

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 44
Entry Year 2015

Acreage: 4,438
County Charlevoix

Management Area: Jordan Valley

Revision Date: 02/20/2013 Stand Examiner: Zach Crew

Legal Description:

32N 05W Sections 1-3,5,6,11,15,16,19,24,25,27,29-36

32N 06W Section 25

Identified Planning Goals:

To provide for the protection, integrated management and responsible use of a healthy, productive, and undiminished forest resource base for the social, recreational, environmental, and economic benefit of the State of Michigan.

Soil and topography:

The soils in this compartment are typically either mucks from the Tawas – Carbondale or Lupton – Cathro associations or loamy sands from the Kalkaska – Leelanau or Emmet – Leelanau associations. The east and south areas of the compartment are hardwood ridges that vary in grade. The other sections of the compartment are mostly lowland swamp types that are relatively flat with a very high water table.

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

Ownership is fairly contiguous throughout the compartment except for a small inholding in the west side of the compartment. Boyne Mountain is just to the north of the compartment as well as the town of Boyne Falls. Most of the surrounding area is either wooded lowlands or there are a few areas that are currently in farm land.

Unique Natural Features:

The Kondrat swamp is a large complex in the Northwest of this compartment that provides substantial habitat to a variety of flora and fauna.

Archeological, Historical, and Cultural Features:

There were a few HAL hits in 32N 05W Sections 25, 36, but after contacting the appropriate staff it was determined that these areas aren't effected by any treatments.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

This compartment is in the Boyne and Jordan River watersheds. Many small streams such as Schoolhouse Creek, Moyer Creek, North Branch Boyne River, Warner, Eaton, Cramer, and Deer creek are found within the compartment. Though none of the treatments proposed appear as if they will impact these larger bodies of water, the small tributaries in the lowlands should be protected with the appropriate BMP's and any pertinant Natural River Buffers.

Wildlife Habitat Considerations:

This compartment consists of an upland area consisting of northern hardwoods and aspen and a large wetland complex that lies in the northwest corner of the compartment. A couple of treatments are prescribed in this complex to regenerate the cedar component of the area. This wetland complex is used by numerous furbearers, white-tailed deer, and a variety of amphibian and songbird species. There will be a few aspen treatments within this compartment to maintian age class diversity. This early successional habitat benefits white-tailed deer, wild turkey, ruffed grouse, woodcock, and various songbirds. A portion of the hardwoods will be treated to add structural diversity to the stands.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of coarse-textured glacial till and an end moraine of coarse-textured till (uplands) and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 10 and 600 feet. Beneath the glacial drift are the Antrim and Ellsworth Shales. The Antrim is quarried for cement products elsewhere in the State. Several gravel pits are located on the moraine deposits and the upland areas appear to have good potential. Oil and gas potential in the area is primarily for the Antrim Shale gas play. All parcels have been classified as nondevelopment – reason? Some of the State land is being drained of hydrocarbons.

Vehicle Access:

Access to this compartment is either off of Geim Road or Kuzmik Road in the east or Grygier Road in the West. Most of the access throughout the stand is severely worn forest roads some of which are impassable to vehicles and have been reported as RDRs. The south side of the compartment is also accessible via many small two tracks.

Survey Needs:

None

Recreational Facilities and Opportunities:

There are two boat launches in this compartment, one on Deer Lake and one at the Boyne Falls pond. There is also river access to the Boyne in the Northwest part of the compartment. The North Country path way travels through the east half of the compartment.

Fire Protection:

This area is covered by the Boyne Valley VFD as well as the Bellaire and Gaylord Field Offices. Large scale fire events are not likely to occur in this area due to the forest types found in this compartment.

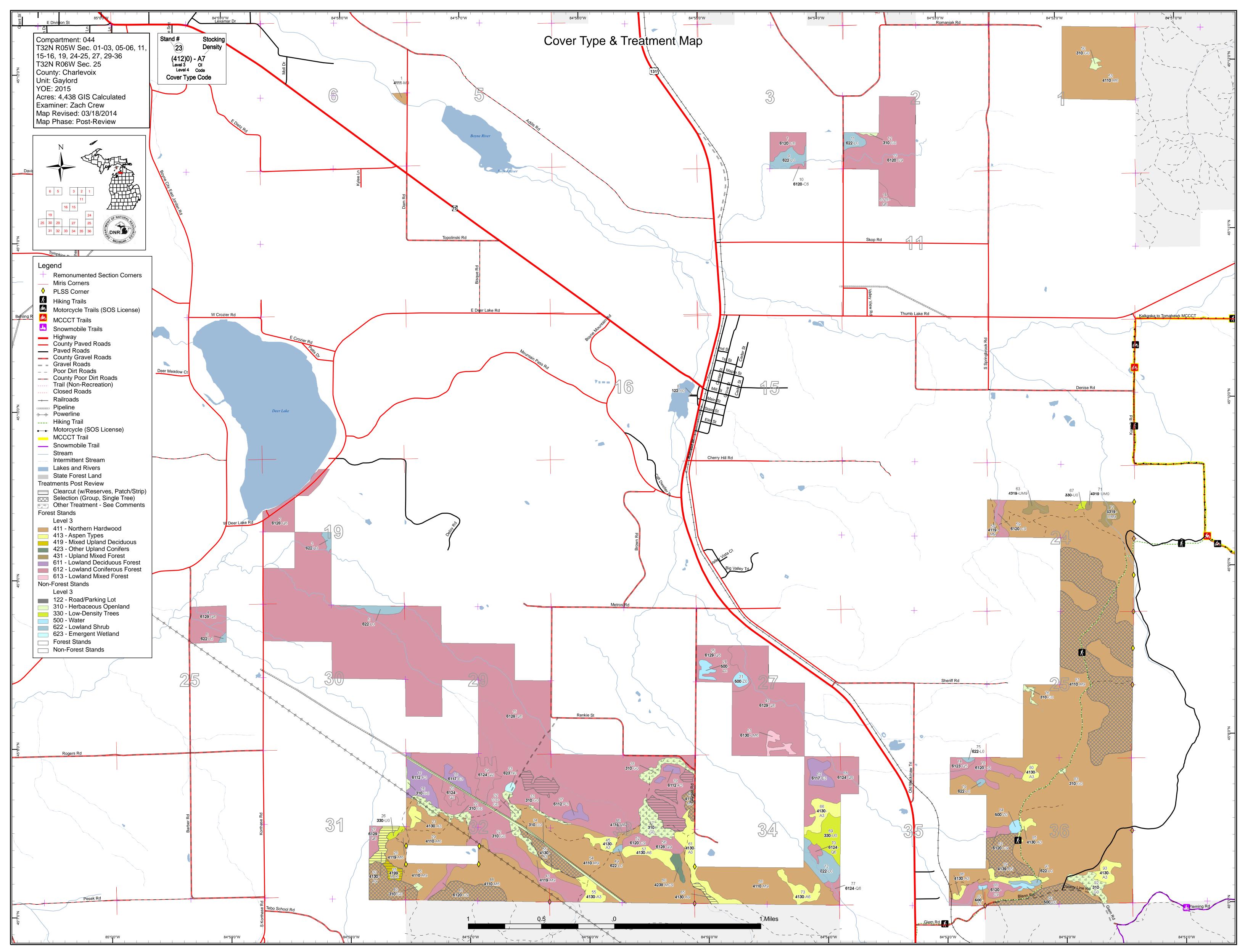
Additional Compartment Information:

