



COMPARTMENT REVIEW PRESENTATION

GAYLORD FOREST MANAGEMENT UNIT

COMPARTMENT: 48

ENTRY YEAR: 2013

ACREAGE: 1,967

COUNTY: Antrim

Revision Date: 05/20/2011

Stand Examiner: Ken Phillips

Legal Description: T31N-R05W, Sections 17, 20, 29, 32

Management 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: This compartment is dominated by the Jordan River watershed. The terrain that forms the river valley can be quite steep and will pose severe limits to equipment operability. The dominant upland soil type is the Kalkaska-Montcalm loamy sand complex. Tawas muck and Roscommon mucky sands are typically associated with the wetlands along the Jordan River.

Ownership Patterns, Development, and Land Use in and Around the Compartment: No private property in-holdings occur within the compartment. Numerous private parcels do adjoin exterior compartment boundaries on both the north and south ends of the compartment.

Unique, Natural Features: A recent search of the Michigan Natural Features Inventory database returned a notation indicating the possible presence of Red-Shouldered Hawk (*Buteo lineatus*). I located two active nests while conducting stand exams.

Archeological, Historical, and Cultural Features: A search of the Archeological Concerns database did not identify any recorded features.

Special Management Designations or Considerations: In 1972 the Jordan River became the first river in Michigan to be formally designated as a Wild-Scenic River under the State's Natural Rivers Act. In 1996 a large portion of the compartment was nominated for dedication as a Natural Area. That nomination is still pending but until such time that the application is formally evaluated and acted upon, the lands identified are to be managed in accordance with the statutory requirements of Act 451. A Department Directors Order is in place which governs specific recreational uses on State-owned land within this compartment lying south of M-32.

Watershed and Fisheries Considerations: In addition to the Natural Rivers designation, the Jordan River is also listed as a high quality designated trout stream. O'Brian's Pond is located in the northeast corner of section 20. This is a body of water that was formed due to the impoundment of Warner Creek by an old railroad grade. The level of this pond fluctuates widely depending on beaver activity. Shade, limiting sediment input, and woody debris recruitment are all crucial to maintaining high quality trout streams. Restricting cutting to outside of the appropriate buffers will help to maintain temperatures and the overall health of the watershed. Cutting appears to be away from these water bodies, and buffers are appropriate. As always, the appropriate BMP's should be applied when working in the proximity of surface water.

Wildlife Habitat Considerations: This compartment consists of a mix of upland hardwoods and a lowland complex associated with the Jordan River. The lowland area is used by a variety of species including waterfowl, amphibians, and various furbearers and songbirds. The upland area consists mainly of upland hardwoods with a small component of aspen that is utilized by white-tailed deer, grouse and woodcock. Stand 29 is a wildlife opening that is going to be treated to maintain it in this condition. Stands 7, 9, 13, 61, and 64 are upland hardwood stands that are going to be treated to provide structural diversity within the stand and the compartment.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of a mixture of coarse-textured glacial end moraine deposits (high ground) and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Ellsworth Shale. This shale is quarried for shale/clay elsewhere in the State. One gravel pit is located on the moraine deposits to the north in Section 7. All State lands located on the moraine deposits have excellent gravel potential. Oil and gas potential in the area is primarily for the Antrim Shale gas play. This is part of the Jordan Valley Management Area and development is allowed and Section 17 is leased and has had long horizontal wells drilled below it.

Vehicle Access: Access for the general public is restricted to the Jordan River Road. Four gated State Forest trail roads provide additional restricted access to Department staff for management purposes. There are no State Forest trail roads open to the public within this compartment.

Survey Needs: It is possible that survey work will be required in order to carry out the prescribed treatment for stand #13 in section 20.

Recreational Facilities and Opportunities: Portions of the Jordan River and Warner Creek hiking trails are located within this compartment. The nationally recognized North Country Trail (NCT) utilizes sections of these two pathways as it passes through the compartment. A designated snowmobile trail utilizes the seasonally maintained Jordan River Road.

Fire Protection: The limited existing road network and steep terrain features would combine to pose a substantial access problem to most off road areas within the compartment. Fortunately, this compartment is composed of generally low risk fuel types.

