

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41131 Entry Year 2019 Acreage: 3,223

County Schoolcraft

Management Area: Danaher Kingston Outwash

Revision Date: 2017-02-23

Stand Examiner: Scott Kentner

Legal Description:

T47N R14W Sections 5-8 and 16-18

Identified Planning Goals:

To manage the compartment in accordance with the principles of sustainable forest eco-system management, with emphasis on timber production, recreation, maintaining & enhancing wildlife habitat, and protection of riparian areas

Soil and topography:

The topography is rolling, with occasional steep ridges. Soils are generally moderate to well-drained, but pockets and corridors of lowland with impeded drainage are also present.

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

There are several private land parcels with hunting camps located within this compartment, and also timber company lands enrolled in the Commercial Forest Reserve.

Unique Natural Features:

The West Branch Fox River and its tributaries, including lakes and ponds, influence a significant area of this compartment.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

The Fox River drainage is designated as a natural river system. Surrounding lands are subject to special protective measures and management guidelines as defined in the FOX RIVER NATURAL RIVER PLAN.

Watershed and Fisheries Considerations:

The West Branch of the Fox River is found within this compartment and is a designated trout stream. Standard BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Ordovician Black River and Prairie du Chien Groups subcrop below the glacial drift. The Black River is quarried for stone/dolomite elsewhere in the UP. Gravel pits at not found in the general area, but there should be potential on the uplands. There is no commercial oil and gas production in the UP.

Vehicle Access:

Although the bridge over the West Branch Fox River on the Wagner-Taylor Dam Road is no longer available for vehicle traffic, access to the compartment by motor vehicle is generally very good. Areas north of the river may be accessed through private lands via the Adams Trail (Co. Rd. 637) while the rest of the compartment may be reached from the Wagner-Taylor Dam Rd. A well-developed network of passable woods roads exists throughout the area.

Survey Needs:

Recreational Facilities and Opportunities:

A heavily-used snowmobile trail passes through the compartment, and the Fox River Pathway passes through the southwest corner in section 18. Hunting, fishing and dispersed camping are all popular pursuits in this area.

Fire Protection:

Vehicle access is good, and viable water sources are readily available. A wide variety of fuel types are present.

Additional Compartment Information:

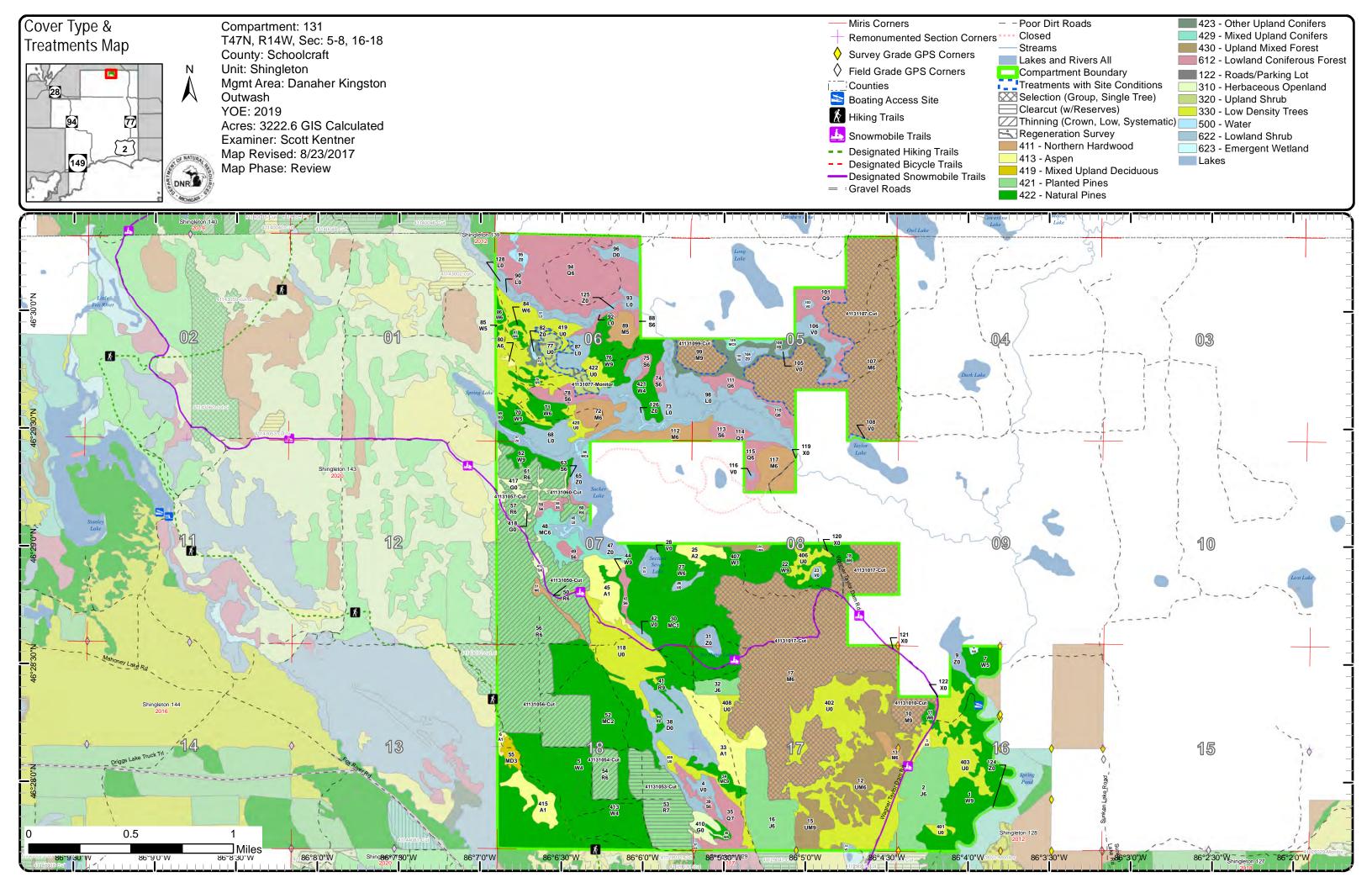
The following reports from the Inventory are attached:

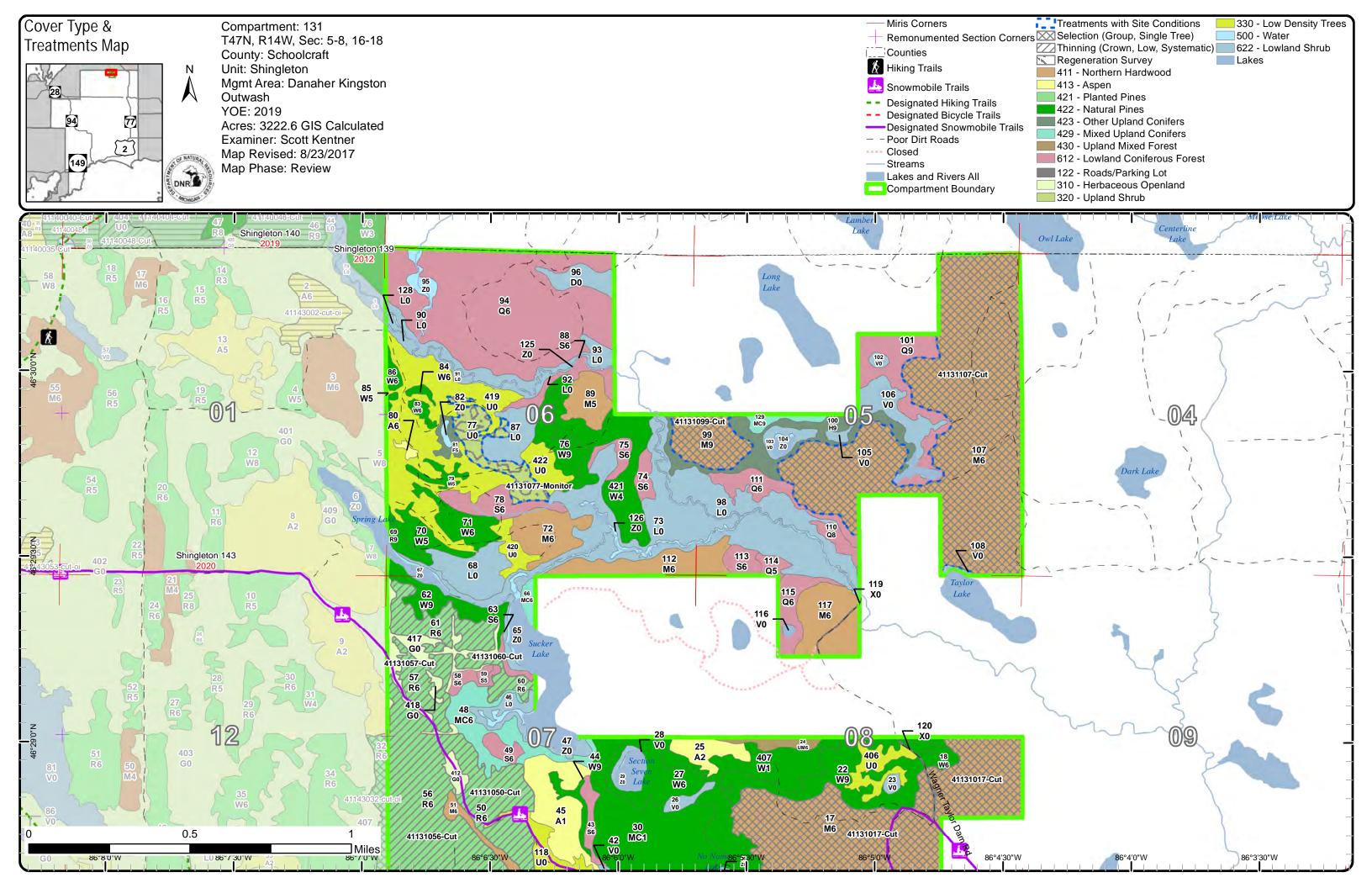
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

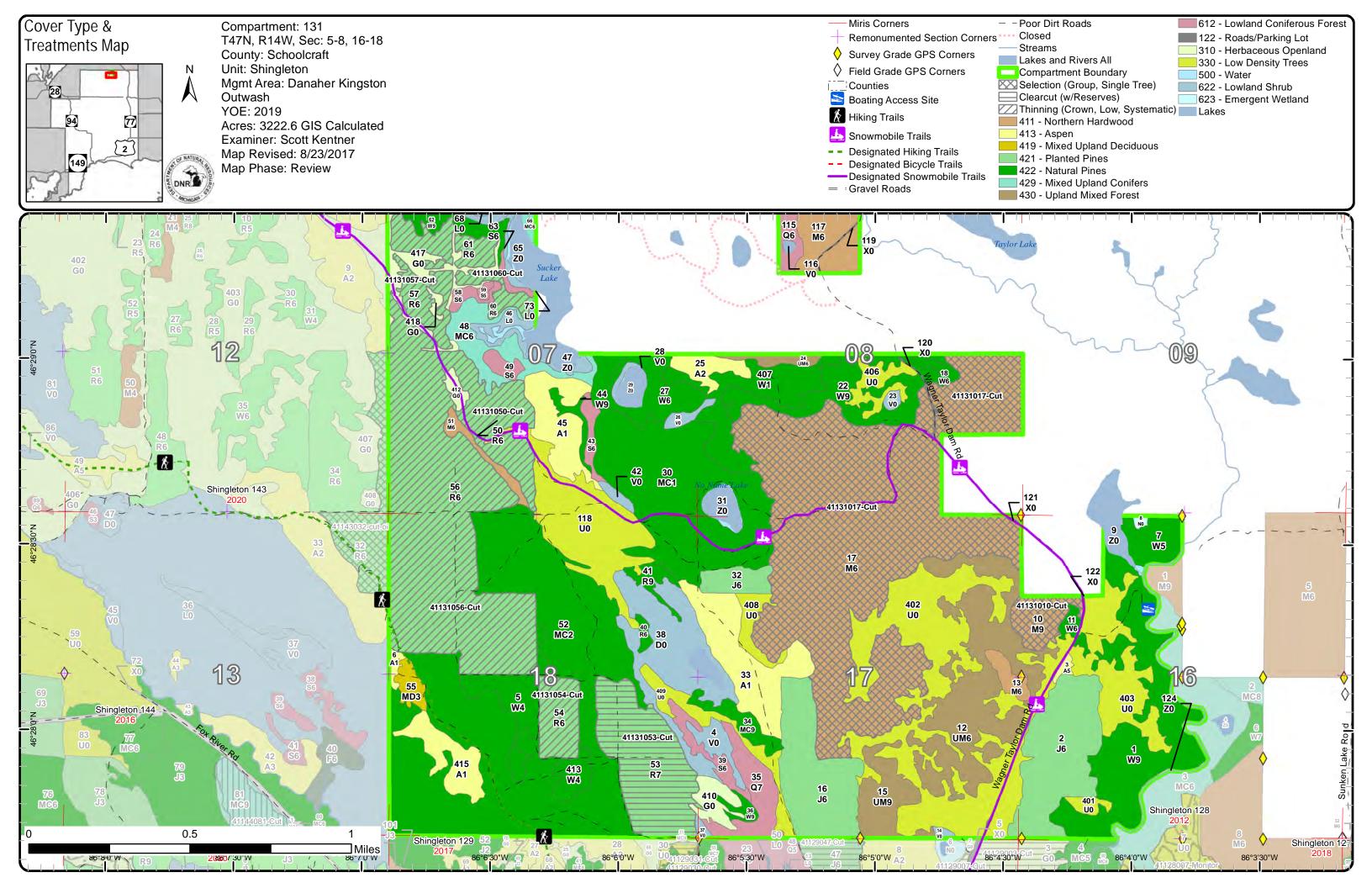
The following information is displayed, where pertinent, on the attached compartment maps:

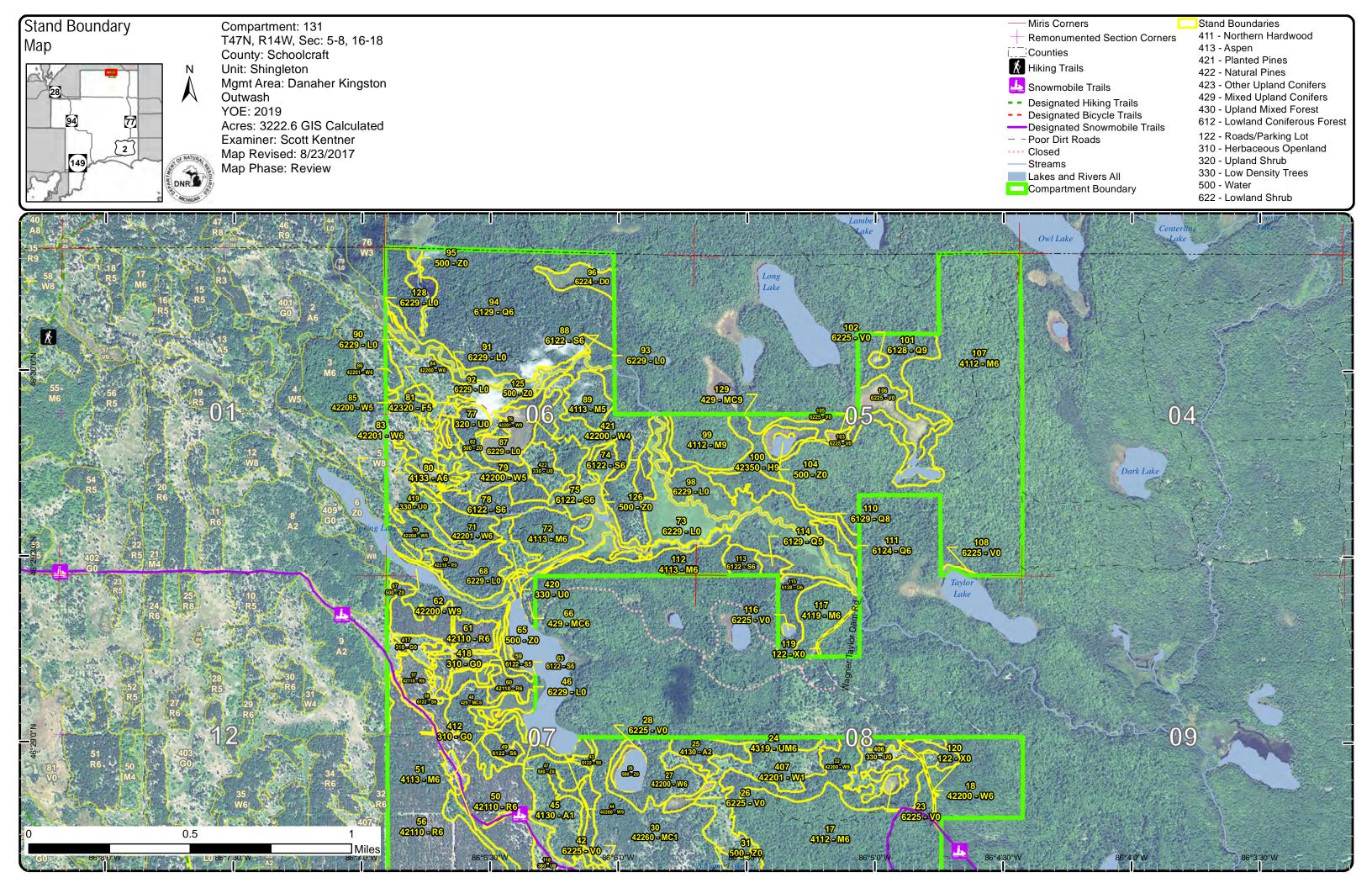
Base feature information, stand boundaries, cover types, and numbers

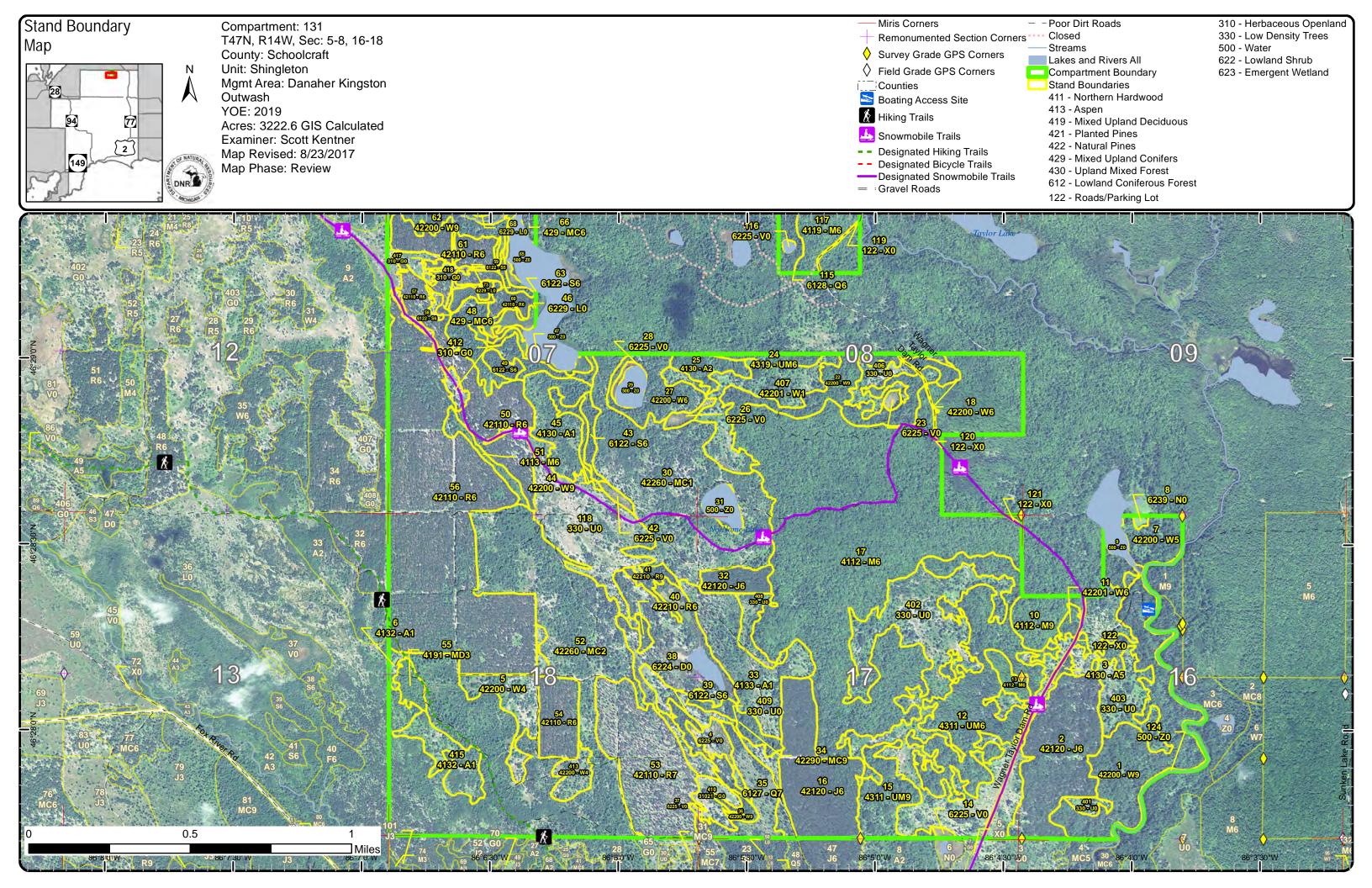
Proposed treatments
Site condition boundaries
Details on the road access system