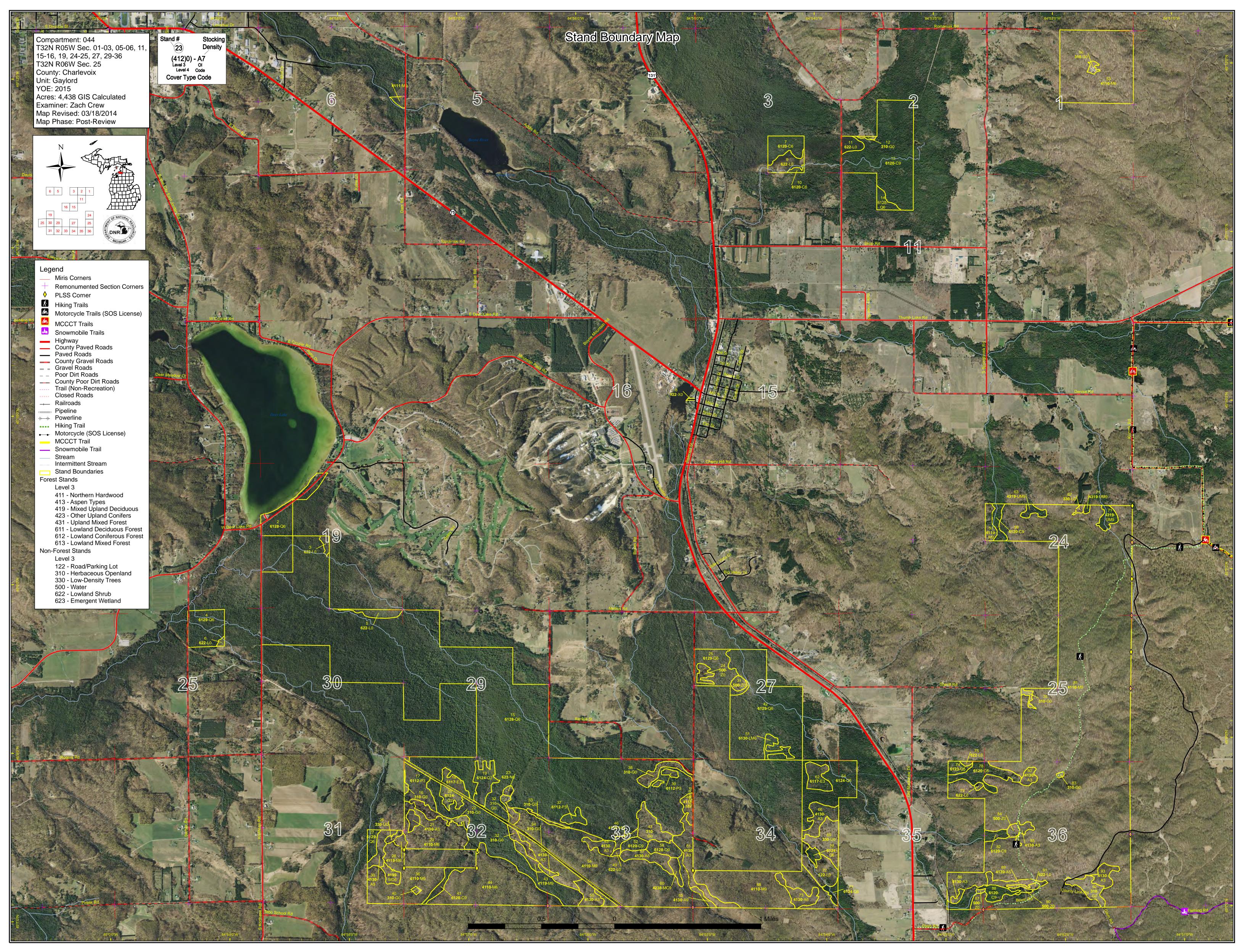
The following reports from the Inventory are attached:

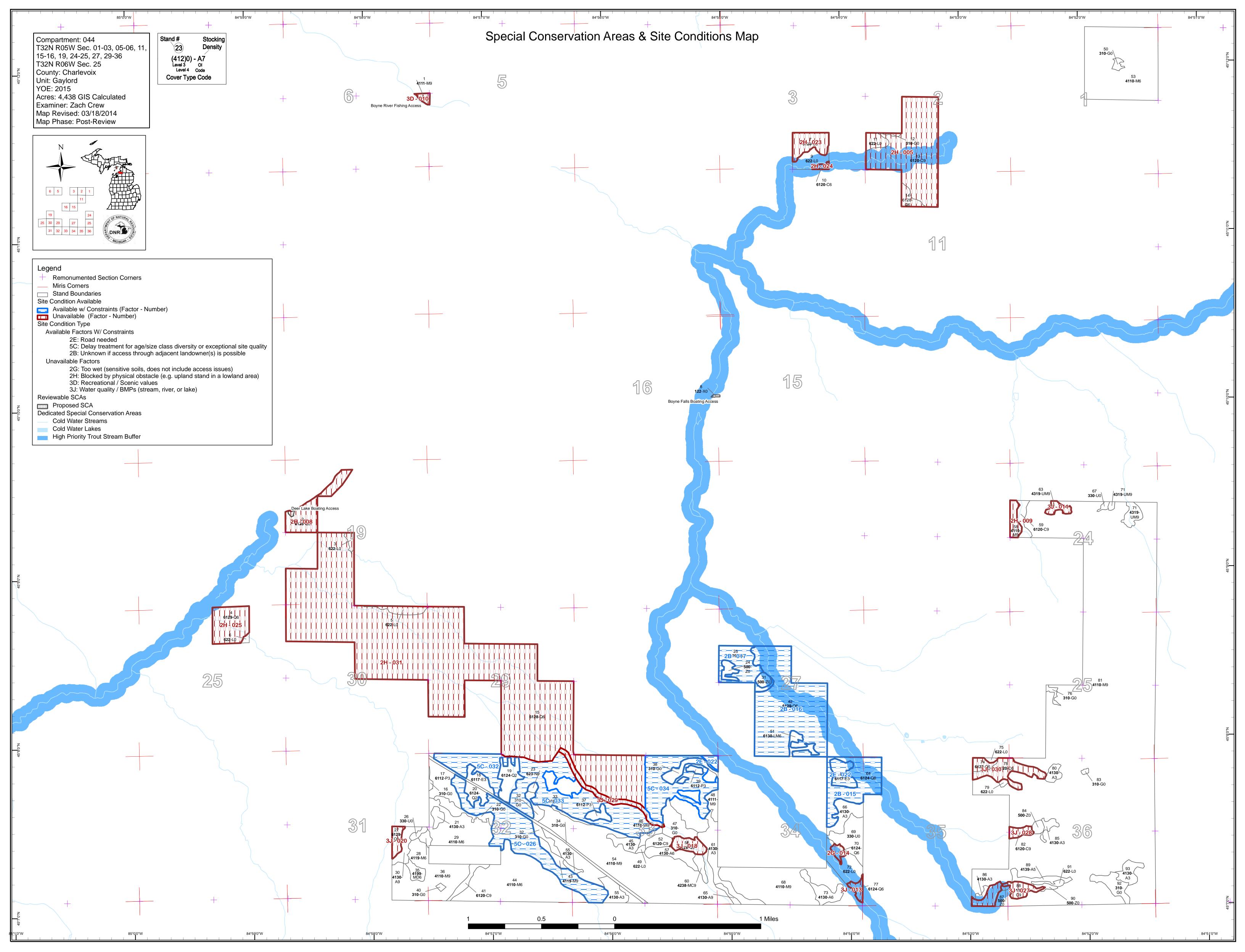
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