Additional Compartment Information:

- **The following 3 reports from the IFMAP Inventory System are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **Suggested potential and current SCA's**

Cover Type & Treatment Map

Compartment 048
 T31N, R05W, Sec. 17, 20, 29, 32
 County: Antrim
 Unit: Gaylord
 YOY: 2013
 Acres: 1,967 GIS Calculated
 Stand Examiner: Ken Phillips
 Map Revised: 5/25/2011
 Map Phase: Pre-Review

Stand # **23**
 Stacking Density
(4120) - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

17
 20
 29
 32

N

Legend

- Miris Corners
- Remonumented Section Corners
- Culverts
- Railroads
- Highway
- County Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Closed Roads
- US Highway
- State Highway
- Bike Trail
- Horse Trail
- Hiking Trail
- Ski Trail
- Motorcycle (DNR Sticker)
- Motorcycle (SOS License)
- ORV Trail
- ORV Route
- Snowmobile Trail
- MCCCT Trail
- Lakes and Rivers
- Intermittent Stream/Drain
- Stream

Treatments

- Selection (Group, Single Tree)
- Other Treatment - See Comments

Forest Stands

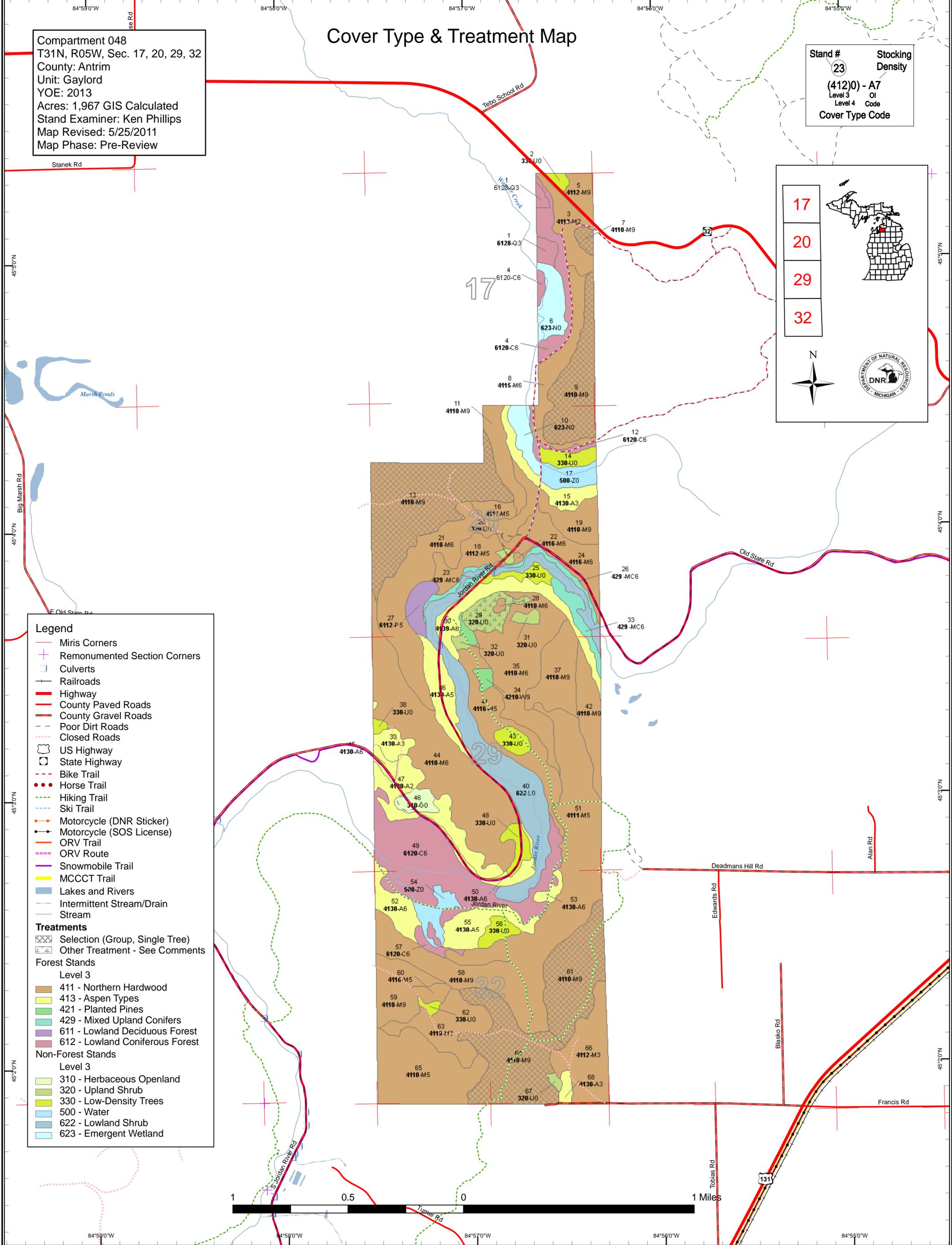
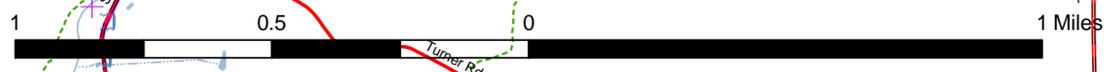
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 421 - Planted Pines
- 429 - Mixed Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



