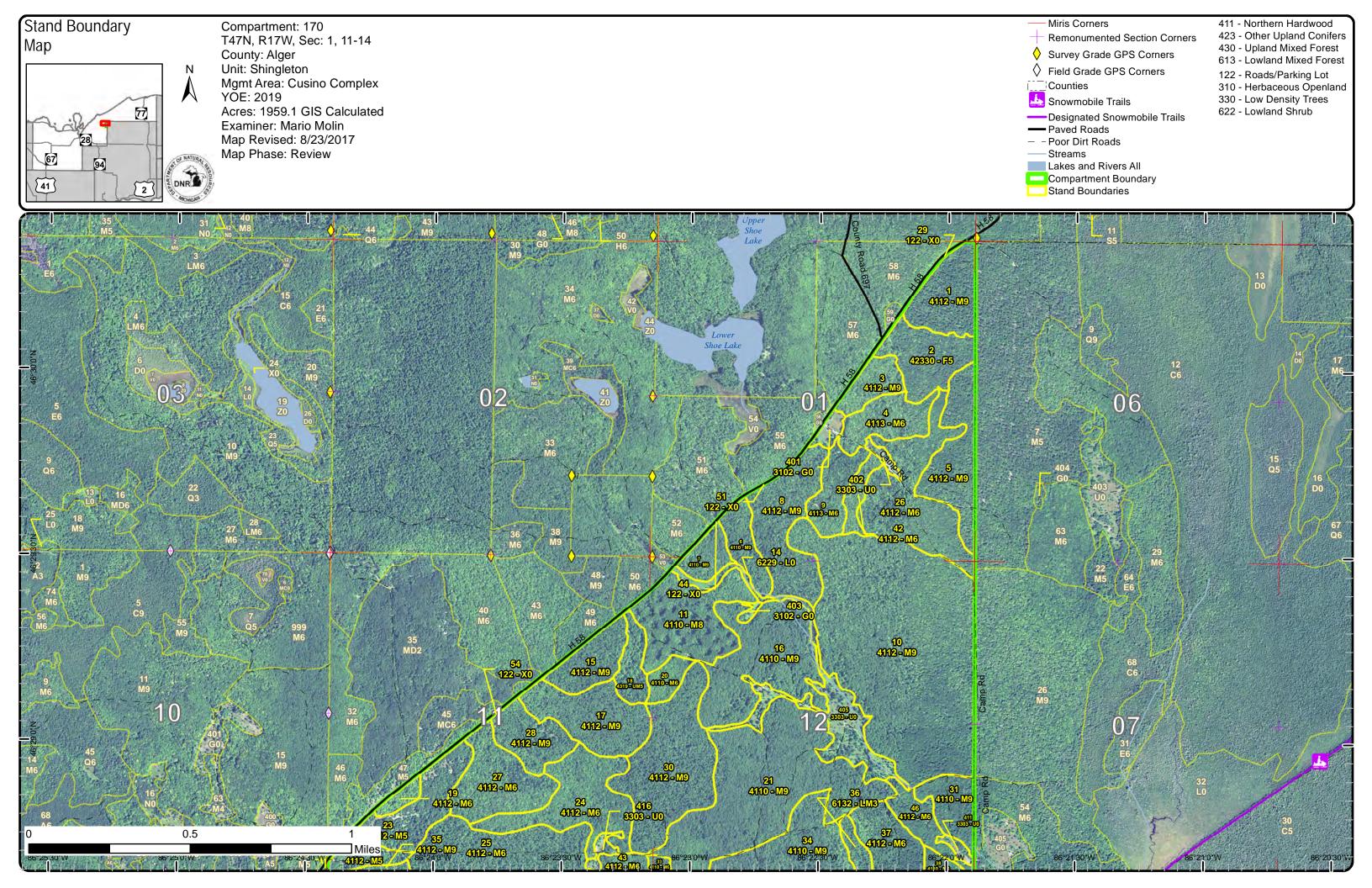
Base feature information, stand boundaries, cover types, and numbers