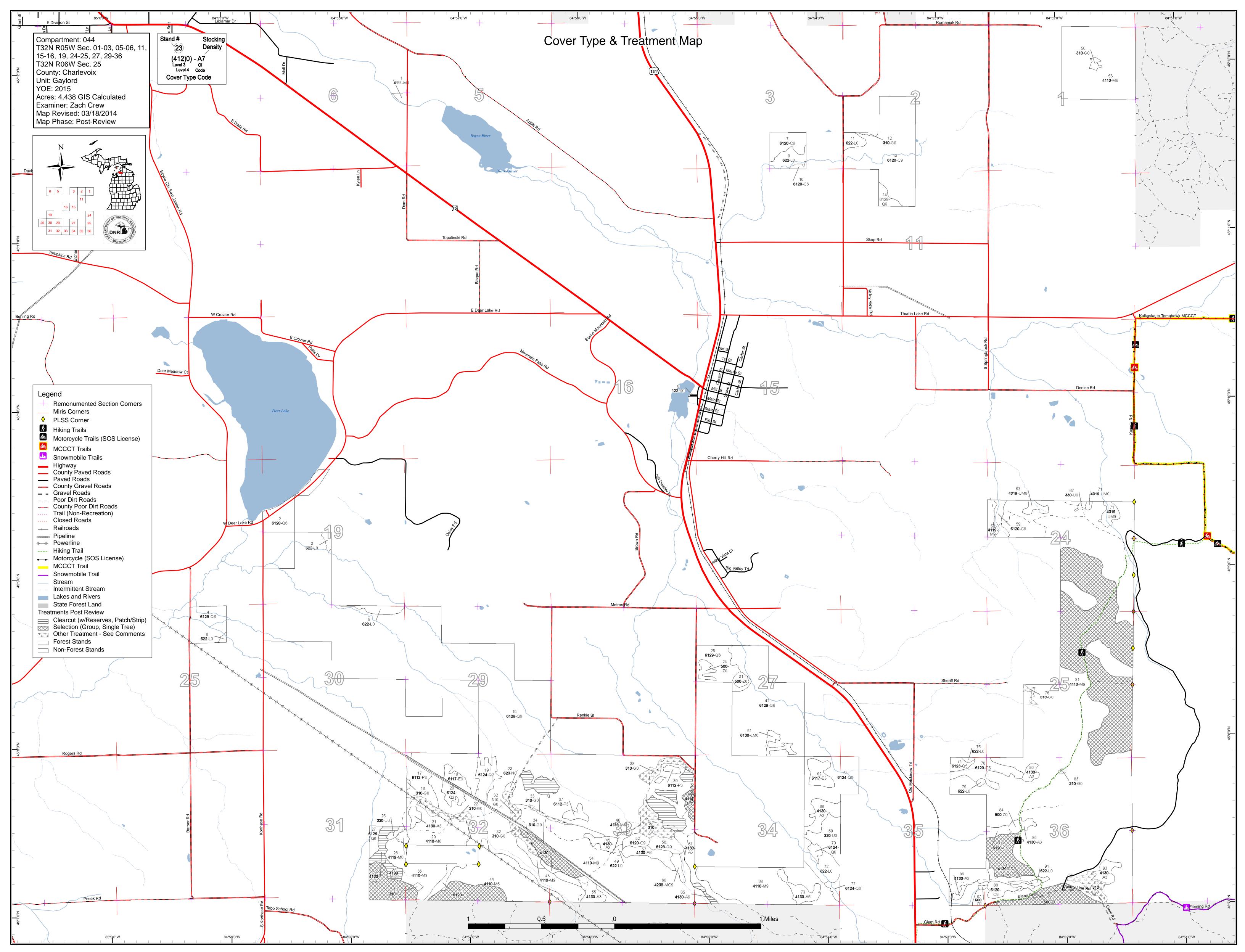
The following information is displayed, where pertinent, on the attached compartment maps:

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









Gaylord Mgt. Unit

Zachary Crew: Examiner



						Age (Class									
		60	70,79	Ser /	å %	pro /	Se Se	\$0,00°	No. No.	\$ 8 / S	88	o o	72,73	,	St. L.	, so
Aspen	0	64	54	19	10	13	4	0	0	0	0	0	0	0	163	
Cedar	0	0	0	0	0	0	0	17	55	151	21	0	0	0	245	
Herbaceous Openland	109	0	0	0	0	0	0	0	0	0	0	0	0	0	109	
Low-Density Trees	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
Lowland Aspen/Balsam Poplar	0	30	0	7	0	0	0	0	0	0	0	0	0	0	37	
Lowland Conifers	0	30	0	0	0	15	0	51	1270	254	10	0	0	0	1630	
Lowland Deciduous	0	10	16	0	0	0	0	0	0	0	0	0	0	0	26	
Lowland Mixed Forest	0	0	0	0	8	0	0	0	0	0	0	0	0	0	8	
Lowland Shrub	71	0	0	0	0	0	0	0	0	0	0	0	0	0	71	
Marsh	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Mixed Upland Deciduous	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7	
Northern Hardwood	0	0	4	0	0	0	138	1605	317	0	0	0	0	0	2064	
Upland Conifers	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	
Upland Mixed Forest	0	0	0	0	0	0	0	11	6	0	0	0	0	0	17	
Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Water	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
Total	234	134	74	26	18	35	142	1691	1648	406	32	0	0	0	4438]