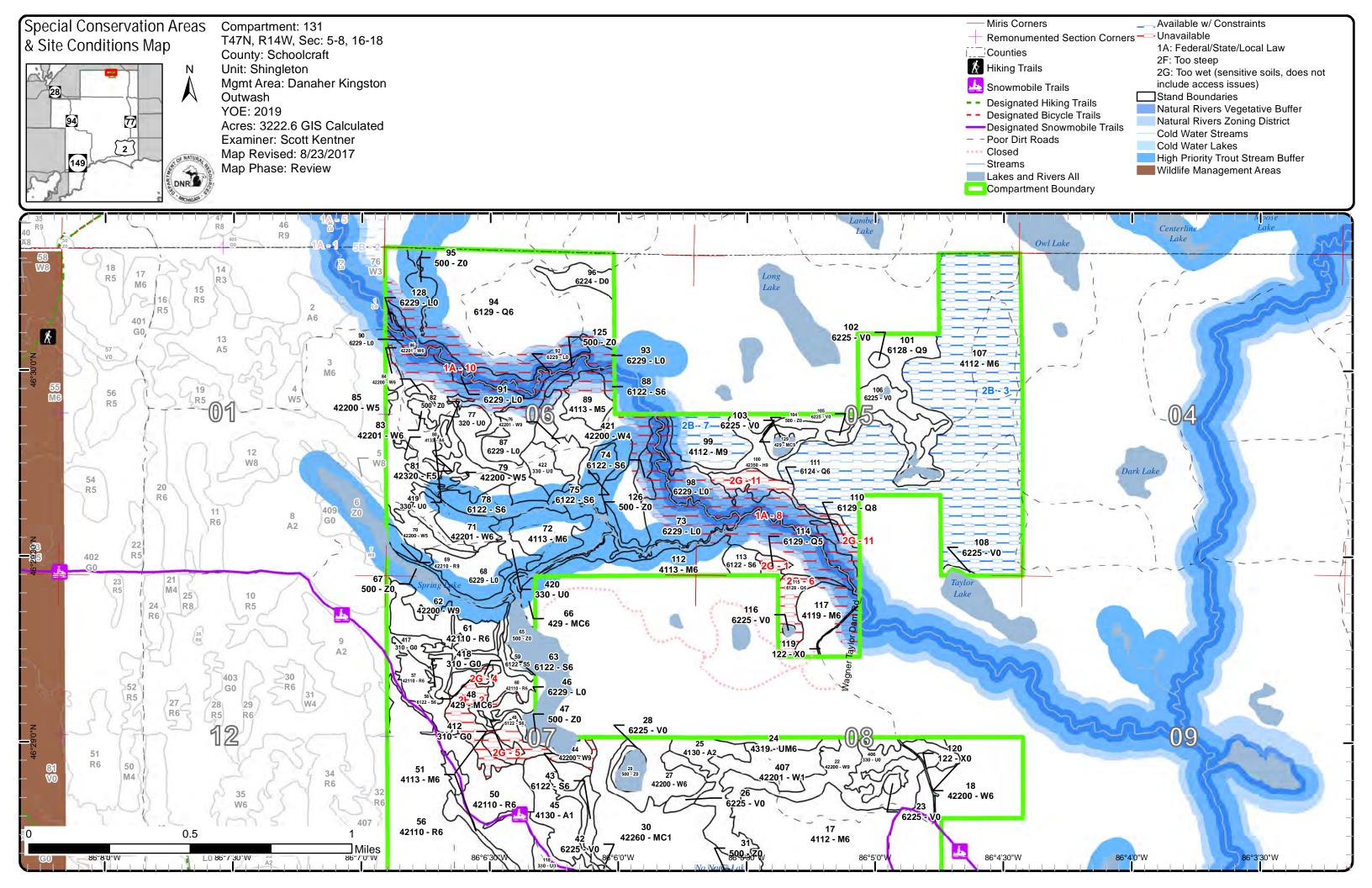


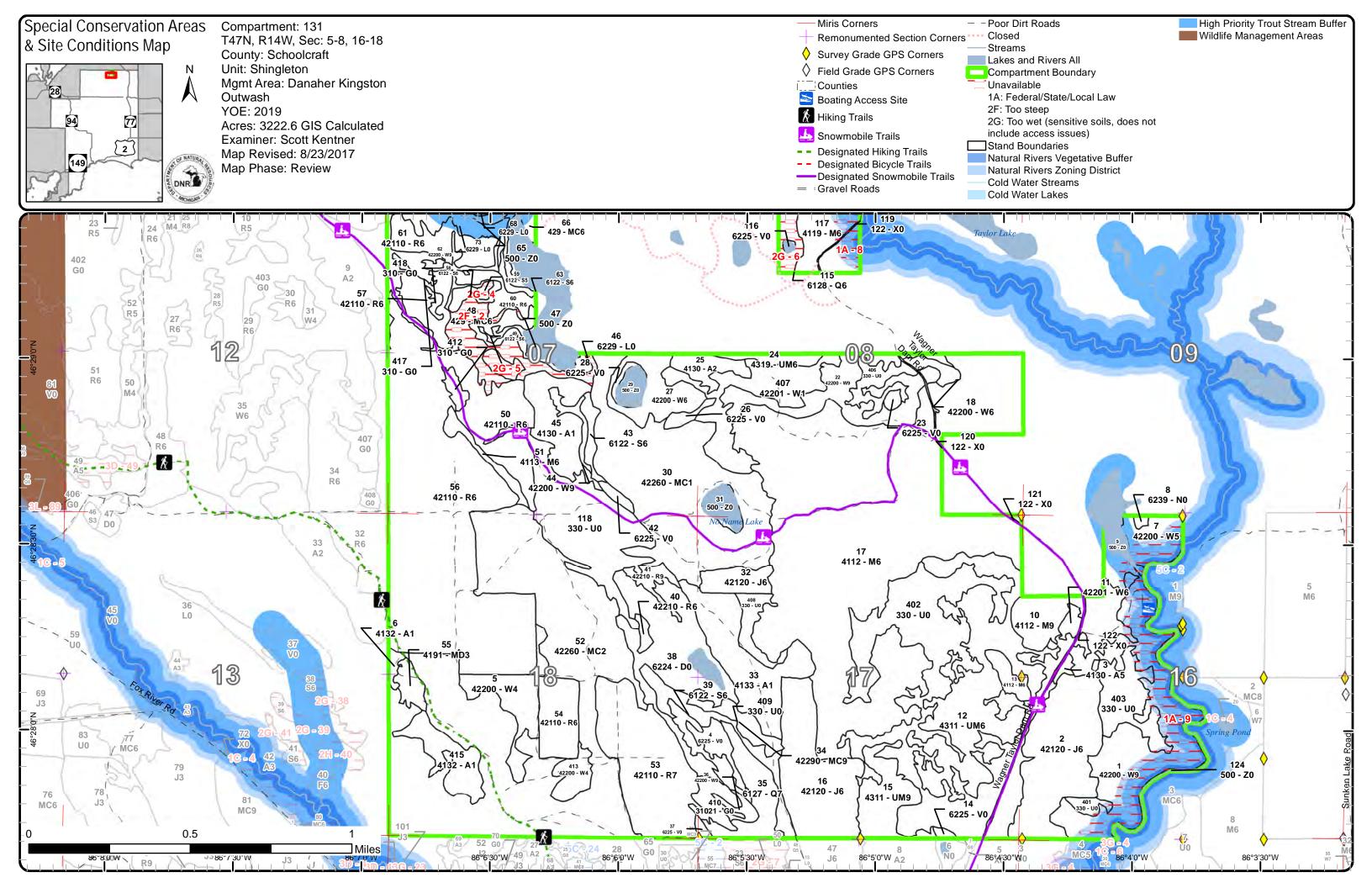












Shingleton Mgt. Unit **Scott Kentner: Examiner**



Age Class

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	, ₽of	LA STA	,			\$ \$		8/8	/ 5 ⁶ / 15	/ \$ ³ /\$		\$ \ \&	20,00	, , , , , , , , , , , , , , , , , , ,				g Jud	LOS LOS
Aspen	0	0	100	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	103
Bog	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	26
Herbaceous Openland	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Jack Pine	0	0	0	0	0	61	64	0	0	0	0	0	0	0	0	0	0	0	125
Low-Density Trees	357	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	357
Lowland Conifers	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	181	212
Lowland Shrub	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174
Lowland Spruce/Fir	0	0	0	0	0	0	2	0	32	7	9	0	9	0	0	0	0	0	59
Marsh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
Natural Mixed Pines	0	0	364	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	374
Northern Hardwood	0	0	0	0	18	0	0	342	0	0	0	0	0	0	0	0	0	332	692
Red Pine	0	0	0	0	0	0	363	0	12	0	0	0	0	0	0	0	0	0	374
Treed Bog	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	119
Upland Shrub	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Urban	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
White Pine	0	0	0	67	0	0	4	0	25	0	4	0	0	0	0	0	0	238	338
Total	763	0	464	67	18	63	433	342	100	7	13	0	9	0	0	0	0	948	3225
		-	-	_	_	_	•	_	-						•				



Report 2 - Treatment Summary

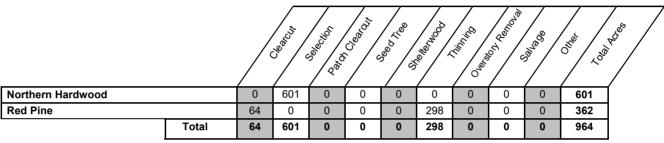
Shingleton Mgt. Unit Year of Entry: 2019

Acres of Harvest

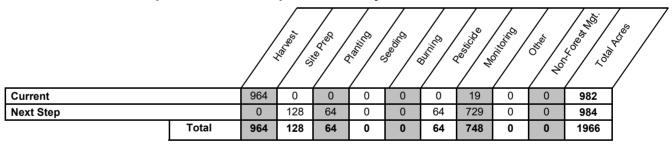
Compartment 131
Total Compartment Acres: 3,223

Commercial Harvest - 720 Harvests with Site Condition - 244 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Sawtimber

Treatments:

Acceptable Red pine

Regen:

<u>Other</u>

Comment:

Proposed Start Date:

53 41131053-Cut

10/01/2018

Red Pine Poor

1-50

58

Harvest

Clearcut with Retention

4211 - Planted Even-Aged Red Pine

Proposal

Habitat Cut: No Site Condition:

63.8

Prescription Clearcut with Retention: Cut all trees down to 2". Leave all oak

42110 - Planted

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Pesticide, Skidder/Mechanical; Monitoring, Artificial Regen(1yr);

Treatments: Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other Comment:

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

Next Step

Acceptable Red Pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

60 41131060-Cut 9.0 42110 - Planted Poletimber 58 111-Harvest Low Thinning 4211 - Planted Even-Aged Proposal Red Pine Red Pine Well 140

Site Condition: **Habitat Cut: No**

Prescription Second Entry Thinning: Mark stand to 110 - 120 BA, focus on removing suppressed/poor quality trees.

Specs:

Next Step Treatments:

Acceptable Red pine

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Compartment: 131

Year of Entry: 2019

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
61	41131061-Cut	21.1	42110 - Planted Red Pine	Poletimber Well	58	141- 170	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	Proposal