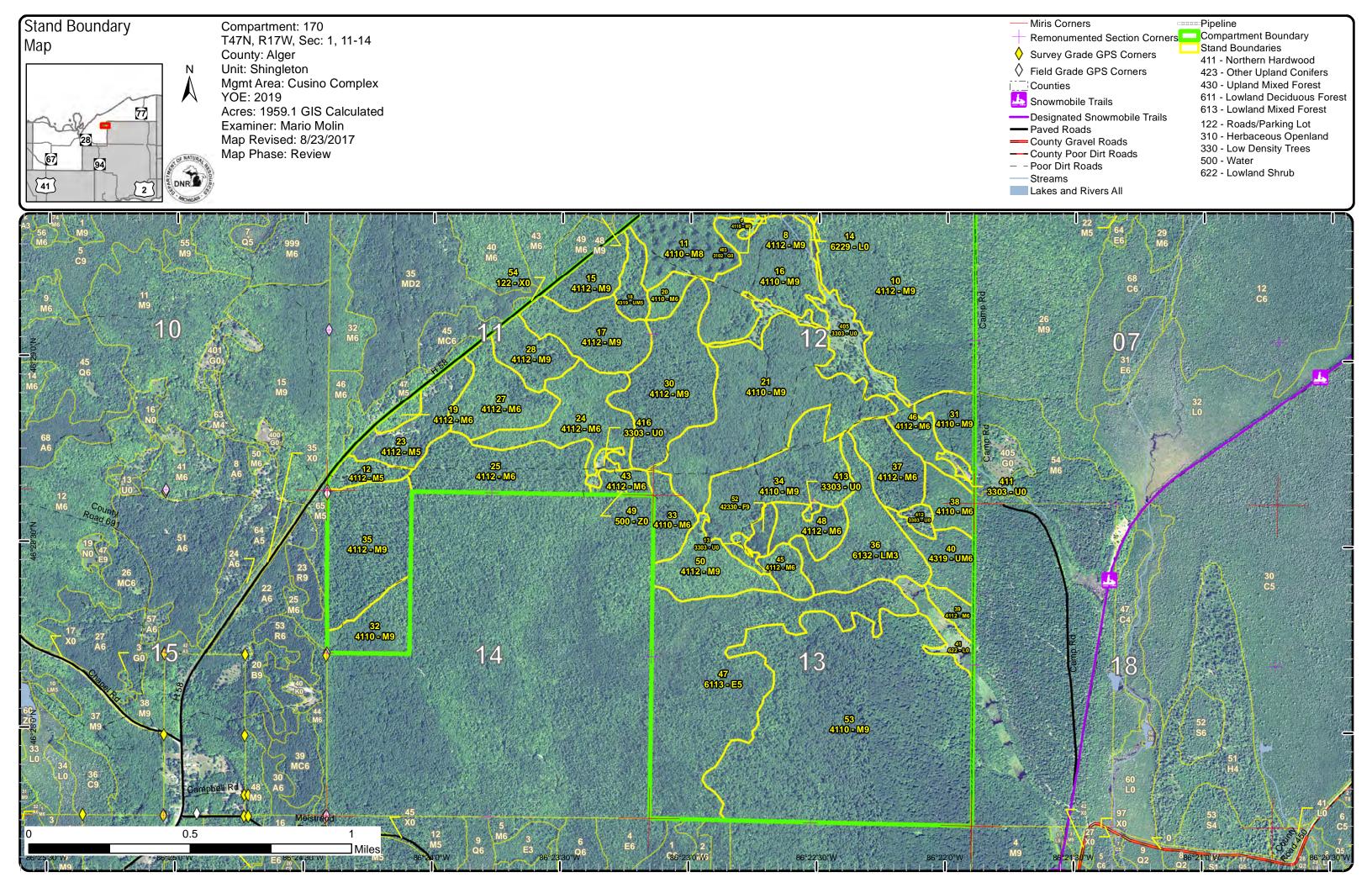
Proposed treatments
Site condition boundaries
Details on the road access system