Report 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit Year of Entry 2015

Compartment 044
Total Compartment Acres: 4,438

Acres by Treatment Type

Commercial Harvest - 507 Tree Planting - 0 Other - 0

Habitat Cut - 0 Opening Maintenance - 84

			Cov	er Ty	oe by F	larves	st Meth	nod	
		/	in the second se	Section of		No of	Zindino .	Son /	S. A.
		/	3° / 6				CHILL OF	¢' / ¿ð ⁱ	
Aspen Types		16	0	0	0	0	0	16	
Lowland Coniferous Forest		45	0	0	0	0	0	45	
Mixed Upland Deciduous		7	0	0	0	0	0	7	
Northern Hardwood		0	439	0	0	0	0	439	
	Total	68	439	0	0	0	0	507	

Compartment: 044 Gaylord Mgt. Unit Report 3 -- Treatments Prescribed Year of Entry 2015 with No Limiting Factor s t а **Treatment** CoverType Size BA **Treatment Treatment Cover Type** Acres Approval n Method Objective d Name Density Age Range Type **Status** 16.0 6128 - Lowland High 111-140 Harvest Clearcut with 6128 - Lowland Fld. Tr. Bdy. -15 52044015_CC 85 Coniferous, Mixed Density Reserves Coniferous, Mixed Incomplete Deciduous Deciduous Pole Prescription Stand is to be clearcut in appropriate winter conditions only. Mark out 6 half acre patches within the sale area to leave for retention purposes. Tops should be lopped and scattered throughout the sale. Do not cut white pine or hemlock. The retention should be left in strips to facilitate a Specs: <u>Other</u> A mix of cedar, balsam fir, spruce,balsam poplar, and red maple is expected to regenerate in this stand Comments: Regen survey in 10 years <u>Next</u> Steps: Proposed Start Date: 10/01/2014 25.1 6128 - Lowland 111-140 Harvest Clearcut with 6128 - Lowland Fld. Tr. Bdy. -15 52044015 Eas High 85 t-Cut_small Coniferous, Mixed Density Reserves Coniferous, Mixed Incomplete Deciduous Pole Deciduous Prescription Stand should be clearcut, leaving 6 half acre or bigger patches as retention. Also this should be a winter cut only, no exceptions, and the tops should be lopped and scattered on site. do not cut white pine or hemlock. The retention should be left in strips oriented from SW to the NE. Specs: Crane mats or a bridge will be needed to cross a small creek. Other Regen should be a mix of cedar, spruce, balsam poplar, balsam fir, red maple, and birch. Due to winter cut woodland vole shouldn't be disturbed. Comments: Regen survey in 10 years Next Steps: Proposed 10/01/2014 Start Date: 15 52044015_Nor 3.7 6128 - Lowland High 85 111-140 Harvest Clearcut with 6128 - Lowland Fld. Tr. Bdy. theast-Cut Coniferous, Mixed Density Reserves Coniferous, Mixed Incomplete Deciduous Deciduous Pole leave next to hemlock clumps to act as nurse logs. <u>Other</u> Regen should be a mix of cedar, balsam poplar, balsam fir, spruce, red maple, paper birch, and hopefully a few hemlock. Due to winter cut woodland vole should not be disturbed.

Prescription Clear cut stand, leave all hemlock and white pine. Winter cut only. Lop and scatter tops on the site. Mark a few spruce or fir trees to cut and Specs:

Comments:

Next regen survey in 10 years

Steps:

Proposed

Start Date: 10/01/2014

30 52044030-Cut 12.6 4130 - Aspen High 59 171-200 Harvest Clearcut with 4130 - Aspen Fld. Tr. Bdy. -**Density Log** Reserves Incomplete

Prescription Clear cut stand, retention should be along the west boundary in areas where it is to steep to operate, do no cut any WHITE PINE. This should not hinder any aspen regen. Be aware that the powerline company should be contacted when crossing Kondrat Creek and the bridge may need Specs:

to be improved.

Other Aspen should be the predominant species that will regenerate

Comments:

Next Regen survey

Steps:

<u>Proposed</u>

10/01/2014 Start Date:

Gaylord Mgt. Unit S

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 044 Year of Entry 2015

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35	52044035-Cut	7.2	4199 - Other Mixed Upland Deciduous	High Density Pole	58	1-50	Harvest	Clearcut	4130 - Aspen	Fld. Tr. Bdy Incomplete

Prescription Clearcut stand to promote aspen regeneration, no retention due to small stand size, be sure to use the 2 inch spec clear the site as much as Specs: possible. Be aware that the powerline company should be contacted when crossing Kondrat Creek and the bridge may need to be improved.

Other Aspen should be the predominant species to regenerate, but there will probably be a mix of other northern hardwood species as well

Comments:

<u>Next</u> regen survey

Steps:

<u>Proposed</u>

Start Date: 10/01/2014

52044036-Cut 35.2 4110 - Sugar Maple High 85 51-80 Harvest Single Tree 4110 - Sugar Maple Fld. Tr. Bdy. -Density Log Association Selection Association Incomplete

Prescription Thin stand to roughly 80 BA, follow the marking guidelines. Make sure to establish 75 foot diameter regen gaps. Cut all ash and beech except those beech that exhibit resistance to BBD. Do not cut aspen. Leave 1 gap per 2 - 5 acres. Be aware that the powerline company should be Specs: contacted when crossing Kondrat Creek and the bridge may need to be improved. When setting up the sale try to obtain private access from the

Expected regen should be a mix of beech, sugar maple, ironwood, and basswood. Red Shoulder Hawk last observed in area in 04/2000, in east Other

Comments: corner of stand. No nest was observed during inventory

Next regen survey

Steps:

Proposed 10/01/2014 Start Date:

52044044-Cut 32.5 4110 - Sugar Maple High 69 81-110 Harvest Single Tree 4110 - Sugar Maple Fld. Tr. Bdy. -44 Association Density Selection Association Incomplete

Prescription Thin stand to roughly 80 BA, follow marking guidelines. Be sure to establish 75 foot diameter regen holes. Cut all ash and beech except those Specs: beech that exhibit resistance to BBD. Do not cut aspen. Leave 1 gap per 2 - 5 acres. Be aware that the powerline company should be contacted when crossing Kondrat Creek and the bridge may need to be improved. When setting up the sale discuss access across private landowners from the south with the appropriate parties.

