



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 125

Entry Year 2016

Acreage: 1,450

County Schoolcraft

Management Area: Bullock Ranch

Revision Date: 07/29/2014

Stand Examiner: Bob Tylka

Legal Description:

T46N R14W Sections 4, 5 and 9

Identified Planning Goals:

Timber production, wildlife habitat management and protection of the Fox River in accordance with the Fox River Plan are goals identified in this compartment. Recreational management is also significant as both the Fox River Pathway and a groomed snowmobile trail pass through the compartment.

Soil and topography:

Most of this compartment consists of gently rolling terrain and dry, sandy soils. Along the southwest edges where it leads out into the Driggs Marsh, the soils are heavier. Here the terrain is flatter and considerably wetter. East of the Fox River Road, the banks of the Fox River are quite steep in places.

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

There are significant blocks of private timber company land in the middle of this compartment and immediately to the south, but the majority of the surrounding area is state forest land.

Unique Natural Features:

The Fox River is a designated natural river and forms the northeast boundary of this compartment.

Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

The Fox River is designated as a natural river and HCVA. The Fox River Plan specifies acceptable land and forest management practices for the Fox River corridor and its tributaries.

Watershed and Fisheries Considerations:

Fisheries values are excellent. The main branch of the Fox River runs alongside of this compartment and offers some of the best brook trout fishing found in the eastern Upper Peninsula.

Wildlife Habitat Considerations:

This compartment lies to the southwest of the Fox River and Fox River Road and is just outside the corridor for management of large opening complexes. The first surveyors recorded white pine, red pine, hemlock, American beech, and red maple as the primary upland tree species. Tamarack and spruce dominated the lowland forests.

Current vegetation is substantially altered from pre-settlement days. Strip plantations of red pine interspersed with strips of grassy openings dominate section 4 and the northeast portion of section 5. Jack pine and aspen have both increased significantly within the compartment.

Wildlife habitat objectives include maintaining early successional forests, promoting the retention of super-canopy conifers, and protecting the Fox River corridor.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Trenton and Black River Groups subcrop below the glacial drift. These rocks are quarried for stone/dolomite. Gravel pits are not found in the general area and potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

Access from the Fox River Road is excellent via numerous forest roads and the snowmobile trail.

Survey Needs:

Land survey may be needed to facilitate timber sale activities sections 4 & 5.

Recreational Facilities and Opportunities:

The groomed snowmobile trail through this compartment receives extremely heavy use during the winter. The Fox River Pathway also passes through this area, and receives occasional use by hikers. The remains of an old logging camp are located along the pathway and listed as Feature #8 in the current brochure describing the pathway.

The state lands along the Fox River Road receive some hunting pressure. The Fox River State Forest Campground is less than two miles away, and the river itself is a popular destination for fishermen and canoeists.

Fire Protection:

This area is features relatively high-risk fuels, including large stands of jack pine. Access for fire management/suppression is excellent in the pines and grasslands, but may be somewhat more difficult on the softer ground approaching the marsh in the southern reaches of 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**

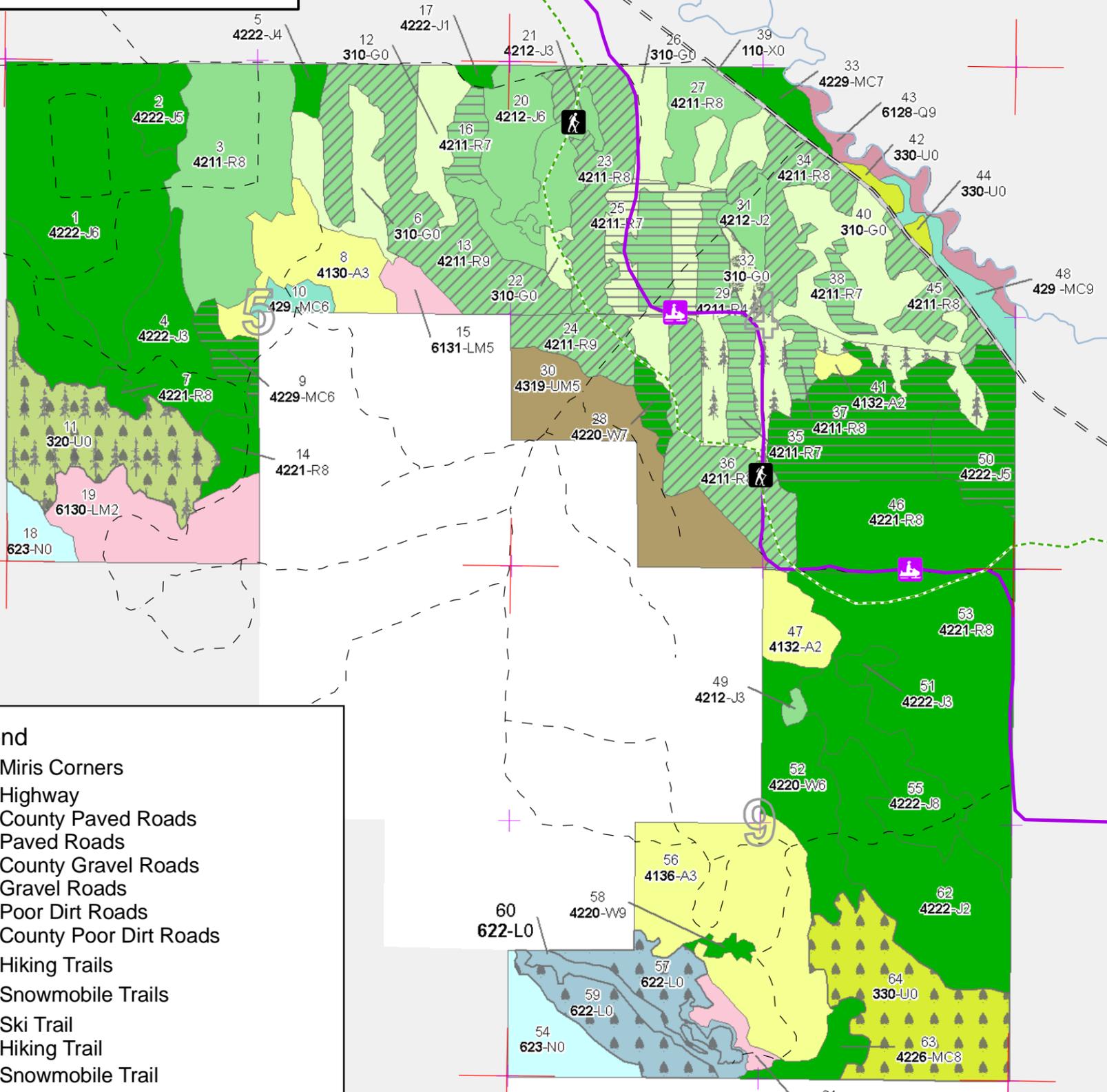
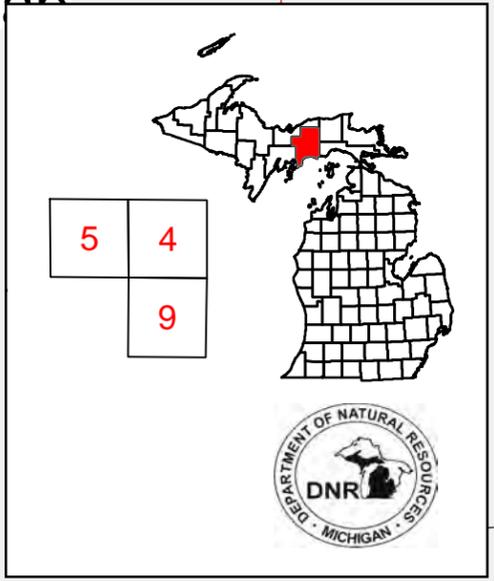
The following information is displayed, where pertinent, on the attached compartment maps:

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

Cover Type & Treatment Map

Compartment: 125
 T46N R14W
 03 04 05 08 09 10 16
 County: Schoolcraft
 Unit: Shingleton
 Management Area: Bullock Ranch
 YOE: 2016
 Acres: 1,450 GIS Calculated
 Examiner: Bob Tylka
 Map Revised: 07/30/2014
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Hiking Trails
 - Snowmobile Trails
 - Ski Trail
 - Hiking Trail
 - Snowmobile Trail
 - Stream
 - Intermittent Stream
 - Lakes and Rivers
 - State Forest Land
- Non-Forest Regeneration**
- Natural
 - Planted
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
 - Thinning (Crown, Low, Systematic)
 - Planting (tree species)
 - Treatments w/ Site Condition

Forest Stands

- Level 3
- 413 - Aspen Types
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 429 - Mixed Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest

Non-Forest Stands

- Level 3
- 110 - Low Intensity Urban
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

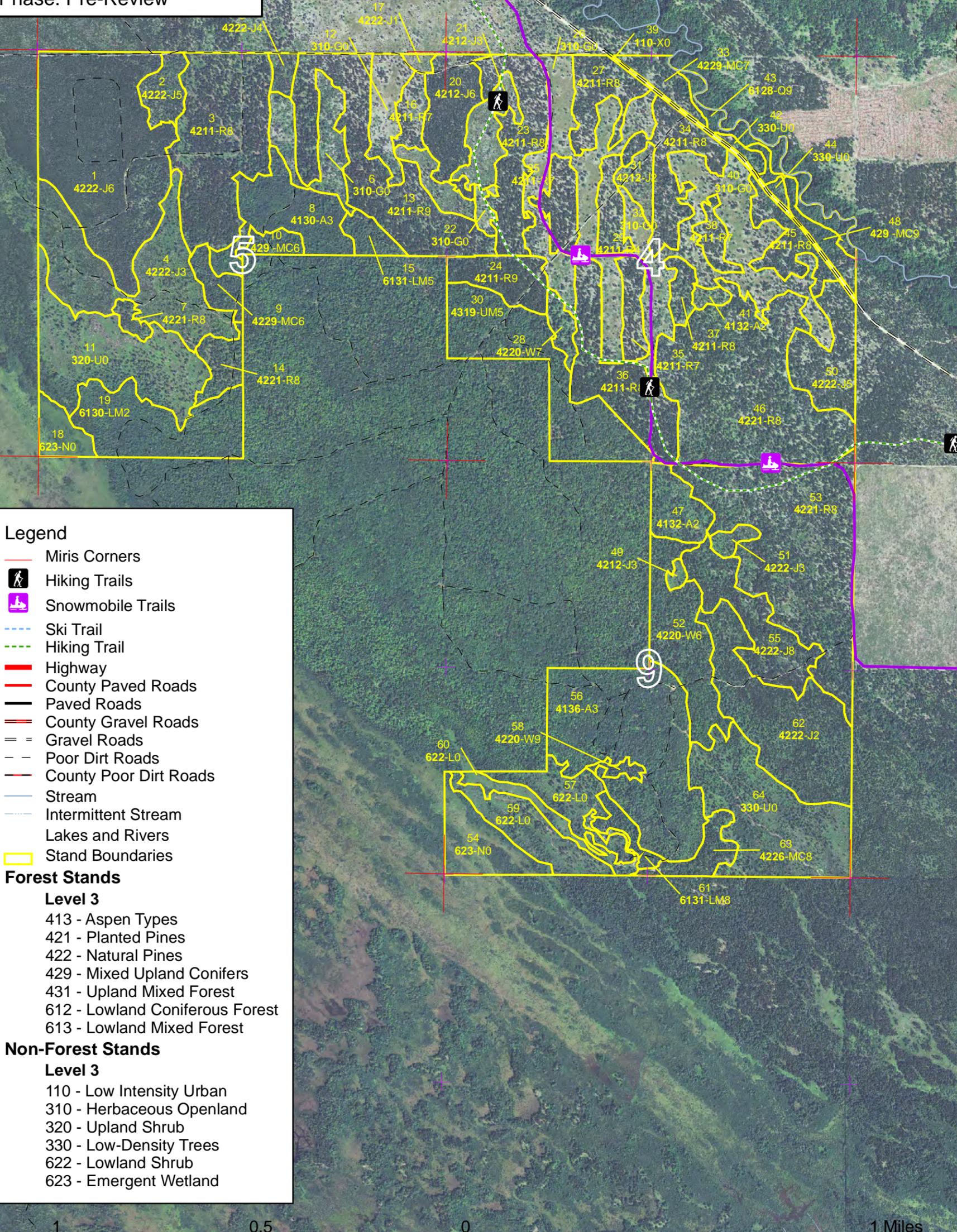
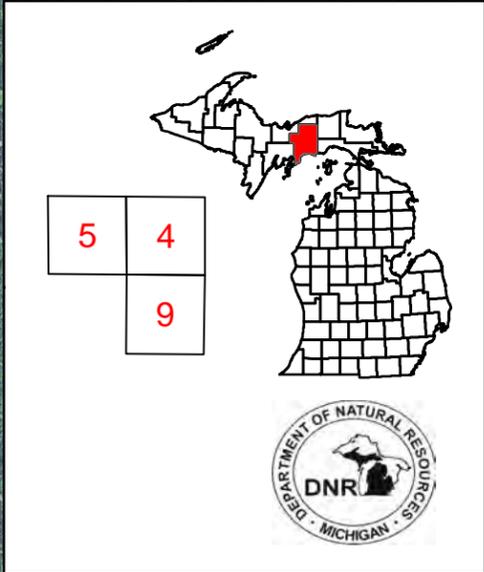