Site Condition: Habitat Cut: No

Prescription Second Entry Thinning: Mark stand to 110 - 120 BA, focus on removing suppressed/poor quality trees.

Specs:

S

Next Step Treatments:

Acceptable Red pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

41131077-18.5 330 - Low-Density Natural Regen Nonstocked Unspec Monitorina 4130 - Aspen Even-Aged Draft Field Monitor **Trees** ified (Intermediate) Boundary

Habitat Cut: No Site Condition: Federal/State/Local Law

Prescription Monitor for aspen regen in 2029

Specs:

Next Step **Treatments:**

Acceptable Aspen, white pine

Regen:

Other Percent to Treat = 100%

Comment:

Proposed Start Date: 03/10/2017

41131099-Cut 21.1 111-411 - Northern Uneven-4112 - Maple, Sawtimber Harvest Single Tree Proposal Beech, Cherry Well 140 Selection Hardwood Aged

Association

Habitat Cut: No Site Condition: Unknown Access

Prescription Single Tree Selection: Mark stand to 80 BA following the Complete Marker Guidelines. Buffer River according to Natural River Plan.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Northern Hardwood Species

Regen: Other

Comment:

Proposed Start Date: 10/01/2018

107 41131107-Cut 222.7 4112 - Maple, Poletimber 60 81-110 Harvest Single Tree 411 - Northern Uneven-Proposal Well Selection Hardwood Aged

Beech, Cherry

Association

Habitat Cut: No Site Condition: Unknown Access

Prescription Single Tree Selection: Mark stand to cut leaving 80 BA of Residual, following the Complete Marker Guidelines.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Northern Hardwood species

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Total Treatment 982.1 Acreage Proposed:

Shingleton Mgt. Unit

Scott Kentner: Examiner

Compartment: 131
Year of Entry: 2019

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	Con	ditions
Acres	Available	With Condition	Not Available		2B	1A	2F	2G
103	103	0	0	Aspen				
46	46	0	0	Bog				
26	23	0	3	Hemlock	0	3		
32	32	0	0	Herbaceous Openland				
125	125	0	0	Jack Pine				
357	296	0	61	Low-Density Trees		61		
213	151	0	61	Lowland Conifers		38		23
174	85	0	89	Lowland Shrub		89		
59	43	0	16	Lowland Spruce/Fir		11		5
1	1	0	0	Marsh				
6	6	0	0	Mixed Upland Deciduous				
373	373	0	0	Natural Mixed Pines				
693	419	244	30	Northern Hardwood	244	30		
374	374	0	0	Red Pine				
64	64	0	0	Treed Bog				
31	8	0	23	Upland Conifers			23	
119	119	0	0	Upland Mixed Forest				
19	18	0	1	Upland Shrub		1		
4	4	0	0	Upland Spruce/Fir				
5	4	0	1	Urban		1		
64	45	0	19	Water		19		
337	228	0	109	White Pine		109		
3,222	2,566	244	412	Total Forested Acres	244	361	23	29
	80%	8%	13%	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	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Shingleton Mgt. Unit
Scott Kentner: Examiner

2	Unavailable	2F: Too steep	23	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	2B: Unknown if access through adjacent landowner(s) is possible	223	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	2F: Too steep	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	2B: Unknown if access through adjacent landowner(s) is possible	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
	/2015 2 24 24 DM D						255