Other_ Expected regen should be a mix of sugar maple, beech, basswood, and ironwood. Red Shoulder Hawk last observed in area in 04/2000

Comments:

Next regen survey

Steps:

Proposed

Start Date: 10/01/2014

4111 - S.Maple, 52044048-Cut 4111 - S.Maple, High 111-140 Single Tree Fld. Tr. Bdy. -48 8.0 Harvest Hard Mast Density Log Selection Hard Mast Incomplete Association Association

Prescription Stand should be thinned to 80 BA, follow marking guidelines, cut all beech and ash, except those beech that exhibit any resistance to BBD Specs:

Other stand is probably to small for commercial operation and would be better suited to a firewood operation

Pole

Comments:

Next Steps:

<u>Proposed</u>

Start Date: 10/01/2014

Gaylord Mgt. Unit S

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 044 Year of Entry 2015

DEPARTME	DNR MICHIGAN
	MICHIGAN
10	MICHIGAN .

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
54	52044054-Cut	22.1	4110 - Sugar Maple Association	High Density Log	87	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Fld. Tr. Bdy Incomplete

Specs:

Prescription Portion of stand to the west of the powerline should be thinned to 80 BA, follow marking guidelines. All and ash and beech should be cut except for those Beech that exhibit resitance to BBD. Be sure to put in 75 ft diameter regen gaps. Leave 1 gap per 2 - 5 acres. Be aware that the powerline company should be contacted when crossing Kondrat Creek and the bridge may need to be improved.

Other

Expect regen of beech, ironwood, and maple in regen gaps. If basswood is cut expect stump sprouts.

Comments:

Next regen survey

Steps:

Proposed

10/01/2014 Start Date:

65 52044065-Cut 3.7 4130 - Aspen High 69 81-110 Harvest Clearcut 4130 - Aspen Fld. Tr. Bdy. Density Log

Prescription Clearcut stand, no retention due to small size. May need to be packaged with another cut to make it economically desirable for a producer to

move equipment in. Stand is to be added to the adjacent Harbringer HDWDS sale to the south. Specs:

Other

Aspen should be the predominant species to regenerate Comments:

regen survey Next

Steps:

Proposed

Start Date: 10/01/2012

81 52044081-266.3 4110 - Sugar Maple High 77 81-110 Harvest Single Tree 4111 - S.Maple, Fld. Tr. Bdy. -Association Density Log Selection Hard Mast Incomplete Cut_small Association

Prescription Thin stand to 80 BA, follow the marking guidelines. Cut all ash and beech except those beech that exhibit resistance to BBD. Be sure to mark Specs: out 75 ft wide regen gaps. Be sure to only allow crossing the north country pathway in certain locations and do not mark any trees within 10 feet

of the pathway. Leave 1 gap per 2 - 5 acres

There was a HAL hit in this area but according to Stacy Tchorzynski the treatment boundary falls outside of the HAL site. Suger maple, beech, <u>Other</u>

Comments: and irownwood should regen in the canopy gaps, and basswood should sprout where it is cut

Next Steps:

Proposed

Start Date: 10/01/2014

High 81 52044081-35.1 4110 - Sugar Maple 77 81-110 Harvest Single Tree 4111 - S.Maple, Fld. Tr. Bdy. -Cut_South Association Density Log Selection Hard Mast Incomplete Association

Prescription Thin stand to 70 BA, follow the marking guidelines. Cut all ash and beech except those beech that exhibit resistance to BBD. Be sure to mark out 75 ft wide regen gaps. The treatment area is everything south of Geim road to the compartment boundary. Leave 1 gap per 2 - 5 acres Specs:

Other There was a HAL hit in the area but according to Stacy Tchorzynski the treatment is outside of the HAL site. Suger maple, beech, and

Comments: irownwood should regen in the canopy gaps, and basswood should sprout where it is cut

<u>Next</u> Steps: regen survey

regen survey

Proposed

10/01/2014 Start Date:

Compartment: 044 Gaylord Mgt. Unit Report 3 -- Treatments Prescribed Year of Entry 2015 with No Limiting Factor s t а **Treatment** Acres CoverType Size BA **Treatment Treatment Cover Type** Approval n Method Objective **Status** d Name Density Age Range Type High 81 52044081-39.4 4110 - Sugar Maple 77 81-110 Harvest Single Tree 4111 - S.Maple, Fld. Tr. Bdy. -Hard Mast **Cut West** Association Density Log Selection Incomplete Association Prescription Thin stand to 80 BA, follow the marking guidelines. Cut all ash and beech except those beech that exhibit resistance to BBD. Be sure to mark Specs: out 75 ft wide regen gaps. Leave 1 gap per 2 - 5 acres. Other There was a HAL hit in the area but according to Stacy Tchorzynski the treatment boundary is outside of the HAL site. Suger maple, beech, and Comments: irownwood should regen in the canopy gaps, and basswood should sprout where it is cut <u>Next</u> regen survey Steps: <u>Proposed</u> Start Date: 10/01/2014 NF 52044022-310 - Herbaceous Non-Forest Other - Specify 3105 - Mixed Fld. Tr. Bdy. -Openland NonFor Management Upland Herbaceous Incomplete Prescription Opening Maintenance Specs: **Other** Comments: <u>Next</u> Steps: **Proposed** Start Date: Unspecified NF_52044032-310 - Herbaceous Non-Forest Other - Specify 3105 - Mixed Fld. Tr. Bdy. -32 Upland Herbaceous Openland Management Incomplete NonFor **Prescription** Opening Maintenance Specs: Other Comments: <u>Next</u> Steps: **Proposed** Start Date: Unspecified NF 52044033-310 - Herbaceous Non-Forest Fld. Tr. Bdy. -33 Other - Specify 3105 - Mixed NonFor Openland Management Upland Herbaceous Incomplete Prescription Opening Maintenance Specs: <u>Other</u> Comments: **Next** Steps: Proposed Start Date: Unspecified NF 52044038-12.5 310 - Herbaceous Non-Forest Other - Specify 3105 - Mixed Fld. Tr. Bdy. -38 NonFor Openland Management Upland Herbaceous Incomplete

Unspecified

Prescription Opening Maintenance

Other Comments: Next Steps: Proposed Start Date:

Compartment: 044 Gaylord Mgt. Unit Report 3 -- Treatments Prescribed Year of Entry 2015 with No Limiting Factor s t а **Treatment** Acres CoverType Size BA **Treatment Treatment Cover Type** Approval n Name **Density** Range Method Objective **Status** d Age Type 310 - Herbaceous Non-Forest 3105 - Mixed NF_52044047-21.9 Other - Specify Fld. Tr. Bdy. -47 Openland Upland Herbaceous Incomplete NonFor Management Prescription Opening Maintenance Specs: Other Comments: Next Steps: Proposed Start Date: Unspecified NF_52044076-2.8 310 - Herbaceous 3105 - Mixed 76 Non-Forest Other - Specify Fld. Tr. Bdy. -Management Openland **Upland Herbaceous** Incomplete NonFor Prescription Opening maintenance Specs: Other Comments: Next Steps: Proposed 10/01/2014 Start Date: 83 NF 52044083-1.0 310 - Herbaceous Non-Forest Other - Specify 3105 - Mixed Fld. Tr. Bdy. -Incomplete Openland Management Upland Herbaceous NonFor Prescription Opening maintenance Specs: Other Comments: <u>Next</u> Steps: Proposed Start Date: Unspecified 92 NF_52044092-15.2 310 - Herbaceous Non-Forest Other - Specify 3105 - Mixed Fld. Tr. Bdy. -Upland Herbaceous Openland Management Incomplete NonFor Prescription Opening maintenance Specs: <u>Other</u> Comments: <u>Next</u> Steps: Proposed Start Date: Unspecified