86°50'W 86°40'W 86°30'W

Stand Boundary Map

Compartment: 125
 T46N R14W
 03 04 05 08 09 10 16
 County: Schoolcraft
 Unit: Shingleton
 Management Area: Bullock Ranch
 YOE: 2016
 Acres: 1,450 GIS Calculated
 Examiner: Bob Tylka
 Map Revised: 07/30/2014
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



- Legend**
- Miris Corners
 - Hiking Trails
 - Snowmobile Trails
 - Ski Trail
 - Hiking Trail
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Stream
 - Intermittent Stream
 - Lakes and Rivers
 - Stand Boundaries
- Forest Stands**
- Level 3**
- 413 - Aspen Types
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 429 - Mixed Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3**
- 110 - Low Intensity Urban
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

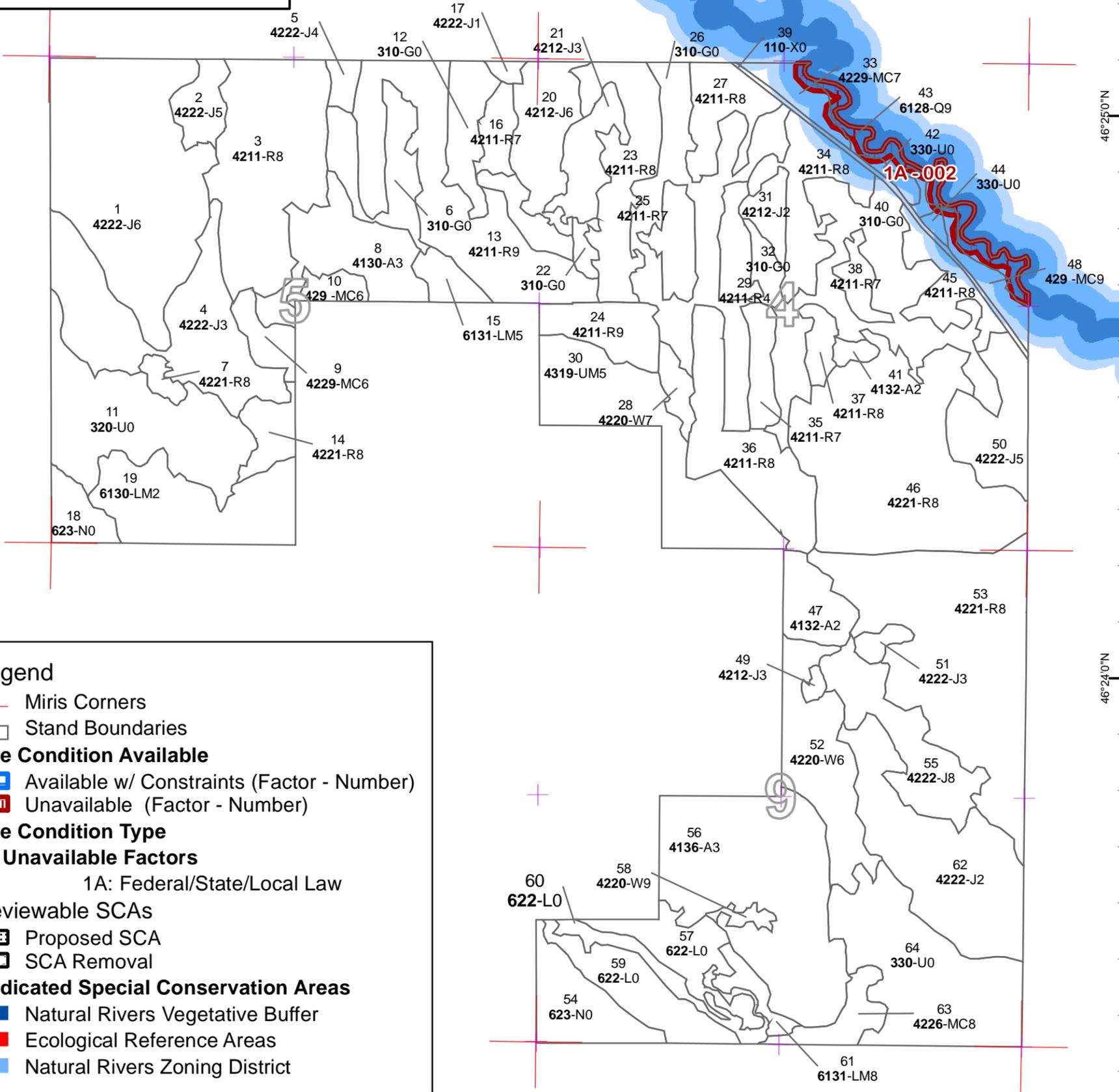
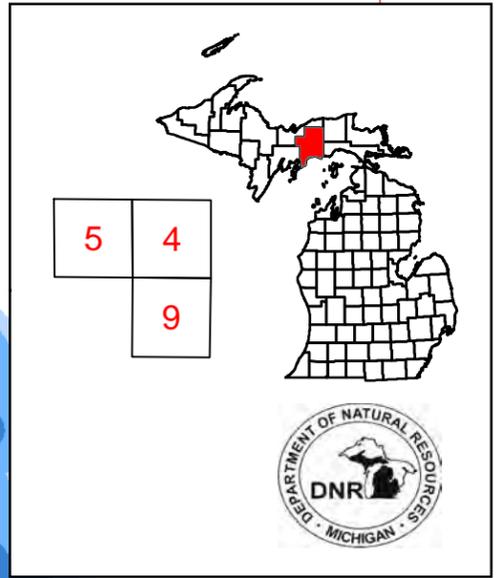