Report 4 – Site Conditions

Shingleton Mgt. Unit

Scott Kentner: Examiner

Unavailable	1A: Federal/State/Local Law	102	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
Unavailable	1A: Federal/State/Local Law	72	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
Unavailable	1A: Federal/State/Local Law	92	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
	Unavailable Comments: Unavailable Comments:	Unavailable 1A: Federal/State/Local Law Comments: Unavailable 1A: Federal/State/Local Law Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues)	Comments: Unavailable 1A: Federal/State/Local 72 Law Comments: Unavailable 1A: Federal/State/Local 92 Law Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues)	Unavailable 1A: Federal/State/Local 72 Unspecified Law Comments: Unavailable 1A: Federal/State/Local 92 Unspecified Law Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues)	Comments: Unavailable 1A: Federal/State/Local 72 Unspecified Unspecified Comments: Unavailable 1A: Federal/State/Local 92 Unspecified Unspecified Comments: Unavailable 2G: Too wet (sensitive soils, does not include access issues) Unspecified Unspecified Unspecified Unspecified	Unavailable 1A: Federal/State/Local 72 Unspecified Unspecified Unspecified Unavailable 1A: Federal/State/Local 92 Unspecified Unspecified Unspecified Unavailable 1A: Federal/State/Local 92 Unspecified Unspecified Unspecified Unavailable 2G: Too wet (sensitive soils, does not include access issues)

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				

Shingleton Mgt. Unit Compartment: 131





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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area				
SCA	Cold Water Lake	coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or tocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial proundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.					
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen condistocked trout populations and those of other coldwater fish specified year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial				
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high d communities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well				
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts				

s t	Shingleton	Mgt. Unit		Report 7	Forested	Stands Compartment: 131 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42200 - Natural White Pine	Sawtimber Well	83.3	84	81-110	
2	42120 - Planted Jack Pine	Poletimber Well	60.6	47	111-140	
3	4130 - Aspen	Poletimber Medium	1.5	47	51-80	
5	42200 - Natural White Pine	Poletimber Poor	22.5	25	51-80	
6	4132 - Aspen, Jack Pine	Sapling Poor	2.3	17	Immature	Was grass in previously entry. The Fox River Pathway passes through this stand.
7	42200 - Natural White Pine	Poletimber Medium	15.0	74	51-80	Rolling and often steep terrain - Slope position and aspect influence stand composition, density and structure.
10	4112 - Maple, Beech, Cherry Association	Sawtimber Well	16.0	83	111-140	Last thinned in 1992.
11	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	4.3	56	51-80	
12	4311 - Pine, Aspen Mix	Poletimber Well	89.2	59	81-110	White pine/aspen/red maple mix on rolling, fairly dry terrain. Small grassy openings are common throughout but generally represent very little of the stand's acreage. Composition & density vary significantly as either the aspen or the white pine dominates at a given point.
13	4112 - Maple, Beech, Cherry Association	Poletimber Well	6.2	41	81-110	
15	4311 - Pine, Aspen Mix	Sawtimber Well	23.7	56	81-110	Unevenaged, aspen with a few red maple and mixed pine poles on sharply rolling terrain. Pockets of open grassland are included. Cut along with the adjacent jack pine to the west.
16	42120 - Planted Jack Pine	Poletimber Well	53.3	52	111-140	Healthy jack pine plantation -could be cut this entry a little early or next entry (2029). southwest corner has scattered white pine.
17	4112 - Maple, Beech, Cherry Association	Poletimber Well	342.0	65	111-140	Last thinned in 1992. Note: Beech Bark Disease is present throughout this stand, most Beech is dead from the disease.
18	42200 - Natural White Pine	Poletimber Well	4.2	56	81-110	
22	42200 - Natural White Pine	Sawtimber Well	37.9	71	81-110	
24	4319 - Mixed Upland Forest	Poletimber Well	5.8	55	51-80	

s t	Shingleto	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 131 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4130 - Aspen	Sapling Medium	9.8	17	111-140	Mix of aspen clones, semi-open grasslands/upland brush, and pockets of white pine regeneration. Density is extremely variable.
27	42200 - Natural White Pine	Poletimber Well	20.4	70	51-80	
30	42260 - Natural Pine, Mixed Deciduous	Sapling Poor	120.1	17	Immature	Mix of aspen clones, semi-open grasslands/upland brush, and pockets of white pine regeneration. Density is extremely variable.
32	42120 - Planted Jack Pine	Poletimber Well	10.6	52	111-140	White pine is sparsely scattered throughout plantation.
33	4133 - Aspen, Mixed Pine	Sapling Poor	42.7	16	Immature	
34	42290 - Natural Mixed Pine	Sawtimber Well	9.6	78	81-110	
35	6127 - Lowland Pine	Sawtimber Poor	20.4	75	1-50	[8-27-10] Stand is now under contract TS 41-032-09-01 3-Way Pine. Residual BA: white pine = 14; red pine = 8; cedar = 2; total = 24 sq.ft./acre.[11-8-12] Sale is now closed/completed.
36	42200 - Natural White Pine	Sawtimber Well	3.5	94	81-110	
39	6122 - Black Spruce	Poletimber Well	8.5	74	51-80	rolling terrain in low area with boggy parts of stand.
40	42210 - Natural Red Pine	Poletimber Well	2.2	77	51-80	
41	42210 - Natural Red Pine	Sawtimber Well	5.8	77	51-80	
43	6122 - Black Spruce	Poletimber Well	4.9	77	81-110	Drainage runs thru stand.
44	42200 - Natural White Pine	Sawtimber Well	4.2	77	81-110	
45	4130 - Aspen	Sapling Poor	26.4	17	Immature	Rolling and occasionally steep terrain supporting a stand of semi-open aspen regeneration. There are also several scattered pockets of white pine regeneration, open grassland & upland brush, plus a few white pine poles.
48	429 - Mixed Upland Conifers	Poletimber Well	22.8	60	81-110	Sharply rolling terrain supporting a mix of upland conifers, scattered aspen and red maple, with white pine logs that are generally about 10" DBH. The broken terrain would make logging without causing excessive erosion a challenge.
49	6122 - Black Spruce	Poletimber Well	4.2	90	111-140	

S	Shingleton	n Mgt. Unit		Report 7	Forested	Stands Compartment: 131 Year of Entry: 2019
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	42110 - Planted Red Pine	Poletimber Well	37.8	58	111-140	[9-2-10] Stand is now under contract TS 41-028-09-01 Red Dragon. Residual BA: red pine = 100; white pine = 10; total = 110 sq.ft./acre. [8-5-14] Sale completed/closed TCR dtd 6-11-14.
51	4113 - R.Maple, Conifer	Poletimber Well	6.4	40	51-80	Red maple with white pine and a few aspen on steep ground.
52	42260 - Natural Pine, Mixed Deciduous	Sapling Medium	243.8	16	Immature	Young aspen over a mix of white pine/red maple with some scattered jack & red pines pockets of grassland etc. Scattered residual pine logs and poles are also present. Stand density varies but stocking levels are generally acceptable. The Fox River Pathway passes through the southwest corner of this stand.
53	42110 - Planted Red Pine	Sawtimber Poor	63.8	58	1-50	Two-storied red pine on a medium quality site - first planted in 1959 and recently underplanted to fill in the open areas. [8-27-10] Stand is now under contract TS 41-032-09-01 3-Way Pine. Residual BA: white pine = 1; red pine = 30; total = 31 sq.ft./acre. [11-8-12] Sale is now closed/completed. Check for natural regen in 2015 and determine if cult work is needed at that time. Regen check is failed, no red pine
54	42110 - Planted Red Pine	Poletimber Well	19.5	58	111-140	[8-27-10] Stand is now under contract TS 41-032-09-01 3-Way Pine. Residual BA: white pine = 1; red pine = 105; total = 106 sq.ft./acre. [11-8-12] Sale is now closed/completed.
55	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	6.2	20	Immature	Scattered red maple, aspen and a few oak The Fox River Pathway passes through the southwest tip of this stand.
56	42110 - Planted Red Pine	Poletimber Well	195.6	58	111-140	[9-2-10] Stand is now under contract TS 41-028-09-01 Red Dragon. Residual BA: red pine = 100; white pine = 18; total = 118 sq.ft./acre. [8-5-14] Sale completed/closed TCR dtd 6-11-14.
57	42110 - Planted Red Pine	Poletimber Well	15.5	58	111-140	.[9-2-10] Stand is now under contract TS 41-028-09-01 Red Dragon. Residual BA: red pine = 86; white pine = 10; total = 96 sq.ft./acre. [8-5-14] Sale completed/closed TCR dtd 6-11-14.
58	6122 - Black Spruce	Poletimber Well	3.7	90	81-110	
59	6122 - Black Spruce	Poletimber Medium	1.2	90	51-80	Black spruce bog - inoperable. Ground cover is primarily low shrubs and/or wet grasses.
60	42110 - Planted Red Pine	Poletimber Well	9.0	58	111-140	Red pine plantation on rolling terrain. [9-2-10] Stand is now under contract TS 41-028-09-01 Red Dragon. Residual BA: red pine = 98; white pine = 10; total = 108 sq.ft./acre. [8-5-14] Sale completed/closed TCR dtd 6-11-14.