Total Treatment

Acreage Proposed: 590.8

Gaylord Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 044 a Site Condition s Year of Entry 2015 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Objective Method Status Name Range Density Age Type #Type! #Type! **Prescription** Specs: Other Comment: **Next** Steps: <u>Proposed</u> #Type! Start Date:

Total Treatment

Limiting Factor

Acreage Proposed: 0.0

Gaylord Mgt. Unit

Compartment 044
Year of Entry 2015

Zach Crew: Examiner

Availa	ability for I	Management									
Total	Acres	Acres	De	ominai	nt Site	Cond	dition	s			
Acres	Available	Not Available		No	5C	3J	3D	2H	2G	2E	2B
163	163		Aspen	163							
245	26	219	Cedar	26		54		165			
37	37		Lowland Aspen/Balsam Poplar	37							
1630	710	921	Lowland Conifers	75	354	51		864	5	4	277
26	26		Lowland Deciduous	10						16	
8	8		Lowland Mixed Forest	8							
7	7		Mixed Upland Deciduous	7							
2064	2051	13	Northern Hardwood	2,051			3	10			
6	6		Upland Conifers	6							
17	11	6	Upland Mixed Forest	11		6					
4,203	3,045	1,158	Total Forested Acres	2,394	354	112	3	1,039	5	20	277
	72%	28%	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.

140. C	Dominant Site ond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
005	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	158	2E: Road needed			
Co	omments:						
008	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	36	2B: Unknown if access through adjacent landowner(s) is possible	2E: Road needed		
Co	omments:						

Gaylord Mgt. Unit
Zach Crew: Examiner

009	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	10	3J: Water quality / BMPs (stream, river, or lake)	2D: Portable Bridge Needed (Dept. bridge will be adequate)	
С	omments:					
010	Not Available	3D: Recreational / Scenic values	3			
С	omments:					
011	Not Available	3J: Water quality / BMPs (stream, river, or lake)	6			
С	omments:					
013	Not Available	3J: Water quality / BMPs (stream, river, or lake)	6	2G: Too wet (sensitive soils, does not include access issues)	2E: Road needed	2B: Unknown if access through adjacent landowner(s) is possible
С	omments:					
014	Not Available	2G: Too wet (sensitive soils, does not include access issues)	5	3J: Water quality / BMPs (stream, river, or lake)	2B: Unknown if access through adjacent landowner(s) is possible	
С	omments:					
015	Available	2B: Unknown if access through adjacent landowner(s) is possible	59	2E: Road needed	3J: Water quality / BMPs (stream, river, or lake)	
С	omments:					

Gaylord Mgt. Unit
Zach Crew: Examiner

016	Available	2B: Unknown if access through adjacent landowner(s) is possible	181	2E: Road needed	3J: Water quality / BMPs (stream, river, or lake)	
С	omments:					
017	Available	2B: Unknown if access through adjacent landowner(s) is possible	37	2E: Road needed		
С	omments:					
018	Not Available	3J: Water quality / BMPs (stream, river, or lake)	13			
С	omments:					
020	Not Available	3J: Water quality / BMPs (stream, river, or lake)	8			
С	omments:					
022	Available	2E: Road needed	20	2B: Unknown if access through adjacent landowner(s) is possible		
С	omments:					
023	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	23	2B: Unknown if access through adjacent landowner(s) is possible	2E: Road needed	
С	omments:					

Gaylord Mgt. Unit
Zach Crew: Examiner

024	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2	2B: Unknown if access through adjacent landowner(s) is possible	2E: Road needed	
С	omments:					
025	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	39	2E: Road needed		
С	omments:					
026	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	106			
С	omments:					
027	Not Available	3J: Water quality / BMPs (stream, river, or lake)	21			
С	omments:					
028	Not Available	3J: Water quality / BMPs (stream, river, or lake)	6			
С	omments:					
029	Not Available	3J: Water quality / BMPs (stream, river, or lake)	18	2E: Road needed		
С	omments:					

Gaylord Mgt. Unit
Zach Crew: Examiner

030	Not Available	3J: Water quality / BMPs (stream, river, or lake)	34				
С	omments:						
031	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	796	2E: Road needed	2B: Unknown if access through adjacent landowner(s) is possible	2D: Portable Bridge Needed (Dept. bridge will be adequate)	
С	omments:						
032	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	42				
С	omments:						
033	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	126				
С	omments:						
034	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	80				
С	omments:						

Gaylord Mgt. Unit

Compartment: 044 Year of Entry: 2015



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
Boyne Falls Boating Access Comments	Concentrated Recreation Area	Boat Access Site	SCA	0.5
Deer Lake Boating Access Comments	Concentrated Recreation Area	Boat Access Site	SCA	0.7
Boyne River Fishing Access	Concentrated Recreation Area	Fishing Access Site	SCA	3.2
Comments hardwood stand along river g	iving access to it, signs posted sta	ating no camping, those should	d removed, possible disposal parce	el?

Gaylord Mgt. Unit Compartment: 044
Year of Entry 2015



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservation	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical sites of cultural and historical significance that may occur upon to bottomlands. They include thousands of Native American settler and British outposts, nineteenth century logging camps, mines at the Great Lakes, there are shipwrecks and other remains documbe identified by Natural heritage data from the State Historic Prethis compartment will be implemented in such a manner as to me the sensitive nature of this information, no further detail about logical sites and the sensitive nature of this information, no further detail about logical sites are sites as a sensitive nature of this information, no further detail about logical sites are sites as a sensitive nature of this information, no further detail about logical sites are sites as a sensitive nature of this information, no further detail about logical sites are sites as a sensitive nature of the sensitive nature nature nature of the sensitive nature nature nature nature nature nature nature nature natu	errestrial areas and Great Lakes ments and burial sites, as well as French and homesteads. Beneath the waters of menting the maritime trade. Such sites may servation Office. Proposed treatments in aintain the integrity of these sites. Due to
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spectonditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ies to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen condistocked trout populations and those of other coldwater fish spective 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.	ies (e.g., slimy sculpin) to persist from ese 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 communities are ecologically and socially significant in their effe as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well