86°50'W 86°40'W 86°30'W
 46°23'0"N 46°23'0"N 46°23'0"N

Special Conservation Areas & Site Conditions Map

Compartment: 125
 T46N R14W
 03 04 05 08 09 10 16
 County: Schoolcraft
 Unit: Shingleton
 Management Area: Bullock Ranch
 YOE: 2016
 Acres: 1,450 GIS Calculated
 Examiner: Bob Tylka
 Map Revised: 07/30/2014
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- Stand Boundaries
- Site Condition Available**
 - Available w/ Constraints (Factor - Number)
 - Unavailable (Factor - Number)
- Site Condition Type**
 - Unavailable Factors**
 - 1A: Federal/State/Local Law
 - Reviewable SCAs
 - Proposed SCA
 - SCA Removal
 - Dedicated Special Conservation Areas**
 - Natural Rivers Vegetative Buffer
 - Ecological Reference Areas
 - Natural Rivers Zoning District



Report 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneten Age
Aspen	0	16	107	0	0	0	0	0	0	0	0	0	0	0	122
Herbaceous Openland	144	0	0	0	0	0	0	0	0	0	0	0	0	0	144
Jack Pine	2	86	54	109	64	0	0	0	0	0	0	0	0	0	316
Low-Density Trees	60	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50
Lowland Shrub	48	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Marsh	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Natural Mixed Pines	0	0	0	0	8	0	0	0	0	0	0	0	0	18	26
Red Pine	0	0	0	0	0	288	0	0	0	3	0	0	0	196	487
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	47	47
Upland Shrub	50	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Urban	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40
Total	336	102	161	109	72	288	0	0	0	3	0	0	0	377	1450



Report 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2016

Compartment 125
Total Compartment Acres: 1,450

Acres by Treatment Type

Commercial Harvest - 318 Tree Planting - 155 Other - 0
 Habitat Cut - 0 Opening Maintenance - 0

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Herbaceous Openland	19	0	0	0	0	0	19
Natural Pines	80	0	0	0	0	0	80
Planted Pines	48	0	0	0	171	0	219
Total	147	0	0	0	171	0	318

S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
9 41125009-Cut	7.8	42290 - Natural Mixed Pine	High Density Pole	48	81-110	Harvest	Clearcut	4212 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Clearcut - no retention necessary due to small stand size, but reserve oak if any is encountered in this stand.

Specs:

Other The northern tip of this stand lies on land that was purchased w/State Game Funds.

Comments: Featured Species - Sharp-tailed Grouse: This prescription will strive to balance jack pine age classes with the Bullock Ranch MA and create a temporary opening within a mosaic of opening/plantation habitat which will benefit sharp-tailed grouse and other open-land dependent species. Wildlife Division - consider planting some oak to enhance habitat values after the jack pine is planted.

Next Steps: Trench and plant jack pine. Monitor regen in accordance with the work instructions. Jack, red & white pines plus spruce and oak are all acceptable species for regen.

Proposed

Start Date: 10/01/2015

13 41125013-Cut	55.6	42110 - Planted Red Pine	High Density Log	53	111-140	Harvest	Low Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
-----------------	------	--------------------------	------------------	----	---------	---------	--------------	--------------------------	-----------------------

Prescription Thin the red & white pine and remove the jack pine and aspen.

Specs:

Other Part of the land in this stand was purchased w/State Game Funds.

Comments: This treatment will potentially benefit species such as red crossbill and other seed eaters by stimulating crown development of dominant trees.

Next Steps:

Proposed

Start Date: 10/01/2015

16 41125016-Cut	7.2	42110 - Planted Red Pine	Low Density Log	57	51-80	Harvest	Clearcut	3102 - Grass	Cmpt. Review Proposal
-----------------	-----	--------------------------	-----------------	----	-------	---------	----------	--------------	-----------------------

Prescription Clearcut and convert to open grassland, but reserve oak if any is encountered in the stand. Include a 2" cutting spec in the timber sale to facilitate conversion to open grassland.

Specs:

Other Comments:

Next Steps: Wildlife Division - may consider planting some oak to enhance habitat values after the conversion to open grassland.

Proposed

Start Date: 10/01/2015

23 41125023-Cut	30.1	42110 - Planted Red Pine	Medium Density Log	52	81-110	Harvest	Low Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
-----------------	------	--------------------------	--------------------	----	--------	---------	--------------	-------------------------	-----------------------

Prescription Thin to release the best quality red and white pine. Cut all jack pine, and reserve oak if any are encountered in this stand.

Specs:

Other The Fox River Pathway runs through the south end of this stand.