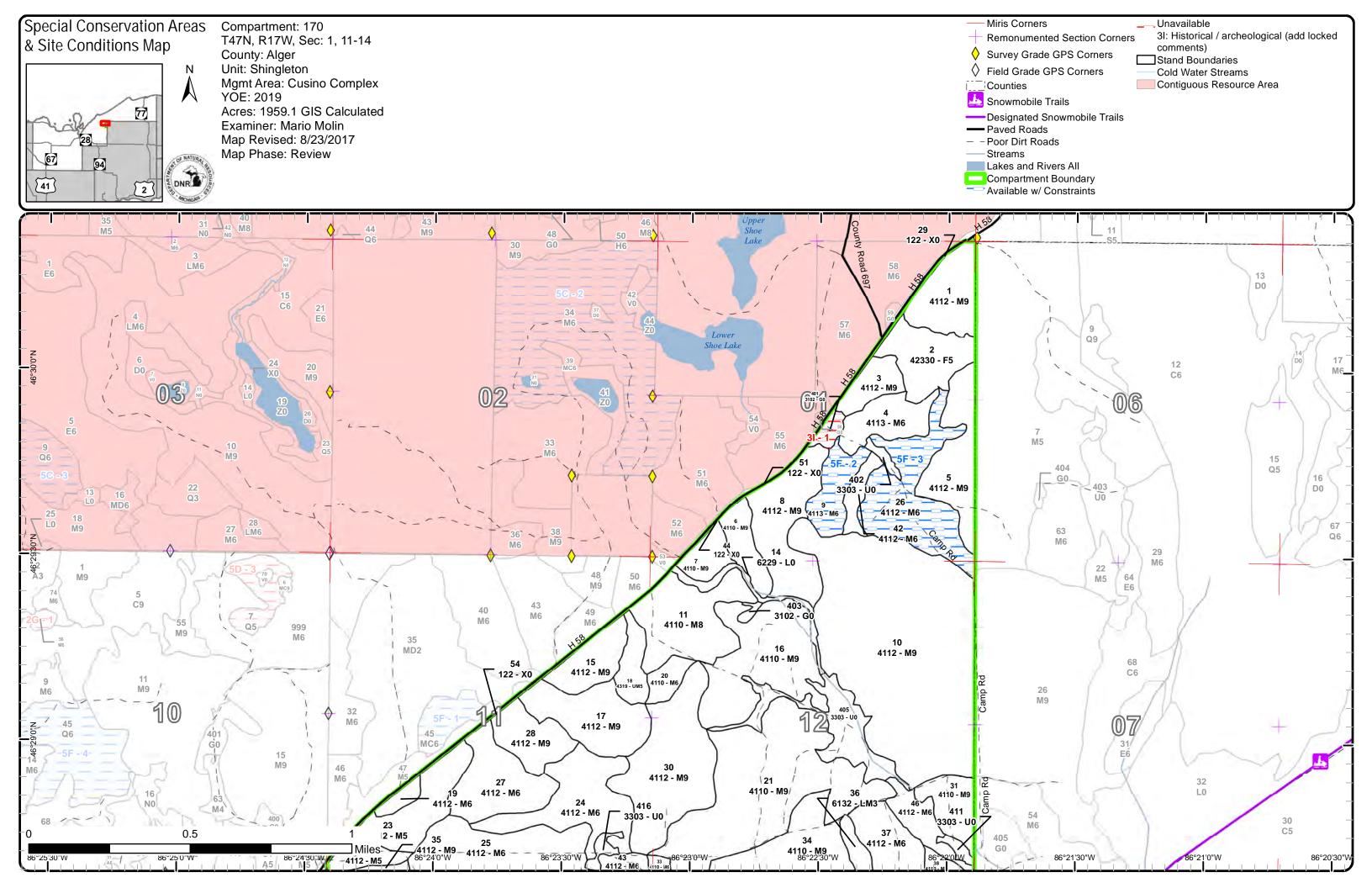


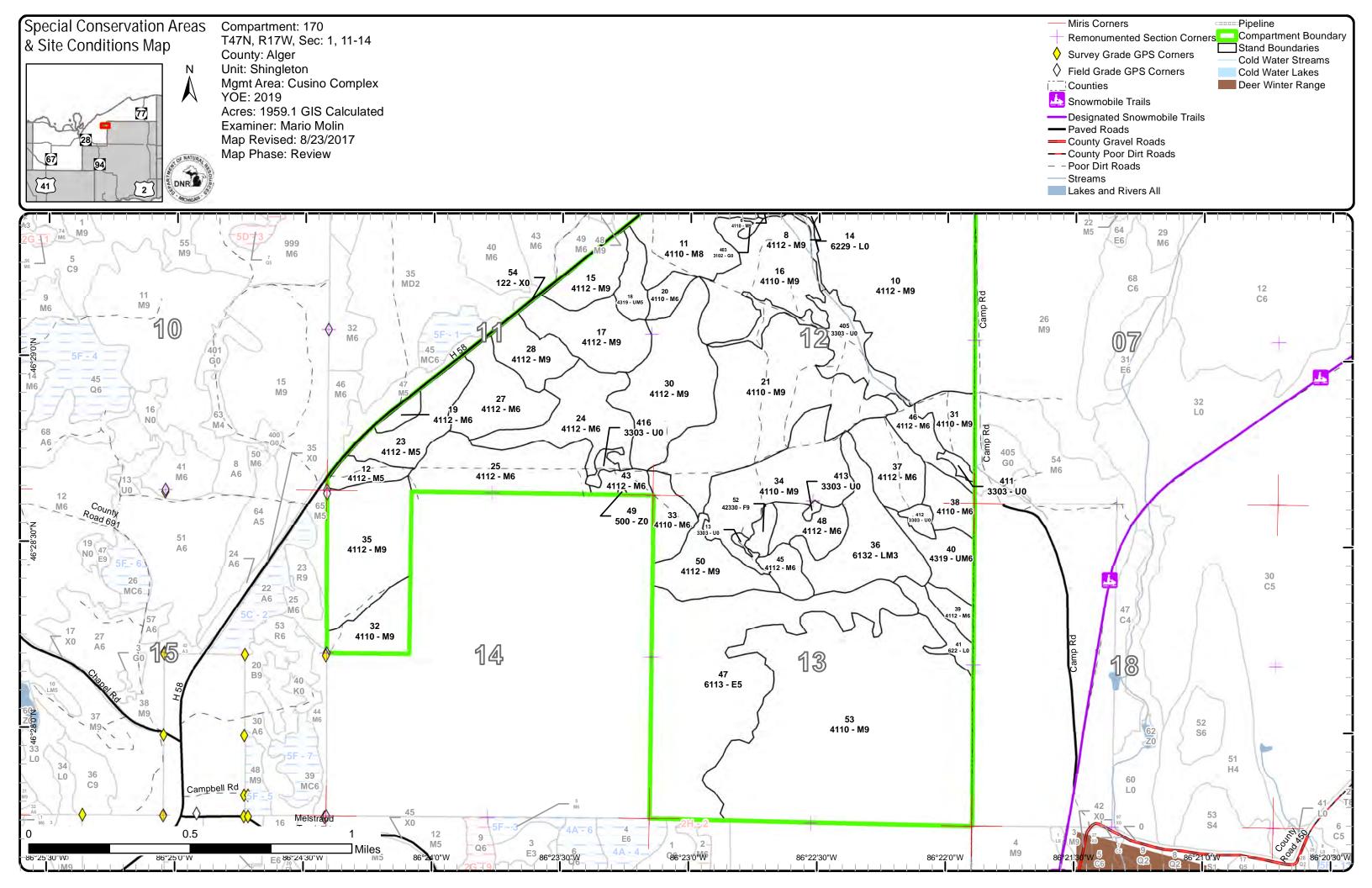












Compartment 170 Year of Entry 2019

Shingleton Mgt. Unit

Mario Molin : Examiner

Age Class

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Herbaceous Openland	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Low-Density Trees	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Lowland Deciduous	0	0	0	0	0	0	0	0	157	0	0	0	0	0	0	0	0	0	157
Lowland Mixed Forest	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Lowland Shrub	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Northern Hardwood	0	0	0	0	0	88	19	0	10	0	0	0	0	0	0	0	0	1484	1600
Upland Mixed Forest	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	33
Upland Spruce/Fir	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	29	35
Urban	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	82	0	52	0	0	94	53	0	167	0	0	0	0	0	0	0	0	1513	1959