S t	Gaylord	d Mgt. Unit		·		Stands Compartment: 044 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4111 - S.Maple, Hard Mast Association	High Density Log	3.2	76	81-110	hardwood stand along river giving access to it, signs posted stating no camping, those should removed, possible disposal parcel?
2	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	36.1	94	81-110	Mixed lowland stand with cedar and black ash, Boating Access in stand but not large enough to be broken out as a non forested stand, adjacent to deer lake and lots of streams
4	6129 - Mixed Coniferous Lowland Forest	High Density Pole	38.5	73	51-80	Very wet, lots of streams and creeks, scattered super canopy white pine
7	6120 - Lowland Cedar	High Density Pole	22.5	89	81-110	Low wet area, no access to this or stands 84 and 83
10	6120 - Lowland Cedar	High Density Pole	2.1	94	111-140	Lowland conifer, heavy signs of usage from deer, no access
13	6120 - Lowland Cedar	High Density Log	140.1	91	141-170	swamp of varying stocking and quality, lots of blowdown areas, seems to have multiple age classes, streams were mapped out to see if any logging was feasible
14	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	8.1	56	51-80	Similiar to stand 5 except it seems to be younger (BAM and Aspen falling out, cedar starting to take over)
15	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	1,202.3	85	111-140	mixed q type, lots of areas of blowdown/low BA, variable stocking is typical with a stand this size, lots of water at the surface, very wet, south east portion of stand has most of the blowdown
17	6112 - Lowland Aspen	High Density Sapling	25.6	14		Aspen clear cut, a few scattered super canopy white pine were left
18	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	9.9	17		interesting mix of regenerating species, almost a pure birch stand
19	6124 - Lowland Spruce- Fir	Medium Density	19.9	16		Stand was harvested in 1988 as well as 1997. There were some strip cuts on the north end and a larger clearcut area in the south. Swamp conifer regen appears to be concentrated along the edge of the clearcut and in the strip cuts but is patchy. The larger clearcut seems to be mostly open water, tag alder, and some BAM.
20	6124 - Lowland Spruce- Fir	Medium Density	10.0	16		Cedar/fir/spruce starting to to seed in, the area looks like it was previously flooded, possibly due to beaver activity, lots of small creeks
21	4130 - Aspen	High Density Sapling	5.6	14		regenerating aspen clear cut, there is a decent amount of other mixed hardwood species present
25	6129 - Mixed Coniferous Lowland Forest	High Density Pole	37.0	97	81-110	Mixed conifer stand, lots of water

s	Gaylord	Gaylord Mgt. Unit			– Forested	Stands Compartment: 044 Year of Entry: 2015
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	6129 - Mixed Coniferous Lowland Forest	High Density Pole	8.3	82	111-140	Wet - really wet - lots of deer traffic
28	4119 - Mixed Northern Hardwoods	High Density Pole	3.9	26	1-50	regenerating M3/M6, age estimate is just a guess
29	4110 - Sugar Maple Association	High Density Pole	54.7	73	51-80	Northern hardwood stand, thinning was completed 4 years ago, not ready to be re entered, lots of beech sprouting, residual looks good
30	4130 - Aspen	High Density Log	12.6	59	171-200	Nice stocking - good growth and form on aspen trees, somewhat hilly, overlooks creek to west
35	4199 - Other Mixed Upland Deciduous	High Density Pole	7.2	58	1-50	mostly M3/M6 with aspen mixed in and some pockets of larger diameter aspen
36	4110 - Sugar Maple Association	High Density Log	80.4	85	51-80	Part of Hungry Bear Hardwoods sale (52-006-005-01), completed in 2009. Residual trees look good, understory if fairly undeveloped.
37	6112 - Lowland Aspen	High Density Sapling	6.9	31		lowland clearcut, old road bisects stand, old OI has stand origin at 1983
39	6112 - Lowland Aspen	High Density Sapling	4.2	16		strip cuts that were done by kondrat, combined into one multi part stand b/c the composition is similiar, however the ages are different by roughly 5 years, could not find specific cutting records for these two patches
41	6120 - Lowland Cedar	High Density Log	8.2	78	81-110	narrow valley with with a creek and plenty of seeps
42	6129 - Mixed Coniferous Lowland Forest	High Density Pole	181.1	95	81-110	Mixed swamp conifer, some areas of blown down and high water table
43	4119 - Mixed Northern Hardwoods	High Density Log	6.9	65	51-80	Edge of ridge that drops down in to swamp, scattered white pine
44	4110 - Sugar Maple Association	High Density Pole	121.7	69	81-110	Most of stand thinned in 1997 as part of Snowridge Hardwoods sale, lots of beech sprouts and ironwood in the understory, residual trees look good and healthy, evidence of BBD and EAB.
45	4130 - Aspen	High Density Sapling	9.9	15		Old aspen clearcut part of Rookie Aspen in 1999
46	4119 - Mixed Northern Hardwoods	High Density Pole	5.2	73	51-80	Small Hardwood Stand, low quality, high ridge between two wet areas
48	4111 - S.Maple, Hard Mast Association	High Density Log	8.0	85	111-140	small hardwood stand, easy access make and stocking make it ready for a thinning, small size may preclude any large scale logging operations, stand left as retention along road during cutting of Rookie Aspen to the south

S t	Gaylord	l Mgt. Unit		Report 8	Forested	Stands Compartment: 044 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
51	6130 - Fir, Aspen, Maple	High Density Pole	8.4	41		Looks to be a stand developing from old strip cuts done in the swamp, previous inventory puts this stand at 40 years old but size of aspen doesn't support this, could be misleading due to limited growth on wet flooded sites.
52	6120 - Lowland Cedar	High Density Log	8.7	79	141-170	Creek running west to east through stand, nice quality cedar, good buffer for water quality
53	4110 - Sugar Maple Association	High Density Pole	156.9	77	51-80	North half of stand thinned as part of Fox Den Hardwoods (52-026-98-01), completed in 2001
54	4110 - Sugar Maple Association	High Density Log	228.2	87	81-110	Boyne Valley Hardwood (52-017-95-01), completed in 2001 in NW part of sale. East/West ridge running along southside of stand and down into lowland on the north. lots of seeps and creeks running in the valleys down into the lowlands would make harvesting in some areas problematic
55	4130 - Aspen	High Density Sapling	15.8	15		aspen clear cut, old logging road is blown out, is entered into the database as an RDR, multi part stand, cut in 1999 with Rookie Aspen
56	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	12.8	79	111-140	Lots of diversity in stand, small creek meanders through stand
57	4130 - Aspen	High Density Pole	16.1	26		Aspen clearcut, TCR states the stand was cut in 1988
58	4119 - Mixed Northern Hardwoods	High Density Log	9.5	67	111-140	Small northern hardwood stand seperated from larger hardwood stand to the east by a creek. Severe ash mortality/EAB in the stand. Wet are in the middle of the stand surrounded by an inclusion of Bigtooth Aspen and developing hemlock, larger concentration of Sugar Maple poles in the south end
59	6120 - Lowland Cedar	High Density Log	9.2	98	81-110	lowland stand surrounding a north/south running creek, mix of mainly hemlock and cedar, signs of EAB mortality
60	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Log	6.0	76	81-110	Mix of mainly hemlock and cedar bordering a stream that flows into the swamp to the NW
61	4130 - Aspen	High Density Sapling	30.0	15		Aspen clearcut, part of Rookie Aspen sale in 1999
62	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	16.1	24		Stand was harvested from 1983 through 1995, 1990 was used as an average start age
63	4319 - Mixed Upland Forest	High Density Log	5.9	87	111-140	convergance of small feeder streams into a larger creek, mix of cedar with wet mesic hardwood types
64	6124 - Lowland Spruce- Fir	High Density Pole	59.1	83		No access to stand through private, edge call with data taken from previous inventory