Dedicated & Proposed Special Conservation Area Map

Compartment 048
 T31N, R05W, Sec. 17, 20, 29, 32
 County: Antrim
 Unit: Gaylord
 YOE: 2013
 Acres: 1,967 GIS Calculated
 Stand Examiner: Ken Phillips
 Map Revised: 5/25/2011
 Map Phase: Pre-Review

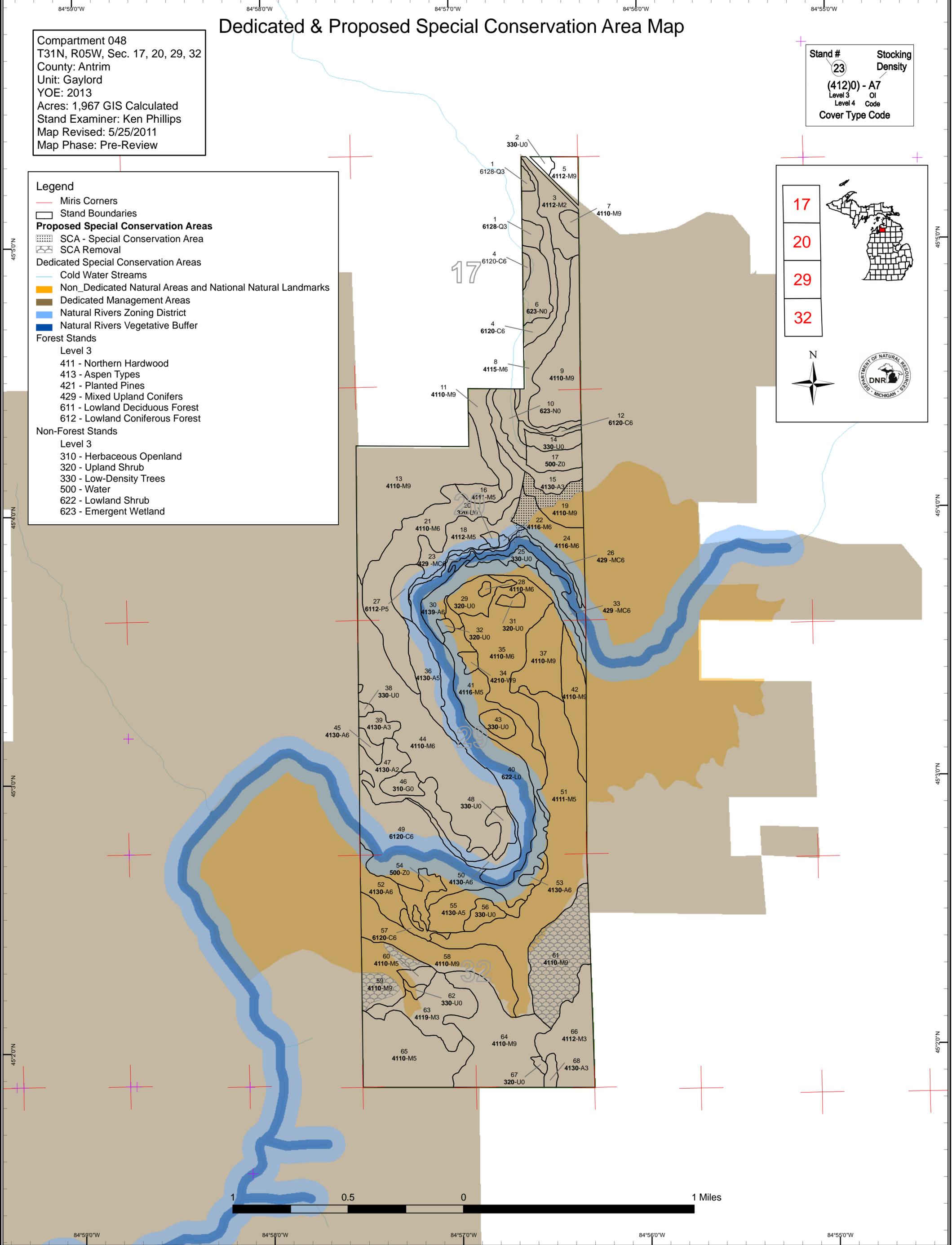
Stand #
 (23)
 Stacking
 Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