Comments:

Next Steps:

Proposed

Start Date: 10/01/2015



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	41125024-Cut	15.3	42110 - Planted Red Pine	High Density Log	52	111-140	Harvest	Low Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Thin the red & white pine to release the best quality trees. Cut the jack pine, and reserve oak if any is encountered in this stand.

Specs:

Other The Fox River Pathway crosses through the northeast corner of this stand.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

25	41125025-Cut	10.8	42110 - Planted Red Pine	Low Density Log	52	51-80	Harvest	Clearcut	3102 - Grass	Cmpt. Review Proposal
----	--------------	------	--------------------------	-----------------	----	-------	---------	----------	--------------	-----------------------

Prescription Clearcut - not enough basal area or diversity present to reserve anything except oak if any are encountered in this stand. Include a 2" cutting

Specs: spec in the timber sale to facilitate conversion to grass.

Other Land was purchased w/State Game Funds.

Comments: Featured Species - Sharp-tailed Grouse: This prescription will consolidate the habitat available for sharp-tailed grouse and other open-land dependent species.

Next Wildlife Division - consider planting some oak after the conversion to open grassland.

Steps:

Proposed

Start Date: 10/01/2015

28	41125028-Cut	5.3	42200 - Natural White Pine	Low Density Log	84	1-50	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
----	--------------	-----	----------------------------	-----------------	----	------	---------	----------	-------------------------	-----------------------

Prescription Clearcut - retention is not necessary due to the small size of the stand, but any hemlock and oak encountered in this stand should be retained.

Specs:

Other

Comments:

Next Trench and plant red pine. Monitor regen in accordance with the work instructions. Red, jack & white pines plus hemlock and oak are considered acceptable species.

Steps:

Proposed

Start Date: 10/01/2015

29	41125029-Cut	9.0	42110 - Planted Red Pine	Low Density Pole	52	51-80	Harvest	Clearcut	3102 - Grass	Cmpt. Review Proposal
----	--------------	-----	--------------------------	------------------	----	-------	---------	----------	--------------	-----------------------

Prescription Clearcut - not enough basal area or diversity present to reserve anything except oak if any are encountered in this stand. Include a 2" cutting

Specs: spec in the timber sale to facilitate conversion to grass.

Other Land was purchased w/State Game Funds.

Comments: Featured Species - Sharp-tailed Grouse: This prescription will consolidate the habitat available to sharp-tailed grouse and other open-land dependent species.

Next Wildlife division - consider planting some oak after the stand is converted to open grassland.

Steps:

Proposed

Start Date: 10/01/2015



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34	41125034-Cut	23.1	42110 - Planted Red Pine	Medium Density Log	52	51-80	Harvest	Low Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Thin the red & white pine, and cut the jack pine. Retain oak if any is encountered in this stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
35	41125035-Cut	8.9	42110 - Planted Red Pine	Low Density Log	52	51-80	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut - retention is not necessary due to the small size of the stand, but reserve oak if any is encountered in this stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Trench & plant red pine. Monitor the regen in accordance with the work instructions. Red, jack & white pines and oak are considered acceptable species for regen.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
36	41125036-Cut	33.8	42110 - Planted Red Pine	Medium Density Log	52	81-110	Harvest	Low Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Thin the red and white pine to release the best quality trees. Cut the jack pine and reserve oak if any is encountered in this stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> The Fox River Pathway goes through this stand.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
37	41125037-Cut	5.6	42110 - Planted Red Pine	Medium Density Log	55	51-80	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut - no retention is necessary due to the small size of this stand, but reserve oak if any is encountered in this stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Trench and plant red pine. Monitor regen in accordance with the work instructions. Red, jack & white pines and oak are acceptable species for regen.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
38	41125038-Cut	6.2	42110 - Planted Red Pine	Low Density Log	57	51-80	Harvest	Clearcut	3102 - Grass	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcutwith no retention for conversion to open grassland. Reserve oak if any is encountered in the stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Wildlife Division - may consider planting some oak after the stand is converted to open grassland.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
45	41125045-Cut	13.4	42110 - Planted Red Pine	Medium Density Log	57	81-110	Harvest	Low Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Thin the red & white pine to release the best quality trees. Cut the jack pine and reserve oak if any is encountered in this stand.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

46	41125046-Cut	44.4	42210 - Natural Red Pine	Medium Density Log	80	1-50	Harvest	Clearcut with Reserves	4211 - Planted Red Pine	Cmpt. Review Proposal
----	--------------	------	--------------------------	--------------------	----	------	---------	------------------------	-------------------------	-----------------------

Prescription Clearcut with reserves - retain some large (18" DBH and larger) red & white pine, and oak if any is encountered in this stand.

Specs:

Other

Comments: The snowmobile trail forms the southern boundary of this stand, so harvest operations along the trail will not be permitted from December 1st through March 31st. The Fox River Pathway hiking trail also runs through the southwest corner of the stand and along the stand boundary in the southeast corner. Both trails must be protected in accordance with PRD standards.

Wildlife Division - consider planting some oak after the stand is trenched and planted.

Next

Steps: Trench and plant red pine. Monitor regen in accordance with the work instructions. All pines plus oak and aspen are considered acceptable species for regen.

Proposed

Start Date: 10/01/2015

50	41125050-Cut	22.9	42220 - Natural Jack Pine	Medium Density Pole	49	51-80	Harvest	Clearcut with Reserves	4222 - Natural Jack Pine	Cmpt. Review Proposal
----	--------------	------	---------------------------	---------------------	----	-------	---------	------------------------	--------------------------	-----------------------

Prescription Clearcut with reserves - retain some large (14-18" DBH) red & white pine plus any oak encountered within the stand.

Specs:

Other

Comments:

Next

Steps: Scarify for natural jack pine regeneration. Monitor the regen in accordance with the work instructions. All pine spp. and oak are considered acceptable species for regen. Wildlife Division - consider planting some oak after the stand is scarified.