s t	Shingleton	Mgt. Unit		Report 7	– Forested	Stands Compartment: 131 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	42110 - Planted Red Pine	Poletimber Well	21.1	58	141-170	.[9-2-10] Stand is now under contract TS 41-028-09-01 Red Dragon. Residual BA: red pine = 130; white pine = 20; total = 150 sq.ft./acre. [8-5-14] Sale completed/closed TCR dtd 6-11-14.
62	42200 - Natural White Pine	Sawtimber Well	16.1	80	51-80	Unevenaged stand of white pine.
63	6122 - Black Spruce	Poletimber Well	2.2	58	81-110	
66	429 - Mixed Upland Conifers	Poletimber Well	3.4	53	81-110	HCVA - Fox River Steep slope down to Lowland/Lake.
69	42210 - Natural Red Pine	Sawtimber Well	3.6	77	81-110	HCVA - Fox River Red pine on the slope above Spring Lake.
70	42200 - Natural White Pine	Poletimber Medium	9.6	51	51-80	
71	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	12.2	48	51-80	White pine on dry, sharply rolling terrain, with a few scattered aspen. Stand density & composition vary considerably.
72	4113 - R.Maple, Conifer	Poletimber Well	18.2	36	51-80	HCVA - Fox River
74	6122 - Black Spruce	Poletimber Well	4.3	112	81-110	HCVA - Fox River Spruce near the West Branch Fox River - buffering the river/tributaries wouldn't leave enough timber to harvest.
75	6122 - Black Spruce	Poletimber Well	4.3	112	81-110	HCVA - Fox River Spruce near the West Branch Fox River.
76	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	12.0	75	81-110	
78	6122 - Black Spruce	Poletimber Well	12.8	73	81-110	HCVA - Fox River
79	42200 - Natural White Pine	Poletimber Medium	4.1	48	51-80	Aspen/white pine mix on a dry, steep ridge surrounded by grasslands.
80	4133 - Aspen, Mixed Pine	Poletimber Well	1.2	45	51-80	
81	42320 - Upland Spruce	Poletimber Medium	3.7	60	51-80	
83	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	2.3	46	51-80	

s t	Shingleton Mgt. Unit			Report 7	– Forested	Stands Compartment: 131 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
84	42200 - Natural White Pine	Poletimber Well	1.4	47	51-80	
85	42200 - Natural White Pine	Poletimber Medium	0.9	48	51-80	0
86	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	2.8	46	81-110	Aspen/white pine mix on a dry, steep ridge surrounded by grasslands.
88	6122 - Black Spruce	Poletimber Well	7.1	87	81-110	HCVA - Fox River
89	4113 - R.Maple, Conifer	Poletimber Medium	12.1	35	81-110	HCVA - Fox River
94	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	132.4	92	81-110	HCVA - Fox River Access is generally poor except across the private lands to the northeast.
99	4112 - Maple, Beech, Cherry Association	Sawtimber Well	21.2	71	111-140	Last cut in 1992-93.
100	42350 - Upland Hemlock	Sawtimber Well	25.7	90	111-140	
101	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	27.8	90	111-140	
107	4112 - Maple, Beech, Cherry Association	Poletimber Well	222.7	60	81-110	Last cut in 1992-93.
110	6129 - Mixed Coniferous Lowland Forest	Sawtimber Medium	4.9	75	1-50	HCVA - Fox River Pockets of timber on slightly elevated knobs & hummocks interspersed with lowland brush and grassy areas. Mixed pulp includes birch, spruce & fir. Almost all the Tamarack is dead due to water level increase and Larch Beetle.
111	6124 - Lowland Spruce- Fir	Poletimber Well	12.4	50	51-80	HCVA - Fox River Conifer mix with areas of inoperable ground - wet site featuring pockets of timber on slightly elevated knobs & hummocks interspersed with lowland brush and grassy bogs.
112	4113 - R.Maple, Conifer	Poletimber Well	22.4	63	51-80	HCVA - Fox River Stand was cut very hard in the past - recovering slowly. Mixed hardwood pulp includes birch and cherry; mixed softwood pulp includes white pine, spruce, and hemlock.
113	6122 - Black Spruce	Poletimber Well	5.7	72	81-110	Mixed conifers stand that starts on the slope coming off of the hardwoods to the west and ends up on the flat bottomland.
114	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	3.3	72	51-80	Slow-growing mix of spruce, tamarack on muck soils. The stand is semi-open but appears to be filling in over time, as the understory is Tag Alder. Operability may be questionable.

	Shingleton Mgt. Unit				Year of Entry: 2019
evel 4 ver Type	Size Density	Acres	Stand Age	BA Range	General Comments:
- Lowland erous, Mixed eciduous	Poletimber Well	11.4	72	81-110	Mixed conifers stand that starts on the steep slope coming off of the hardwoods to the east and ends up on the flat bottomland.
lixed Northern ardwoods	Poletimber Well	25.4	74	51-80	HCVA - Fox RiverPoor quality timber, small in size and lower BA. Wait for next cycle to harvest.
lixed Upland Conifers	Sawtimber Well	4.6	90	81-110	
Natural White xed Deciduous	Sapling Poor	35.9	15	1-50	Previously a grass stand.
Natural White Pine	Poletimber Poor	8.9	27	81-110	
spen, Jack Pine	Sapling Poor	18.6	17	Immature	Stand was previously grass. The Fox River Pathway passes through this stand.
	Natural White ked Deciduous Natural White Pine	Natural White ked Deciduous Natural White Poletimber Pine Poor	Natural White Sapling Poor 35.9 Red Deciduous Natural White Poletimber 8.9 Pine Poor	Natural White Sapling Poor 35.9 15 ced Deciduous Natural White Poletimber 8.9 27 Pine Poor	Natural White Sapling Poor 35.9 15 1-50 ed Deciduous Natural White Poletimber 8.9 27 81-110 Pine Poor