Legend

- Miris Corners
- Stand Boundaries
- Proposed Special Conservation Areas**
 - SCA - Special Conservation Area
 - SCA Removal
- Dedicated Special Conservation Areas**
 - Cold Water Streams
 - Non-Dedicated Natural Areas and National Natural Landmarks
 - Dedicated Management Areas
 - Natural Rivers Zoning District
 - Natural Rivers Vegetative Buffer
- Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 421 - Planted Pines
 - 429 - Mixed Upland Conifers
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
 - Level 3
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

17
 20
 29
 32

N



84°59'0"W 84°58'0"W 84°57'0"W 84°56'0"W 84°55'0"W

84°59'0"W 84°58'0"W 84°57'0"W 84°56'0"W 84°55'0"W

45°50'0"N
 45°40'0"N
 45°30'0"N
 45°20'0"N

45°50'0"N
 45°40'0"N
 45°30'0"N
 45°20'0"N



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneren Age
Aspen	0	38	0	35	0	0	0	0	30	97	0	0	0	0	0	200
Cedar	0	0	0	0	0	0	0	0	0	32	114	0	0	0	0	146
Herbaceous Openland	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Low-Density Trees	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
Lowland Conifers	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
Lowland Shrub	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
Marsh	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Northern Hardwood	0	0	0	90	0	23	0	0	141	308	174	326	262	0	0	1325
Upland Conifers	0	0	0	0	0	0	0	0	22	0	0	2	0	0	0	24
Upland Shrub	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Water	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
White Pine	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Total	246	38	0	125	9	29	0	0	205	438	288	328	262	0	0	1967



Table 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2013

Compartment 048
Total Compartment Acres: 1967

Acres by Treatment Type

Commercial Harvest - 321	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 16	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Northern Hardwood	0	321	0	0	0	0	0	321
Total	0	321	0	0	0	0	0	321



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
7	52048007-Cut	4.6	4110 - Sugar Maple Association	High Density Log	95	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Release crop trees by selectively marking down to 80-90 square feet of residual basal area. Due to the presence of beech bark disease in this</p> <p><u>Specs:</u> compartment, I would recommend removing all but the very smooth barked beech stems. Occasional hemlock exist throughout the stand and these should be left.</p> <p><u>Other</u> --Kendal Phillips : 05/18/2011 comments:</p> <p><u>Comments:</u> For access and logistical reasons it would be best to mark this stand in 2015 in conjunction with the thinning of stand #31 in compartment #47 adjacent to the east. The proposed start date for work has been set to 10/01/2014 to reflect this out of year of entry work.</p> <p><u>Next</u> The goal is to release crops trees within the residual stand while also opening up the canopy to promote natural northern hardwood regeneration.</p> <p><u>Steps:</u></p>									
9	52048009-Cut	54.7	4110 - Sugar Maple Association	High Density Log	95	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Release crop trees by selectively marking down to 80-90 square feet of residual basal area. Due to the presence of beech bark disease in this</p> <p><u>Specs:</u> compartment, I would recommend removing all but the very smooth barked beech stems.</p> <p><u>Other</u> For access and logistical reasons it would be best to mark this stand in 2015 in conjunction with the thinning of stands #31 and #40 in</p> <p><u>Comments:</u> compartment #47 adjacent to the east. The start up date has been changed to 10/01/2014 to reflect this out of entry year work.</p> <p><u>Next</u> The goal is to release crops trees within the residual stand while also opening up the canopy to promote natural northern hardwood regeneration.</p> <p><u>Steps:</u></p>									
13	52048013-Cut	115.0	4110 - Sugar Maple Association	High Density Log	110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Release crop trees by selectively marking down to 80-90 square feet of residual basal area. Due to the presence of beech bark disease in this</p> <p><u>Specs:</u> compartment, I would recommend removing all but the very smooth barked beech stems.</p> <p><u>Other</u> Existing access is available but some road improvements will be required. A survey may be required to identify the private property lines on the</p> <p><u>Comments:</u> north side of the stand.</p> <p><u>Next</u> The goal is to release crops trees within the residual stand while also opening up the canopy to promote natural northern hardwood regeneration.</p> <p><u>Steps:</u></p>									
61	52048061-Cut	63.9	4110 - Sugar Maple Association	High Density Log	100	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Release crop trees by selectively marking down to 80-90 square feet of residual basal area. Remove basswood clumps when possible.</p> <p><u>Specs:</u></p> <p><u>Other</u> We may want to consider a winter only harvesting specification due to the presence of the North County Pathway/Jordan River Trail. A small</p> <p><u>Comments:</u> semi-open area along the border of the farm field will not need to be marked.</p> <p><u>Next</u> The goal is to release crops trees within the residual stand while also opening up the canopy to promote natural northern hardwood regeneration.</p> <p><u>Steps:</u></p>									
64	52048064-Cut	82.6	4110 - Sugar Maple Association	High Density Log	90	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Release crop trees by selectively marking down to 80-90 square feet of residual basal area. Remove basswood clumps when possible. Due to</p> <p><u>Specs:</u> the presence of beech bark disease in this compartment, I would recommend removing all but the very smooth barked beech stems.</p> <p><u>Other</u> We may want to consider a winter only harvesting specification due to the presence of the North County Pathway/Jordan River Trail.</p> <p><u>Comments:</u></p> <p><u>Next</u> The goal is to release crops trees within the residual stand while also opening up the canopy to promote natural northern hardwood regeneration.</p> <p><u>Steps:</u></p>									