Proposed

Start Date: 10/01/2015

26	NF_41125026-Cut	19.1	3105 - Mixed Upland Herbaceous				Harvest	Clearcut	3102 - Grass	Cmpt. Review Proposal
----	-----------------	------	--------------------------------	--	--	--	---------	----------	--------------	-----------------------

Prescription Clearcut with no retention for conversion to open grassland. Reserve oak if any is present. Include a 2" cutting spec in the timber sale to facilitate conversion to open grassland.

Specs:

Other

Comments:

Next

Steps: Opening maintenance as required to complete the conversion. Wildlife division may consider planting oak to enhance habitat values.

Proposed

Start Date: 10/01/2015



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
11	NF_41125011-Plant	50.0	3203 - Upland Blueberry				Tree Planting	Machine Plant	42120 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Plant jack pine to fill in where natural regen is currently insufficient. At present about 20 % of the stand (about 10 acres) is non-stocked while another 50% (25 acres) is stocked at about 300 seedlings/acre.</p> <p><u>Other Comments:</u> Scheduled for natural regen under FTP C41-1275, which is still open. Although this is an upland site, fall planting is recommended as the access route may be questionable in spring due to wet areas.</p> <p><u>Next Steps:</u> Regenerate jack pine. Monitor regeneration in accordance with the work instructions.</p> <p><u>Proposed Start Date:</u> 07/29/2014</p>										
26	NF_41125026-Plant1_small	8.7	3105 - Mixed Upland Herbaceous				Tree Planting	Machine Plant	4211 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Trench & plant red pine in the open grasslands between stands 35 and 36.</p> <p><u>Other Comments:</u> Monitor regen in accordance with the work instructions. Red, jack & white pines are all considered acceptable species.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
32	NF_41125032-Plant	5.0	3102 - Grass				Tree Planting	Machine Plant	4212 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Trench and plant jack pine.</p> <p><u>Other Comments:</u> This area was missed when the adjacent stand to the north was regenerated. Land was purchased w/State Game Funds. Featured Species - Sharp-tailed Grouse: This prescription will strive to balance jack pine age classes with the Bullock Ranch MA and create a temporary opening within a mosaic of opening/plantation habitat which will benefit sharp-tailed grouse and other open-land dependent species. Wildlife Division may consider planting some oak after the stand is trenched and planted. The snowmobile trail forms the southern boundary of this stand.</p> <p><u>Next Steps:</u> Monitor regen in accordance with the work instructions. All pine spp. and oak are acceptable species for regen.</p> <p><u>Proposed Start Date:</u> 10/25/2014</p>										
40	NF_41125040-east-Plant_small	9.4	3102 - Grass				Tree Planting	Hand Plant	4211 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Trench and plant red pine</p> <p><u>Other Comments:</u> Monitor regen in accordance with the work instructions. Red, jack & white pines and oak are considered acceptable species.</p> <p><u>Proposed Start Date:</u> 10/25/2014</p>										



S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40 NF_41125040-Plant_small	10.1	3102 - Grass				Tree Planting	Machine Plant	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Trench and plant red pine in the open grassland to the east and immediately adjacent to stand 35.

Specs:

Other

Comments:

Next Steps: Monitor in accordance with the work instructions. Red, jack and white pines are all considered acceptable species.

Proposed

Start Date: 10/01/2015

**Total Treatment
Acreage Proposed: 401.6**



S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	-----------	--------------	-----------	----------	----------------	------------------	----------------------	-----------------

#Type! #Type!

Prescription

Specs:

Other

Comment:

Next

Steps:

Proposed

Start Date: #Type!

Limiting Factor

**Total Treatment
Acreage Proposed: 0.0**

Report 5 – Site Conditions

Shingleton Mgt. Unit

Bob Tylka : Examiner

Compartment 125

Year of Entry 2016

Availability for Management

Availability for Management			Dominant Site Conditions		
Total Acres	Acres Available	Acres Not Available		No	1A
122	122		Aspen	122	
316	316		Jack Pine	316	
12	2	10	Lowland Conifers	2	10
50	50		Lowland Mixed Forest	50	
26	24	1	Natural Mixed Pines	24	1
487	487		Red Pine	487	
14	13	1	Upland Conifers	13	1
47	47		Upland Mixed Forest	47	
40	40		White Pine	40	
1,115	1,103	13	Total Forested Acres	1,103	13
	99%	1%	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
002	Not Available	1A: Federal/State/Local Law	13				

Comments:

Fox River Vegetative Buffer



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
Pictured Rocks Inland Buffer	Contiguous Resource Area		SCA	
Comments				