Report 2 - Treatment Summary

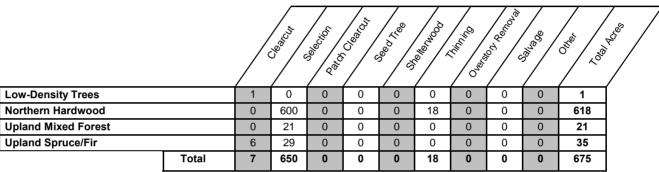
Shingleton Mgt. Unit Year of Entry: 2019

Acres of Harvest

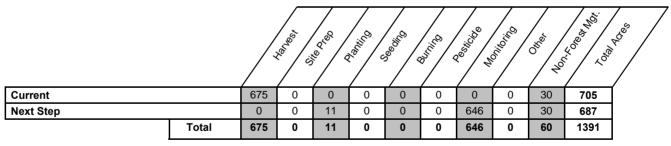
Compartment 170
Total Compartment Acres: 1,959

Commercial Harvest - 675
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Other Comment:

Proposed Start Date: 10/01/2018

16 41170016-Cut 63.0 4110 - Sugar Maple Sawtimber 85 111-Harvest Single Tree 411 - Northern Uneven-Proposal Association Well Selection Hardwood Aged 140

Site Condition:

Prescription Mark to 80BA, mark regen gaps a bit larger than standard, promote underrepresented species where possible.

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Habitat Cut: No

Acceptable Northern hardwoods

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Compartment: 170

Year of Entry: 2019

Hardwood

Selection

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	41170021-Cut	116.3 4°	110 - Sugar Maple Association	Sawtimber Well	85	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal

Habitat Cut: No Site Condition:

Prescription Mark to 80BA, make some larger canopy gaps where no regeneration exists and around under-represented species to promote diversity.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Northern hardwoods.

Regen: Other

Keep to mark, easy ground with very little regen.

Comment:

10/01/2018 **Proposed Start Date:**

31 41170031-Cut 17.6 4110 - Sugar Maple Sawtimber 51-80 Single Tree 411 - Northern 85 Harvest Even-Aged Proposal

> Association Well

Habitat Cut: No Site Condition:

<u>Prescription</u> Light thinning to release advanced regeneration, open existing gaps.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Northern hardwood

Regen:

Other Comment:

Proposed Start Date: 10/01/2017

32 41170032-Cut 24.3 4110 - Sugar Maple Sawtimber 85 81-110 Harvest Single Tree 411 - Northern Uneven-Proposal Association Well Selection Aged Hardwood

Habitat Cut: No Site Condition:

Prescription Mark to 80 BA, promote cherry where possible-tree length openings around seed tree.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Black cherry and other species.

Regen:

Other Comment:

Habitat Cut: No

Proposed Start Date: 10/01/2018

34 41170034-Cut 62.4 4110 - Sugar Maple Sawtimber 85 51-80 Harvest Single Tree 411 - Northern Uneven-Proposal Hardwood Association Well Selection Aged

Site Condition:

Prescription Mark to 80BA, make some larger canopy gaps where no regeneration exists and around under-represented species to promote diversity.

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Northern hardwoods

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Association

Habitat Cut: No Site Condition:

<u>Prescription</u> Mark to 60BA to push for regeneration, and promote current regeneration. Plant oak.