S t	Gaylord	d Mgt. Unit		Report 8 – Forested Stands		Stands Compartment: 044 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
65	4130 - Aspen	High Density Log	3.7	69	81-110	Small Aspen stand on a slope, not sure why it wasn't cut with the previous stand, could have been left for retention?
66	4130 - Aspen	High Density Sapling	18.8	39		A3 stand with some upland brush openings scattered throughout, no access across private
68	4110 - Sugar Maple Association	High Density Log	112.7	73	81-110	Part of Lost & Found HDWDS (52-010-05-01), completed sale in 2008. Residual showing good growth and form.
70	6124 - Lowland Spruce- Fir	High Density Pole	4.7	107		Mixed swamp conifer, stocking looks to have improved since previous inventory, no access across private
71	4319 - Mixed Upland Forest	High Density Log	10.9	79	51-80	mixed upland stand of mainly cedar and hemlock similar to stand 89
73	4130 - Aspen	High Density Pole	15.5	26		Regenerating aspen stand, lots of ironwood and a small amount of white ash saplings/poles as well
74	6123 - Lowland Fir	Medium Density Pole	6.9	58		Cedar dying out or already dead, unlike in pre inventory stand 26, is this because of water table?
77	6124 - Lowland Spruce- Fir	High Density Pole	5.7	107		Small swamp stand surrounded by flowing water, no access across private
78	6120 - Lowland Cedar	High Density Pole	26.6	83	81-110	coverage is patchy in some areas, cedar swamp with a mix of other conifers, lots of streams
80	4130 - Aspen	High Density Sapling	6.4	24		Small aspen stand, good regen
81	4110 - Sugar Maple Association	High Density Log	1,272.8	77	81-110	portions of this stand have been thinned over the past 20 years, large stand with lots of changing topography, evidence of BBD and EAB
82	6120 - Lowland Cedar	High Density Log	6.4	85	141-170	Cedar swamp w/ many feeder streams flowing out of wetland to the east
85	4130 - Aspen	High Density Sapling	4.6	21		Small diameter aspen pole/sapling stand coming along nicely
86	4130 - Aspen	High Density Sapling	2.7	17		Aspen stand that looks to have been recently cut, doesn't correlate very well with old OI data and couldn't find a cutting record therefore the age is just an estimate
88	6120 - Lowland Cedar	High Density Log	21.3	106	111-140	Cedar swamp with many little creeks running every which way
89	4139 - Aspen, Mixed Deciduous	Medium Density Pole	10.1	46	1-50	Sparse aspen stand on a south facing slope

S t	Gaylo	Gaylord Mgt. Unit Report 8 – Forested Sta		Stands Compartment: 044 Year of Entry: 2015	DNR DNR		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN S
93	4130 - Aspen	High Density Sapling	11.1	24		Regenerating aspen stand, starting to develop in to	a pole stand



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	622 - Lowland Shrub	3.6	Unspecified	Unspecified	
5	622 - Lowland Shrub	10.0	Unspecified	Unspecified	
6	622 - Lowland Shrub	1.5	Unspecified	Unspecified	
8	122 - Road/Parking Lot	0.5	Unspecified	Unspecified	
9	622 - Lowland Shrub	15.0	Unspecified	Unspecified	
11	622 - Lowland Shrub	8.8	Unspecified	Unspecified	
12	310 - Herbaceous Openland	1.2	Unspecified	Unspecified	
16	310 - Herbaceous Openland	1.4	Unspecified	Unspecified	
22	310 - Herbaceous Openland	13.1	Unspecified	Unspecified	
23	623 - Emergent Wetland	2.4	Unspecified	Unspecified	
24	50 - Water	6.6	Unspecified	Unspecified	
26	330 - Low-Density Trees	3.0	Unspecified	Unspecified	
31	50 - Water	5.2	Unspecified	Unspecified	
32	310 - Herbaceous Openland	13.9	Unspecified	Unspecified	
33	310 - Herbaceous Openland	3.4	Unspecified	Unspecified	
34	310 - Herbaceous Openland	18.0	Unspecified	Unspecified	
38	310 - Herbaceous Openland	12.5	Unspecified	Unspecified	
40	310 - Herbaceous Openland	1.3	Unspecified	Unspecified	



General Comments:	Management Priority (Objective)	Managed Site	Acres	Cover Type	Stand
	Unspecified	Unspecified	21.9	310 - Herbaceous Openland	47
	Unspecified	Unspecified	1.6	622 - Lowland Shrub	49
	Unspecified	Unspecified	2.8	310 - Herbaceous Openland	50
	Unspecified	Unspecified	1.8	330 - Low-Density Trees	67
	Unspecified	Unspecified	27.6	330 - Low-Density Trees	69
	Unspecified	Unspecified	24.1	622 - Lowland Shrub	72
	Unspecified	Unspecified	1.4	622 - Lowland Shrub	75
	Unspecified	Unspecified	2.8	310 - Herbaceous Openland	76
	Unspecified	Unspecified	1.5	622 - Lowland Shrub	79
	Unspecified	Unspecified	1.0	310 - Herbaceous Openland	83
	Unspecified	Unspecified	4.0	50 - Water	84
	Unspecified	Unspecified	1.0	50 - Water	87
	Unspecified	Unspecified	3.0	50 - Water	90
	Unspecified	Unspecified	3.3	622 - Lowland Shrub	91
	Unspecified	Unspecified	15.2	310 - Herbaceous Openland	92
	Unspecified Unspecified Unspecified Unspecified Unspecified	Unspecified Unspecified Unspecified Unspecified Unspecified	1.0 4.0 1.0 3.0	310 - Herbaceous Openland 50 - Water 50 - Water 50 - Water 622 - Lowland Shrub	83 84 87 90 91