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42220 - Natural Jack Pine	High Density Pole	87.2	36	81-110	Young jack pine - many stems still under 5" but doing well. A few residual red pine logs from the last stand are also present.
2	42221 - Natural Jack Pine, Mixed Deciduous	Medium Density Pole	9.5	48	1-50	Mix of jack pine poles & regen, aspen clones and scattered upland brush. This stand was once a semi-open grassland but now it is gradually filling in with more jack pine and aspen.
3	42110 - Planted Red Pine	Medium Density Log	58.9	56	81-110	Red pine thinned last rotation
4	42220 - Natural Jack Pine	High Density Sapling	53.6	12		Jack pine planted in 2002. About 75 % of the area is well-stocked with jack pine saplings (both planted and volunteers) 6-10' tall. Areas that appeared to be lower and wetter before the stand was harvested in 1999 in the eastern portion of the stand are more of a mix of jack pine, black spruce etc, and the stocking levels are somewhat lower, but still within acceptable limits.
5	42220 - Natural Jack Pine	Low Density Pole	3.7	49	1-50	Old opening slowly filling in with jack pine and upland brush, etc. The age given here represents the oldest cohort of jack pine, but this stand actually has age class variation.
7	42210 - Natural Red Pine	Medium Density Log	3.3	94	111-140	Small stand of mature red pine - maintain for wildlife cover while the surrounding stands are in the process of growing up enough to serve that same purpose. This stand had scattered jack pine and spruce removed when the surrounding stands were cut.
8	4130 - Aspen	High Density Sapling	29.0	25	1-50	Young aspen, mostly 3-4" DBH with a few trees reaching merchantable size. Some areas feature less aspen and a mix of jack pine, red maple and upland brush spp. such as cherry, but overall the stocking levels are good.
9	42290 - Natural Mixed Pine	High Density Pole	7.8	48	81-110	Jack pine ready to cut now. The age shown represents a cohort of jack pine that was planted to fill in a semi-open, uneven-aged stand that was occupying the site prior to the planting. Therefore older trees of all the species shown are also present.
10	429 - Mixed Upland Conifers	High Density Pole	5.1	Uneven Age	111-140	This stand is a mix of red maple and various conifers on rolling terrain. Unevenaged characteristics are evident throughout. The ages given here are from old inventory records, but older trees are present as well.
13	42110 - Planted Red Pine	High Density Log	55.6	53	111-140	Red pine plantation, ready to thin. Not previously entered.
14	42210 - Natural Red Pine	Medium Density Log	9.0	Uneven Age	81-110	Stand of natural red pine.
15	6131 - Hemlock, White Pine, Maple, Birch	Medium Density Pole	6.6	Uneven Age	51-80	This stand is a mix of white pine, red maple and others on rolling terrain that represents a transitional habitat between the dry uplands and wetter lowlands. Unevenaged characteristics are evident throughout. The ages given here are from old inventory records, but older trees are present as well. Records indicate that partial cutting has occurred in this stand as recently as 1989.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	42110 - Planted Red Pine	Low Density Log	7.2	57	51-80	Planted in 1957 but most of the red pine failed. Many areas are just open grass with a few jack pine seedlings, and the basal area is too low to do anything with the stand other than cut it and regenerate by planting. Consider jack pine as an alternative to the red pine.
17	42220 - Natural Jack Pine	Low Density Sapling	1.8	9		Joung jack pine - records indicate that it was not planted but natural jack pine regen has sprung up after a timber sale just to the north of this stand disturbed the soil. Stocking is relatively low, about a J1 - J2 at this time.
19	6130 - Fir, Aspen, Maple	Medium Density	37.6	Uneven Age	1-50	Transitional site that was cut to regenerate aspen back in 1989 but no TSI was done. The stand now features an unevenaged mix of residual white pine logs, red maple and spruce poles, and young aspen/spruce/fir/red maple saplings just getting into the pole size classes.
20	42120 - Planted Jack Pine	High Density Pole	22.2	36	51-80	Healthy jack pine planted in 1978. Crown closure is somewhat variable, and there are still trees in the 4-5" DBH class. Basal area should continue to rise as the stand matures.
21	42120 - Planted Jack Pine	High Density Sapling	21.2	11		Jack pine regen planted in 2003. A few residual red & white pine are present from the last stand.
23	42110 - Planted Red Pine	Medium Density Log	30.1	52	81-110	Red pine planted in 1962 - thin now. Stand density is variable.
24	42110 - Planted Red Pine	High Density Log	15.3	52	111-140	Red pine planted in 1962 - thin now.
25	42110 - Planted Red Pine	Low Density Log	10.8	52	51-80	Planted red pine. Much of the plantation failed - the basal area is currently too low to do anything with this stand other than clearcut it and restart by planting again.
27	42110 - Planted Red Pine	Medium Density Log	16.1	52	81-110	Red pine planted in 1962. Many older trees that predate the plantation are also present but the plantation is considered to be the featured stand.
28	42200 - Natural White Pine	Low Density Log	5.3	Uneven Age	1-50	Very poor quality white pine. Records indicate that an attempt to plant red pine was made in 1962 but only a few survived.
29	42110 - Planted Red Pine	Low Density Pole	9.0	52	51-80	Planted red pine. Much of the plantation failed - the basal area is currently too low to do anything with this stand other than clearcut it and restart by planting again.
30	4319 - Mixed Upland Forest	Medium Density Pole	47.3	Uneven Age	1-50	Partially cut on several occasions, resulting in an an unevenaged mix of species. Stand composition, density and timber quality vary significantly throughout the stand, and the only reliable age class is the regen from the cut in 1989. The older age shown here is an estimate based on earlier inventory records.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	42120 - Planted Jack Pine	Medium Density	6.7	12	1-50	Jack pine planted in 2002, now about 1-2" DBH. The basal area shown here represents the scattered residual mixed pine left from the previous stand.
33	42290 - Natural Mixed Pine	Low Density Log	8.2	Uneven Age	51-80	Buffer between the Fox River and the Fox Ruver Rd.
34	42110 - Planted Red Pine	Medium Density Log	23.1	52	51-80	Red pine plantation established in 1962. Partial failures resulted in semi-open areas throughout the stand.
35	42110 - Planted Red Pine	Low Density Log	8.9	52	51-80	Planted red pine. Much of the plantation failed - the basal area is currently too low to do anything with this stand other than clearcut it and restart by planting again.
36	42110 - Planted Red Pine	Medium Density Log	33.8	52	81-110	Red pine planted in 1962 - thin now to remove the weaker trees and cut the jack pine & poor quality white pine. Stand density is extremely variable.