Specs:

Next Step Treatments:

Acceptable Northern hardwoods

Regen:
Other
Comment:

Proposed Start Date: 10/01/2018

Shingleton Mgt. Unit Report 3 -- Treatments Compartment: 170 s Year of Entry: 2019 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Method Objective Structure **Status** d Name CoverType Density Age Range Type 41170052-Cut 5.8 42330 - Upland Fir Sawtimber 4319 - Mixed 52 81-110 Harvest Clearcut Even-Aged Proposal **Upland Forest** Well **Habitat Cut: No Site Condition:** Prescription Clearcut, no retention due to small size. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Fir with any mix species Regen: Other Comment:

111-

140

Harvest

Single Tree

Selection

411 - Northern

Hardwood

Uneven-

Aged

Proposal

Habitat Cut: No Site Condition:

Prescription Mark to 80BA, re-open canopy gaps, promote under represented species where possible.

Well

278.5 4110 - Sugar Maple Sawtimber

Association

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

10/01/2017

Treatments:

Proposed Start Date:

53 41170053-Cut

Acceptable Northern hardwoods

Regen:

Access is the southwest corner. Other

Comment:

Proposed Start Date: 10/01/2018

405 41170405-NF 29.9 3303 - Mixed Low Nonstocked Unspec NonForestMgt **Brush Cutting** 310 -Draft Field **Density Trees** Herbaceous ified Boundary Openland

Habitat Cut: No Site Condition:

Prescription Prescribed fire, farming (dozing, disking, raking seeding (native or naturalized speces ony), fertilizing and liming), chainsaw removal of competing Specs:

trees and establishment of native hard and soft mast producers such as red oak, mountain ash or others.

NonForestMgt, Brushpile/Woody Debris Creation Next Step

Treatments:

Acceptable Regen:

Other W41-1407.

Comment:

Include with any surrounding timber sales if possible.

Proposed Start Date: 10/01/2019

Total Treatment Acreage Proposed:

704.5

Shingleton Mgt. Unit

Mario Molin : Examiner

Compartment: 170 Year of Entry: 2019

Availability for Management Total Acres Acres Avail Acres **Dominant Site Conditions** With Condition Not Available 5F 31 Acres Available 2 Herbaceous Openland 4 6 4 0 46 0 46 0 **Low-Density Trees** 157 157 0 0 **Lowland Deciduous** 52 52 0 **Lowland Mixed Forest** 0 21 21 0 Lowland Shrub 0 1601 1528 73 0 Northern Hardwood 73 **Upland Mixed Forest** 33 33 0 0 35 0 Upland Spruce/Fir 35 0 9 9 0 Urban 0 0 0 Water 0 0 1,959 73 **Total Forested Acres** 73 1,881 4 4 96% 4% 0% 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 Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition	
1	Unavailable	3l: Historical / archeological (add locked comments)	4	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
2	Available	5F: Evaluated for Forest Health Considerations	19	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: Green sheet- 14 BA B. Fir 1-2 sticks tall.							
3	Available	5F: Evaluated for Forest Health Considerations	55	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: Green Sheet- 16BA	of B. Fir 1-2 sticks tall						

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - 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				

Mgt. Unit Compartment:
Year of Entry

Report 6 - 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 Description
Area