**Table 3 -- Treatments Prescribed
with No Limiting Factor**



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	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
29	NF_52048029- NonFor	16.5	Non-Forested		0	Non-Forest Management	Other - Specify	3205 - Mixed Upland Shrub	Cmpt. Review Proposal

Prescription: Opening Maintenance
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 337.2**

Table 4 -- Treatments Prescribed with a Limiting Factor



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: 0

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6128 - Lowland Coniferous, Mixed Deciduous	High Density Sapling	8.5	35		A multi-poly stand of two separate area of dense conifer regen that may have developed following a blowdown event. The regen is 15-20 feet tall and includes a lot of cedar.
3	4112 - Maple, Beech, Cherry Association	Medium Density	22.8	40	1-50	Based on land record cards this stand was presumably cut in 1971. The basal area recorded was primarily in residual pole sized trees. The regeneration in my mind is definitely the dominant feature. There are some semi-open areas scattered throughout the stand. Much of the regen is over 40 feet tall. White pine while not a dominant species is very apparent in this stand.
4	6120 - Lowland Cedar	High Density Pole	26.3	85	141-170	This stand transitions from uplands to the east to the low ground along Warner Creek to the west. Red maple is fairly common along the eastern edge. This is a multi-poly stand that also includes a small area on the west side of Warner Creek.
5	4112 - Maple, Beech, Cherry Association	High Density Log	11.0	95	51-80	This stand was heavily thinned in the past resulting in a fairly open stand of large diameter trees with a very well developed understory. In general the quality of this stand is low with red maple making up a significant component of the stand.
7	4110 - Sugar Maple Association	High Density Log	4.6	95	111-140	This stand was thinned in 1987 along with the stand in the adjacent compartment to the east. It is a nice quality stand growing on fairly flat terrain.
8	4115 - Y.Birch, Hemlock NH	High Density Pole	32.2	70	111-140	The majority of this stand lies on a steep west facing side hill. The red maple and yellow birch really distinguish this stand from those adjacent. There is also quite a heavy fir understory throughout this stand.
9	4110 - Sugar Maple Association	High Density Log	54.7	95	111-140	This stand lies on fairly flat terrain and extends eastward into the adjacent compartment. It does not appear that it has ever been thinned in the past.
11	4110 - Sugar Maple Association	High Density Log	21.2	90	81-110	This stand lies on a steep east facing side hill. Diameters in this stand are much larger than in any adjacent stands but the quality overall is still pretty low.
12	6120 - Lowland Cedar	High Density Pole	5.7	85	141-170	A narrow multi-poly stand lying at the base of a steep slope. The edge closest to the wetlands is quite wet with a lot of tag alder. The edge near the base of the slope is drier with more red maple mixed in. I used the same data as for the larger swamp conifer stand just to the north.
13	4110 - Sugar Maple Association	High Density Log	115.0	110	111-140	This stand was sold during the last Y.O.E. but was never cut. The stand quality is very nice with many single stemmed crop trees. The stand lies on top of a ridge on flat terrain so it is certainly operable. The biggest drawback is the low stocking level.
15	4130 - Aspen	High Density Sapling	20.2	27	1-50	This was harvested in 1984. The resulting regen is about 40-50 feet tall and is doing very well except for beaver damage along the lowland edges.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	4111 - S.Maple, Hard Mast Association	Medium Density Pole	8.1	100	51-80	This is a very low quality stand growing on an exposed south facing ridge top. Most of the timber is severely stunted.
18	4112 - Maple, Beech, Cherry Association	Medium Density Pole	30.5	70	51-80	This is a very poor quality stand of open grown hardwood. Due to the open character of the stand a well developed understory has developed. The stand occupies flat ground.
19	4110 - Sugar Maple Association	High Density Log	21.6	110	111-140	A similar stand to the sawlog sized stand further to the west. This is growing on a north facing slope. Quality of this stand is quite good.