37	42110 - Planted Red Pine	Medium Density Log	5.6	Uneven Age	51-80	2-aged stand of mixed pine - very large red & white pine (18-24" DBH) mixed into the survivors of an attempt to establish a red pine plantation in 1959. Much of the plantation failed, but enough survived to establish the stand; this cohort should be regarded as the featured stand. Jack pine volunteers of various ages are scattered throughout the stand as well, and it appears that an attempt was made to fill in the open areas by planting jack pine.
38	42110 - Planted Red Pine	Low Density Log	6.2	57	51-80	Red pine planted in 1957 but enough of it failed to result in a stand that is currently making poor use of the site. There are also large red & white pine present that predate the plantation.
41	4132 - Aspen, Jack Pine	Medium Density	2.5	12		Mix of aspen regen and planted jack pine regen.
43	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	12.2	Uneven Age	81-110	Mixed timber on the slopes down to the Fox River and the flat bottomlands along the banks. The slopes are generally a pine/hardwood mix, while the bottomlands lean more toward a mix of spruce, fir and hardwoods.
45	42110 - Planted Red Pine	Medium Density Log	13.4	57	81-110	Red pine planted in 1957 and ready to thin. There are also larger red & white pine present that predate the plantation.
46	42210 - Natural Red Pine	Medium Density Log	90.6	Uneven Age	1-50	Semi-open natural pine - primarily red pine but with pockets of jack pine and a few aspen, plus white pine throughout. Age and size class diversity are present everywhere and well-developed. The stand's density is also extremely variable.
47	4132 - Aspen, Jack Pine	Medium Density	13.4	14	1-50	Aspen regen w/pockets of other regen including jack & white pines, spruce, red maple, etc. The stand's density and composition are variable, and the basal area shown here accounts for the pockets of residual trees left over from the previous stand - primarily white pine with a few jack & red pine, red maple, etc. Some of the spruce shown in the canopy species was probably submerchantable when the stand was cut and is now a component of the new stand. The age given here reflects the age of the current aspen regen.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	429 - Mixed Upland Conifers	High Density Log	9.0	Uneven Age	81-110	Upland mix of pine & red maple etc. between the road and the slopes/bottomlands along the Fox River. Stand density/crown closure vary significantly.
49	42120 - Planted Jack Pine	High Density Sapling	1.6	12		
50	42220 - Natural Jack Pine	Medium Density Pole	22.9	49	51-80	Jack pine ready to cut. Stand density varies, and the north end of the stand features areas of mixed semi-open red/jack pine.
51	42220 - Natural Jack Pine	High Density Sapling	3.5	12		Young jack pine about 2" DBH.
52	42200 - Natural White Pine	High Density Pole	32.4	Uneven Age	81-110	Natural white pine with red maple and a variety of other species mixed in.
53	42210 - Natural Red Pine	Medium Density Log	90.7	Uneven Age	51-80	14-18" red pine logs (probably of natural origin) and a generation of poles planted in 1960-62 that are now 7-12". There are also scattered jack pine throughout - note that these appear to be healthy at this time.
55	42220 - Natural Jack Pine	Medium Density Log	27.9	48	81-110	Jack pine with a lot of white pine in some places, and scattered red pine/aspens in others. The jack pine is listed as having a year of origin of 1966, but that appears to have been plantings that filled in some of the open areas. The white pine displays a lot of age & size class diversity since many are residuals from the previous stands.
56	4136 - Aspen, Mixed Conifer	High Density Sapling	77.6	21	1-50	Young aspen, last cut in 1993. Pockets of both mixed aspen/conifers and jack pine regen are scattered throughout the stand, but overall aspen is dominant throughout. The basal area shown represents the scattered red and white pine logs/poles that were left from the previous stand.
58	42200 - Natural White Pine	High Density Log	2.4	Uneven Age	81-110	Natural white pine along with red maple and a mix of other conifers. The stand is becoming unevenaged as a cohort of white pine/red maple regen has become pole-sized, while the older white pine etc. are significantly larger. The understory is primarily red maple and balsam fir 0-2" DBH.
61	6131 - Hemlock, White Pine, Maple, Birch	Medium Density Log	5.8	Uneven Age	81-110	Red maple and a mix of conifers. The stand is unevenaged as a cohort of white pine/red maple/spruce regen has become pole-sized. The understory is primarily red maple and balsam fir 0-2" DBH.
62	42220 - Natural Jack Pine	Medium Density	54.5	23	1-50	Young jack pine - the site is relatively dry in the northwest part of the stand but gradually transitions to lower ground as it drops to the south and east. The spruce component is more noticeable along the south edge of the stand.
63	42260 - Natural Pine, Mixed Deciduous	Medium Density Log	9.6	Uneven Age	51-80	Semi-open stand of mixed pine and deciduous trees on rolling terrain. Evidence of partial cutting in places and age class diversity, resulting in great variations in density, composition, etc.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
6	3105 - Mixed Upland Herbaceous	18.9	No	Low	
11	3203 - Upland Blueberry	50.0	Natural Regen	Jack Pine	<p>Although the Management Objective was set as jack pine before the harvest, this stand was in reality a mix of jack pine and black spruce on a transitional site. It is therefore no surprise that the spruce seedlings presently outnumber the jack pine, and that white pine seedlings are present in good numbers as well. It is recommended that these 3 all be regarded as acceptable species on this site.</p> <p>Since approximately 70 % of the area is presently understocked or nonstocked, handplanting jack pine to fill in the voids is recommended.</p>
12	3105 - Mixed Upland Herbaceous	13.8	No	Low	
18	6239 - Mixed Emergent Wetland	8.9	No	Low	
22	3102 - Grass	3.0	No	Low	
26	3105 - Mixed Upland Herbaceous	51.0	No	Low	
32	3102 - Grass	5.0	Plantation	Jack Pine	trench and plant jack pine
39	11 - Low Intensity Urban	4.4	Yes	High	
40	3102 - Grass	52.0	No	Low	
42	3302 - Low Density Conifer Trees	2.4	No	Low	Maintain per the Fox River Plan.
44	3302 - Low Density Conifer Trees	1.4	No	Low	Maintain per the Fox River Plan.
54	6239 - Mixed Emergent Wetland	19.7	No	Low	
57	622 - Lowland Shrub	17.4	Natural Regen	Lowland Spruce/Fir	By next entry this stand should be considered to be fully forested.
59	6229 - Mixed lowland shrub	20.2	Natural Regen	Lowland Spruce/Fir	This stand will most likely be considered a forested stand by next entry.
60	6229 - Mixed lowland shrub	10.4	No	Low	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
64	3302 - Low Density Conifer Trees	55.8	Natural Regen	Lowland Spruce/Fir	This stand will probably be considered fully forested by next entry.