ERA = Ecological Reference Area

HCVA = High Conservation Value Area

SCA = Special Conservation Area

S t	Shingleton	Mgt. Unit		Report 7	– Forested	Stands Compartment: 170 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	28.1	85	51-80	Cut in 2011. 1163 Oak Seedlings were planted in the spring of 2014 under FTP #w41-1435 at a cost of \$14421.20. (7/30/14 RH)
2	42330 - Upland Fir	Poletimber Medium	29.0	85	111-140	
3	4112 - Maple, Beech, Cherry Association	Sawtimber Well	13.3	85	81-110	Has the appearance of an old shelterwood cut. Red shouldered hawk nest in stand.
4	4113 - R.Maple, Conifer	Poletimber Well	21.6	65	81-110	
5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	34.9	85	81-110	Cut in 2011. 1163 Oak Seedlings were planted in the spring of 2014 under FTP #w41-1435 at a cost of \$14421.20. (7/30/14 RH)
6	4110 - Sugar Maple Association	Sawtimber Well	14.7	85	81-110	Cut in 2011.
7	4110 - Sugar Maple Association	Sawtimber Well	11.1	85	81-110	
8	4112 - Maple, Beech, Cherry Association	Sawtimber Well	43.1	85	81-110	Cut in 2011. 1163 Oak Seedlings were planted in the spring of 2014 under FTP #w41-1435 at a cost of \$14421.20. (7/30/14 RH)
9	4113 - R.Maple, Conifer	Poletimber Well	18.5	52	81-110	
10	4112 - Maple, Beech, Cherry Association	Sawtimber Well	198.0	85	81-110	2017- Cut next entry, very good regeneration. Thinned in 2003. Underplanted with oak in 2005.
11	4110 - Sugar Maple Association	Sawtimber Medium	45.7	85	81-110	2017- Chery stand that was gap cut to regenerate cherry. Rest of stand can be thinned Cut in 2012.
12	4112 - Maple, Beech, Cherry Association	Poletimber Medium	10.0	75	51-80	
15	4112 - Maple, Beech, Cherry Association	Sawtimber Well	20.0	85	81-110	Cut in 2012. 350 Oak Seedlings were planted in the spring of 2014 under FTP #w41-1434 at a cost of 4340.00. (7/30/14 RH)
16	4110 - Sugar Maple Association	Sawtimber Well	63.0	85	111-140	
17	4112 - Maple, Beech, Cherry Association	Sawtimber Well	37.8	95	81-110	cut in 2012
18	4319 - Mixed Upland Forest	Poletimber Medium	12.5	54	1-50	

s t	Shingletor	n Mgt. Unit		Report 7	- Forested	Stands Compartment: 170 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	4112 - Maple, Beech, Cherry Association	Poletimber Well	4.8	65	51-80	OPIC - FMD: Borders H-58. Flat ground with an old RR grade through the stand. Regeneration consists of hardwood, b.fir and w.pine. Soil=Kalkaska Sand, 0-6% slopes
20	4110 - Sugar Maple Association	Poletimber Well	8.2	85	81-110	
21	4110 - Sugar Maple Association	Sawtimber Well	116.3	85	81-110	Do not contract out. Easy marking.
23	4112 - Maple, Beech, Cherry Association	Poletimber Medium	30.1	47	1-50	
24	4112 - Maple, Beech, Cherry Association	Poletimber Well	45.5	49	81-110	
25	4112 - Maple, Beech, Cherry Association	Poletimber Well	52.8	85	51-80	[5/15/2011 JB] Timber sale has been cut and red oak and hemlock were planted, FTP W41-1431 can be closed.
26	4112 - Maple, Beech, Cherry Association	Poletimber Well	54.8	85	81-110	There are small openings throughout the stand.
27	4112 - Maple, Beech, Cherry Association	Poletimber Well	36.3	47	81-110	Pocket of white pine on east side.
28	4112 - Maple, Beech, Cherry Association	Sawtimber Well	22.1	85	51-80	cut in 2012
30	4112 - Maple, Beech, Cherry Association	Sawtimber Well	66.4	85	81-110	Cut in 2012
31	4110 - Sugar Maple Association	Sawtimber Well	17.6	85	51-80	
32	4110 - Sugar Maple Association	Sawtimber Well	24.3	85	81-110	Cut under #024-95 in apx. 1997.
33	4110 - Sugar Maple Association	Poletimber Well	16.8	85	81-110	Cut in 2013.
34	4110 - Sugar Maple Association	Sawtimber Well	62.4	85	51-80	Stand thinned in summer and fall of 1997, then east portion against the north finger of stand 36 had salvage of windthrow in 2001.
35	4112 - Maple, Beech, Cherry Association	Sawtimber Well	62.7	85	51-80	[5/15/2011 JB] Timber sale has been cut and red oak and hemlock were planted, FTP W41-1431 can be closed. [7-19-11] Sale is now complete TCR dtd 7-18-11.
36	6132 - Mixed Lowland Forest with Cedar	Sapling Well	51.6	15	Immature	Cut in 2002.
37	4112 - Maple, Beech, Cherry Association	Poletimber Well	27.2	85	81-110	Cut in 2012. 350 Oak Seedlings were planted in the spring of 2014 under FTP #w41-1434 at a cost of 4340.00. (7/30/14 RH)