51-80

42200 - Natural White

Pine

421

Poletimber

Poor

35.6

25



Cover Type	Acres	Managed Site	General Comments:
6225 - Bog	7.4	No	
6239 - Mixed Emergent Wetland	1.0	No	Seasonally wet marsh grass adjacent to a pond
500 - Water	5.4	No	HCVA - Fox RiverPond - drains into Fox River.
6225 - Bog	1.2	No	
6225 - Bog	1.7	No	
6225 - Bog	3.1	No	Mix of lowland brush and bog, including areas of submerchantable treed bog.
6225 - Bog	2.3	No	Mix of lowland brush and bog surrounding a pond
500 - Water	4.8	No	Pond
500 - Water	7.4	No	Pond
6225 - Bog	1.4	No	
6224 - Treed Bog	55.5	No	
6225 - Bog	2.4	No	Mix of lowland brush and bog, including areas of submerchantable treed bog.
6229 - Mixed lowland shrub	9.9	No	
500 - Water	6.2	No	Sucker Lake and tributary
500 - Water	10.1	No	HCVA - Fox River Sucker Lake
500 - Water	4.0	No	HCVA - Fox River Spring Lake
	6225 - Bog 6239 - Mixed Emergent Wetland 600 - Water 6225 - Bog 6227 - Water 6227 - Bog 6229 - Water Bog 6229 - Mixed lowland shrub	6225 - Bog 7.4 6239 - Mixed Emergent Wetland 1.0 600 - Water 5.4 6225 - Bog 1.2 6225 - Bog 3.1 6225 - Bog 2.3 600 - Water 4.8 600 - Water 7.4 6225 - Bog 5.5 6225 - Bog 9.4 6224 - Treed Bog 5.5 6225 - Bog 2.4 6229 - Mixed lowland shrub 9.9 600 - Water 6.2	6225 - Bog 7.4 No 6239 - Mixed Emergent Wetland 1.0 No 6239 - Mixed Emergent Wetland 1.0 No 6200 - Water 5.4 No 6225 - Bog 1.2 No 6225 - Bog 3.1 No 6225 - Bog 2.3 No 6225 - Bog 2.3 No 6225 - Bog 4.8 No 6225 - Bog 500 - Water 7.4 No 6225 - Bog 1.4 No 6225 - Bog 55.5 No 6226 - Treed Bog 55.5 No 6227 - Treed Bog 55.5 No 6229 - Mixed lowland shrub 9.9 No 6200 - Water 6.2 No



Stand	Cover Type	Acres	Managed Site	General Comments:
68	6229 - Mixed lowland shrub	17.7		OPIC - FMD: HCVA - Fox River [6/22/11 BB] Stand is now on proposal, 41-048-10-01 "143 RPA", Unit 5, actual acres = 13, Retention is the buffer along creek. See locked comments for Archeology concerns found when processing sales to further mitigate issues no new roads will be allowed in Section 7. [12/21/11] Stand is now under contract. Unit cut summer 2016
73	6229 - Mixed lowland shrub	82.4	No	HCVA - Fox River
77	320 - Upland Shrub	18.5		HCVA - Fox River [6/22/11 BB] Stand is now on proposal, 41-048-10-01 "143 RPA", Unit 5, actual acres = 18, Retention is the buffer along south end. New Road construction was spec'd so as not to impact the Fox River. [12/21/11] Stand is now under contract. Unit was cut summer 2016.
82	500 - Water	1.0	No	Pond/seasonally flooded bog
87	6229 - Mixed lowland shrub	12.5	No	
90	6229 - Mixed lowland shrub	1.7	No	HCVA - Fox River
91	6229 - Mixed lowland shrub	2.1	No	HCVA - Fox River
92	6229 - Mixed lowland shrub	2.1	No	HCVA - Fox River
93	6229 - Mixed lowland shrub	14.8	No	HCVA - Fox River
95	500 - Water	5.0	No	Beaver ponds & backflooding
96	6224 - Treed Bog	8.6	No	Treed bog
98	6229 - Mixed lowland shrub	30.1	No	HCVA - Fox River
102	6225 - Bog	1.5	No	Peat bog, including the ring of slow-growing spruce surrounding the open area. Ground cover consists of low shrubs and wetland grasses.
103	6225 - Bog	4.8	No	
104	500 - Water	1.9	No	



Cover Type	Acres	Managed Site	General Comments:
6225 - Bog	1.6	No	
6225 - Bog	16.5	No	Grassy bog complex, including several small ponds that change seasonally
6225 - Bog	1.1	No	bog surrounding lake
6225 - Bog	0.7	No	
330 - Low-Density Trees	58.8	No	
122 - Road/Parking Lot	0.5	No	
122 - Road/Parking Lot	1.0	No	Taylor Dam Road
122 - Road/Parking Lot	0.2	No	Taylor Dam Road
122 - Road/Parking Lot	2.9	No	Taylor Dam Road
500 - Water	6.3	No	Fox River
500 - Water	3.5	No	W. Branch Fox River
500 - Water	9.2	No	W. Branch Fox River
6229 - Mixed lowland shrub	0.9	No	HCVA - Fox River
330 - Low-Density Trees	3.3	No	
330 - Low-Density Trees	133.8	No	
330 - Low-Density Trees	40.9	No	
330 - Low-Density Trees	10.3	No	
330 - Low-Density Trees	8.7	No	
	6225 - Bog 6225 - Bog 6225 - Bog 6225 - Bog 330 - Low-Density Trees 122 - Road/Parking Lot 122 - Road/Parking Lot 122 - Road/Parking Lot 122 - Road/Parking Lot 500 - Water 500 - Water 500 - Water 6229 - Mixed lowland shrub 330 - Low-Density Trees 330 - Low-Density Trees	6225 - Bog 1.6 6225 - Bog 16.5 6225 - Bog 1.1 6225 - Bog 0.7 330 - Low-Density Trees 58.8 122 - Road/Parking Lot 0.5 122 - Road/Parking Lot 0.2 122 - Road/Parking Lot 0.2 122 - Road/Parking Lot 2.9 500 - Water 6.3 500 - Water 9.2 6229 - Mixed lowland shrub 0.9 330 - Low-Density Trees 3.3 330 - Low-Density Trees 13.8 330 - Low-Density Trees 40.9 330 - Low-Density Trees 40.9	6225 - Bog 1.6 No 6225 - Bog 16.5 No 6225 - Bog 1.1 No 6225 - Bog 0.7 No 6225 - Bog 0.7 No 330 - Low-Density Trees 58.8 No 122 - Road/Parking Lot 0.5 No 122 - Road/Parking Lot 0.5 No 122 - Road/Parking Lot 0.2 No 122 - Road/Parking Lot 0.2 No 122 - Road/Parking Lot 0.2 No 500 - Water 6.3 No 500 - Water 3.5 No 500 - Water 9.2 No 6229 - Mixed lowland shrub 0.9 No 330 - Low-Density Trees 133.8 No 330 - Low-Density Trees 133.8 No



Stand	Cover Type	Acres	Managed Site	General Comments:
409	330 - Low-Density Trees	16.2	No	
410	31021 - Cool Season Grass	9.6	No	
412	310 - Herbaceous Openland	3.6	No	
417	310 - Herbaceous Openland	17.3	No	
418	310 - Herbaceous Openland	1.5	No	
419	330 - Low-Density Trees	69.4		HCVA - Fox River
420	330 - Low-Density Trees	6.6	No	HCVA - Fox River
422	330 - Low-Density Trees	8.7	No	HCVA - Fox River