21	4110 - Sugar Maple Association	High Density Pole	91.8	110	111-140	A stand of decent quality poletimber growing on a steep east facing side hill. Very little aspen in this stand as compared to the south facing slopes along the Jordan Valley Road further to the east.
22	4116 - Mixed N. Hardwood - Aspen	High Density Pole	1.9	80	81-110	An isolated stand of high density maple and aspen.
23	429 - Mixed Upland Conifers	High Density Pole	1.9	100	81-110	A meandering stand occupying an upland ridge along the river. This is a strange stand due to the fact that it also lies on several old railroad grades that tend to give it an unnatural appearance. Some very large white pine are in this stand.
24	4116 - Mixed N. Hardwood - Aspen	High Density Pole	32.9	80	81-110	Stand occupies a south facing slope and the flat ground adjacent to the Jordan River Road. Aspen is very apparent in this stand. Some of the very steep slopes are only sparsely stocked.
26	429 - Mixed Upland Conifers	High Density Pole	10.2	70	81-110	A narrow meandering stand on upland soils but bordering the lowlands adjacent to the river. This is a very variable stand but due to the narrowness of the stand it could not be further subdivided due to the mapping standards. Most areas are heaviest to fir but some areas have a lot of white pine. There has been lots of recent windthrow in this stand.
27	6112 - Lowland Aspen	Medium Density Pole	11.9	70	51-80	This is definitely a wet stand for a large part of the year. Lots of cradled knolls throughout the stand. There is also a very heavy lowland shrub understory. This stand is isolated from the lowlands along the river by a slight narrow ridge of uplands.
28	4110 - Sugar Maple Association	High Density Pole	1.5	80	81-110	This is an island of hardwood within a wildlife opening.
30	4139 - Aspen, Mixed Deciduous	High Density Pole	35.1	80	51-80	This stand is very similar to the stand to the west on the other side of the river. This stand is on an upland site that appears to have a slightly higher water table. There is a very diverse understory.
33	429 - Mixed Upland Conifers	High Density Pole	11.5	70	81-110	A narrow stand along the river that is predominately upland although there are occasional pockets of low ground included.
34	42101 - Planted White Pine, Mixed Deciduous	High Density Log	6.6	40	111-140	This is a multi-poly stand of planted white pine. Apparently a Boy Scout troop planted this in 1971. Growth rates are very impressive since most stems are 10 inches in DBH.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	4110 - Sugar Maple Association	High Density Pole	77.5	80	81-110	This is a very low quality stand dominated by small diameter basswood clumps. Stand lies on flat terrain. The understory is fairly dense and well developed.
36	4130 - Aspen	Medium Density Pole	26.1	80	1-50	An over-mature stand of aspen on a seasonally wet site. Lots of mortality which is why the basal area is so low. There is a very heavy and complex understory that most likely holds a lot of birds. A few big white pine are scattered throughout. I have also included a couple of small patches of low quality northern hardwood within this stand that were too small for mapping standards.
37	4110 - Sugar Maple Association	High Density Log	36.4	100	141-170	Stand of fairly nice quality hardwood on slightly rolling terrain. This is a lot nicer than the stand adjacent to the west. Stand has a light understory.
39	4130 - Aspen	High Density Sapling	10.5	28	1-50	This is a multi-poly stand of aspen regen. which resulted from a 1983 harvest. Portions of both units of this stand extend west into the adjacent compartment.
41	4116 - Mixed N. Hardwood - Aspen	Medium Density Pole	47.8	80	51-80	This is a highly variable, generally low quality stand growing on a dry upland site. Aspen is more prevalent closer to the river while open grown hardwoods dominate on the higher ground. The aspen is over-mature and are slowly being eliminated by beaver activity. There is a very complex and heavy understory throughout the stand.
42	4110 - Sugar Maple Association	High Density Log	27.2	105	111-140	This stand lies on a steep east facing side hill. There are very large diameter trees in this stand. Often they are old and of poor form. I found two active RSH nests in this stand.