s t	Shingleton	Shingleton Mgt. Unit			– Forested	Stands Compartment: 170 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4110 - Sugar Maple Association	Poletimber Well	15.6	75	81-110	
39	4112 - Maple, Beech, Cherry Association	Poletimber Well	8.2	65	81-110	
40	4319 - Mixed Upland Forest	Poletimber Well	20.9	59	81-110	
42	4112 - Maple, Beech, Cherry Association	Poletimber Well	7.9	50	81-110	
43	4112 - Maple, Beech, Cherry Association	Poletimber Well	7.6	47	51-80	
45	4112 - Maple, Beech, Cherry Association	Poletimber Well	11.0	75	81-110	Cut apx. 1997. Very poor quality stand, perhaps a shelterwood or seedtree to reset the stand and produce some better quality timber.
46	4112 - Maple, Beech, Cherry Association	Poletimber Well	14.5	45	1-50	Old opening that has filled in with trees. Looks like an old gravel pit or similar use, stand 411 would be part of old pit.
47	6113 - Lowland Maple	Poletimber Medium	156.7	74	51-80	Large stand - tree species composition and BA varries throughout. Stoner Creek is in the north part of the stand. 98=hemlock and w.pine Carbondale, Lupton and Tawas Soils
48	4112 - Maple, Beech, Cherry Association	Poletimber Well	18.0	75	81-110	
50	4112 - Maple, Beech, Cherry Association	Sawtimber Well	31.4	85	51-80	Prescribe in 2029. Stand is well stocked with small yellow birch, most beech should fall out of the stand by 2029. Push to promote more yellow birch and release existing. Stand is mostly poor quality red maple and beech.
52	42330 - Upland Fir	Sawtimber Well	5.8	47	81-110	
53	4110 - Sugar Maple Association	Sawtimber Well	278.5	85	111-140	Cut in 2001.

Compartment: 170 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
13	3303 - Mixed Low Density Trees	1.2	No	old opening with a mix of trees.
14	6229 - Mixed lowland shrub	7.6	No	OPIC - FMD: Marsh area with seasonal water flow. Soil=Tawas-Deford Mucks
29	122 - Road/Parking Lot	3.0	No	OPIC - FMD: H-58 ROW.
41	622 - Lowland Shrub	13.1	No	OPIC - FMD: Stoner Creek and ponds. Carbondale, Lupton and Tawas Soils
44	122 - Road/Parking Lot	1.1	No	OPIC - FMD: H-58 ROW.
49	500 - Water	0.3	No	OPIC - FMD: Small pond. Carbondale, Lupton and Tawas soils
51	122 - Road/Parking Lot	0.2	No	OPIC - FMD: H-58 ROW.
54	122 - Road/Parking Lot	5.0	No	OPIC - FMD: H-58 ROW.
401	3102 - Grass	4.4	No	Grassy opening at the intersection of H-58 and Camp 1 Rd.
402	3303 - Mixed Low Density Trees	2.6	No	OPIC - FMD: Grass stand along the Camp 1 Rd. Scattered cherry and spruce. Soil=Garlic Sand, 0-6% slopes
403	3102 - Grass	1.5	No	OPIC - FMD: Small grassy opening. soil=Munising-Yalmer-Frohling Complex, Calcareous Substratum, 1-6% slopes
405	3303 - Mixed Low Density Trees	29.9	Yes	OPIC - FMD: Large grassy opening. Hardwood trees encroaching around edges. Scattered cherry, r.maple. Prescribed for opening maintenance. W41-1407
411	3303 - Mixed Low Density Trees	2.7	No	OPIC - FMD: Grassy opening, filling in with trees. Slightly lower ground than surrounding hardwood stands. Soil=Kalkaska-Cusino Complex 1-6% slopes
412	3303 - Mixed Low Density Trees	4.5	No	OPIC - FMD: Grassy opening, filling in with trees. Soil=Kalkaska Sand, 0-6% slopes
413	3303 - Mixed Low Density Trees	1.2	No	
416	3303 - Mixed Low Density Trees	3.5	No	