44	4110 - Sugar Maple Association	High Density Pole	133.6	105	81-110	This is a low quality stand with a heavy percentage of basswood clumps. The stand occupies flat terrain for the most part but a narrow east facing slope was also included near the Jordan Valley Road. The stand has a well developed understory.
45	4130 - Aspen	High Density Pole	5.2	80	51-80	An over-mature stand of aspen that was presumably left for aesthetic reasons when the adjacent timber was cut. There is a very thick and well developed understory.
47	4130 - Aspen	Medium Density	37.5	6		Stand was cut in 2004-2005. For the most part this is poor quality regeneration. Large patches of primarily blackberry and raspberry occur throughout the stand. Most of the aspen regen is less than 10 feet tall. Widely scattered hardwood residual was left throughout in addition to all elm, white pine and upland shrubs.
49	6120 - Lowland Cedar	High Density Pole	107.4	90	141-170	Overall this is a mixed swamp conifer stand that is quite wet. Cedar dominates especially near the river and seeps. Black spruce is more prevalent on the better drained areas of the stand. Some portions of the stand are intermixed with patches of open marsh.
50	4130 - Aspen	High Density Pole	12.5	80	81-110	An over-mature stand of aspen which again was apparently left as a visual buffer when the adjacent stand was cut. Portions of the stand nearest the river are experiencing beaver damage.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
51	4111 - S.Maple, Hard Mast Association	Medium Density Pole	146.8	85	51-80	The stand occupies a steep west facing side hill below Deadman's Hill overlook. Some of the steepest, most exposed slopes are sparsely stocked. Lower slopes tend to be better quality. There is a well developed understory.
52	4130 - Aspen	High Density Pole	18.6	80	51-80	This is a dry stand at the base of a steep slope. It also lies adjacent to an area of lowlands and has suffered past beaver damage along the wetland edges. The aspen component is over-mature and falling apart. The understory is well developed and is slowly replacing the stand as the aspen continues to die out.
53	4130 - Aspen	High Density Pole	5.0	75	51-80	Stand of over-mature aspen that lies on the lower slopes and bottomlands along an area of cedar springs.
55	4130 - Aspen	Medium Density Pole	24.9	75	51-80	This stand apparently has a high water table as there is a seep that begins within the stand which eventually forms a small tributary to the Jordan. Where this tributary intersects with the hiking trail a small 1/2 acre stand of Phragmites has developed in a partially flooded portion of the stand. It is unknown at this time if the Phragmites is native or invasive. The timber in the stand is often sparse with lowland conifer species occurring frequently throughout the stand. Several large white pine are also in the stand.
57	6120 - Lowland Cedar	High Density Pole	6.6	90	141-170	This is a small isolated stand of swamp conifers growing at the base of a very steep side hill. Numerous springs seep out of this stand forming a tributary to the Jordan River. I used the same data as for the large swamp stand to the north.
58	4110 - Sugar Maple Association	High Density Log	57.0	100	81-110	This stand lies on a steep north facing side hill. This is nice quality hardwood with light understory. Beech bark disease is in this stand.
59	4110 - Sugar Maple Association	High Density Log	33.5	110	81-110	This stand lies on flat ground at the top of a steep slope that drops off to the north. It is much better quality than the stand further to the south. There is a well developed understory throughout this stand.
60	4110 - Sugar Maple Association	Medium Density Pole	6.3	70	51-80	This is a low quality open grown hardwood stand with a well developed understory. It is growing on fairly flat terrain.
61	4110 - Sugar Maple Association	High Density Log	63.9	100	111-140	This is a nice quality stand growing on flat terrain. Basswood is still multiple stemmed but sugar maple is largely single stemmed. A small semi-open area lies adjacent to the farm field in the far northern portion of the stand. This area was too small to delineate out as a separate stand.
63	4119 - Mixed Northern Hardwoods	High Density Sapling	41.1	27	1-50	This stand was cut in 1984. The parent stand did have some aspen in it and it has regenerated in isolated portions of the stand. Northern hardwood regen is still dominant though. Aspen is far out distancing the hardwood regen both in height and diameter growth.

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Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 048

Year of Entry: 2013



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	4110 - Sugar Maple Association	High Density Log	82.6	90	111-140	This is a moderate quality hardwood stand. It is much nicer than the stand to the west but not as nice as the stand to the northeast. This stand still has a lot of multiple stemmed clumps in it.
65	4110 - Sugar Maple Association	Medium Density Pole	72.4	70	51-80	This is a very poor quality stand on rolling terrain. Many of the south facing slopes are sparsely stocked with stunted timber. There is a fairly well developed understory so possibly over time this stand will develop on it's own.
66	4112 - Maple, Beech, Cherry Association	High Density Sapling	48.8	27		This northern hardwood stand was final harvested in 1984. The resulting regen is very heavy to cherry with very little aspen anywhere in the stand. The south end of the stand is poorer quality. Some jack pine have been planted along the road in an effort to control vehicle access to the interior road system. Only a couple of residual trees were left in the sale area.
68	4130 - Aspen	High Density Sapling	4.4	27	1-50	This stand was part of a 1984 timber sale that also included the adjacent stand of hardwood regen. This must have been the only clone of aspen within the parent stand. The regen here is over 50 feet tall and some individual stems are reaching merchantable size.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	3301 - Low Density Deciduous Tree	2.9	No	Unspecified	A semi-open stand of cherry and open grown hardwoods.
6	6233 - Wet Meadow	19.8	No	Unspecified	For the most part this is an open stand of marsh grass species. Immediately adjacent to Warner Creek, however, some stunted cedar do occur. I saw two Sandhill Cranes in this stand.
10	6233 - Wet Meadow	13.1	No	Unspecified	A stand of lowland grass species growing along Warner Creek. Beavers are starting to impound stretches of the creek so some areas are currently flooded.
14	3302 - Low Density Conifer Trees	10.1	No	Unspecified	Most of this stand is dead standing cedar that was flooded by beaver activity. Only a few live trees are left.
17	50 - Water	14.0	No	Unspecified	O'Brian's Pond. The water level is especially high due to recent beaver activity.
20	3205 - Mixed Upland Shrub	2.3	No	Unspecified	This is quite an open stand. There are a few open grown hardwoods and quite a few apple trees.
25	3303 - Mixed Low Density Trees	7.9	No	Unspecified	This stand occupies uplands but it is immediately adjacent to the lowland brush stand near the Jordan River. There is a wide mix of species but the overall stocking level is still quite sparse.
29	3205 - Mixed Upland Shrub	16.5	Yes	Low (NonForested)	This is a managed wildlife opening. Notes indicate that Siberian Crab were planted here in 1971 but I suspect other species may have been planted over the years as well. Windrows still exist from when the opening was created.
31	3205 - Mixed Upland Shrub	3.6	Yes	Low (NonForested)	This is a managed wildlife opening. Notes indicate that Siberian Crab were planted here in 1971 but I suspect other species may have been planted over the years as well.
32	3205 - Mixed Upland Shrub	2.3	Yes	Low (NonForested)	I believe that this is a wildlife opening. There is a lot of Siberian Crab in it along with some cherry.
38	3301 - Low Density Deciduous Tree	2.0	No	Unspecified	A lightly stocked stand of large diameter open grown hardwoods. The majority of this stand lies in the adjacent compartment to the west.
40	6229 - Mixed lowland shrub	97.6	No	Unspecified	This stand straddles both sides of the Jordan River for a considerable distance. Various lowland shrub species are represented. Some areas of open marshland also were found.
43	3301 - Low Density Deciduous Tree	8.6	No	Unspecified	Primarily scattered cherry with some open grown hardwoods. This appears to be a low quality, dry site.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
46	3105 - Mixed Upland Herbaceous	9.4	No	Unspecified	This stand was included in the harvest of the surrounding aspen stand. This was already a poorly stocked stand before the harvest and it has not really regenerated except for a few isolated clones of aspen that are coming back. Lots of black berry.
48	3301 - Low Density Deciduous Tree	9.4	No	Unspecified	A semi-open stand. Open grown hardwoods are found toward the west but cherry dominate along the road.
54	50 - Water	13.2	No	Unspecified	This is open water for the most part. Some areas of marsh though do exist as well. A tributary to the Jordan flows through this stand.
56	3301 - Low Density Deciduous Tree	8.9	No	Unspecified	This is a semi-open stand of low density open grown northern hardwoods. Actually the understory is beginning to fill in on it's own quite well.
62	3303 - Mixed Low Density Trees	2.5	No	Unspecified	This is a semi-open stand of open grown hardwood along with some white pine. Lots of blackberry and raspberry in this stand.
67	3205 - Mixed Upland Shrub	1.9	No	Unspecified	A very open stand of scattered cherry.



7 – 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.

Stand	SCA Type	SCA Name	Acres	Comments
19	Unique Site - SCA	52048019	21.6	Maintain SCA coding as this area was probably meant to be mapped as part of the nominated Natural Area for the Jordan Valley. It has the same cover type and topography as the nominated area and its exclusion from the current boundary is likely just a mapping error.
61	SCA Removal	52048061 - SCA Removal	63.9	It is proposed to remove the SCA designation for these areas. They were previously coded "Potential Old Growth" but fall outside of the nominated Natural Area for the Jordan Valley, and are otherwise managerailly desirable for treatment.



8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR.
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.
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.