



COMPARTMENT REVIEW PRESENTATION

GAYLORD FOREST MANAGEMENT UNIT

COMPARTMENT: 1

ENTRY YEAR: 2014

ACREAGE: 1246

COUNTY: Otsego

Revision Date: 04/24/2012

Stand Examiner: Kimberly Lentz

Legal Description: T29N, R01W, Sec. 3, 10

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: The soil type is Graycalm Sand and Roselawn Sand. Terrain is level to gently rolling.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Private on the west and east sides of compartment broken into 10 acre parcels. Douglas Lake, Little Bear and Big Bear Lakes are developed with seasonal and year round cottages and homes. There is extensive Gas and Oil development throughout the compartment.

Unique, Natural Features:

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: This compartment is part of the Ausable Outwash Management Area Plan.

Watershed and Fisheries Considerations: Wetland complex in the southeast quarter of section 10. Little Bear Lake, Big Bear Lake, Duck Lake are to the east on private land. Douglas

Lake is adjacent to the west on private land. This compartment is to the west of Little Bear Lake. No treatments are scheduled near water bodies, so Fisheries has no concerns at this time.

Wildlife Habitat Considerations: This compartment consists mostly of upland areas containing oak, mixed aspen/oak, and red and jack pine. Harvests will concentrate on regenerating the oak for future mast production while leaving clumps and individual islands of oak for current mast production and as a seed source. This early successional habitat will benefit white-tailed deer, wild turkey, grouse, woodcock and various songbirds. This area receives significant hunting pressure for white-tailed deer, grouse, woodcock, and wild turkey.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. Glacial drift thickness varies between 600 and 800 feet. Local relief in the compartment is approximately 100 feet. The Mississippian Coldwater Shale sub crops below the glacial drift and does not have a current economic use. The nearest gravel pit is located one mile to the north and potential is uncertain. The compartment appears to be completely developed for Antrim Shale gas production and is on the southern edge of the Guelph (former Niagaran) reef trend.

Vehicle Access: Extensive buried gas pipelines which many have been replaced in 2011 in the west half of sections 3 & 10. The adjacent trail roads were graded and seeded.

Survey Needs: None needed at this time.

Recreational Facilities and Opportunities: North branch snowmobile trail traverses north on the west side of sections 3 & 10. Crapo Creek ORV Trail and Route traverses through compartment. There is also a Midland to Mackinaw Horse Trail which is designated from Old State Road through sections 10 & 3 which utilizes the pipeline roads.

Fire Protection: No foreseen problems.

Additional Compartment Information:

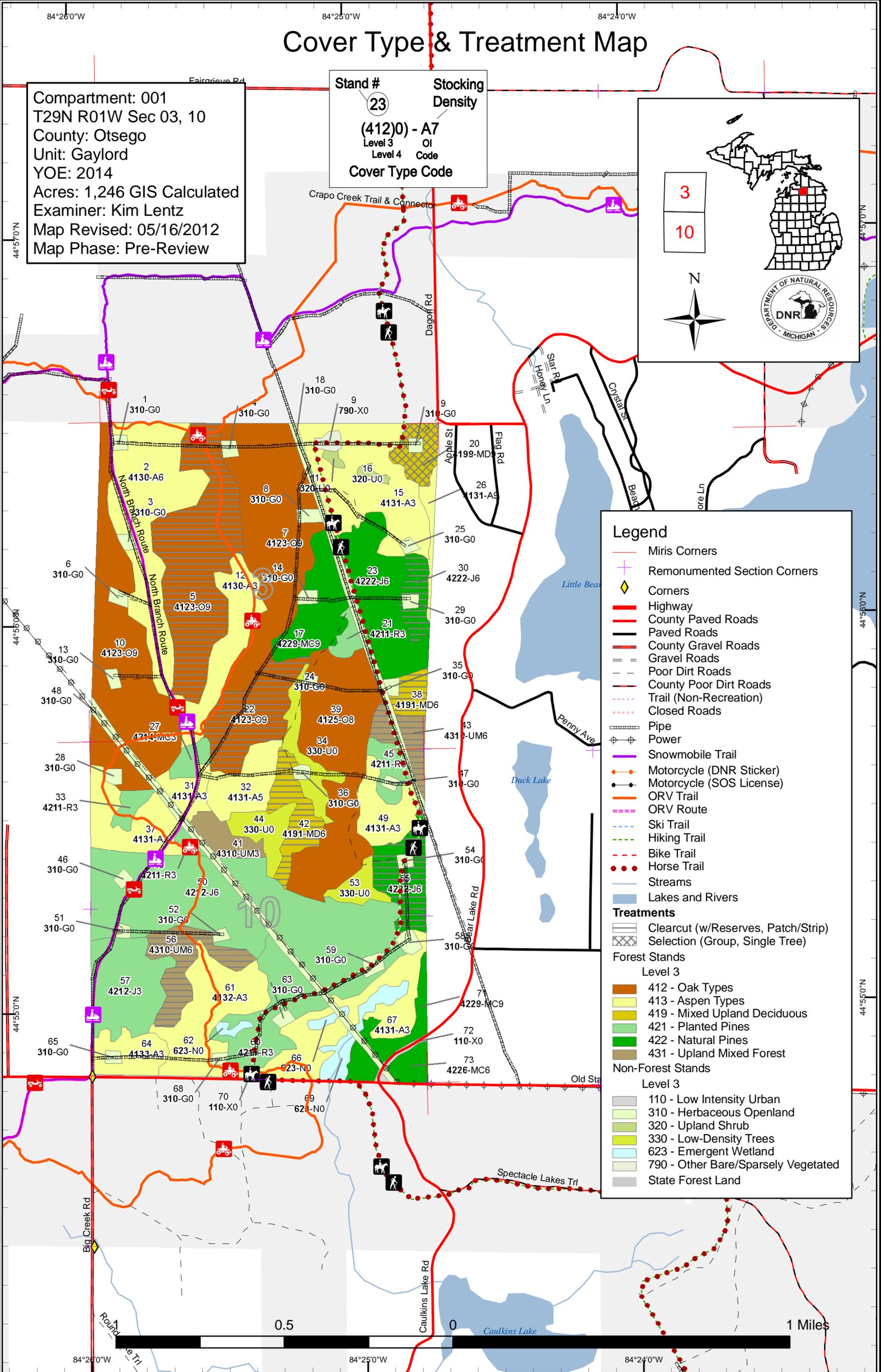
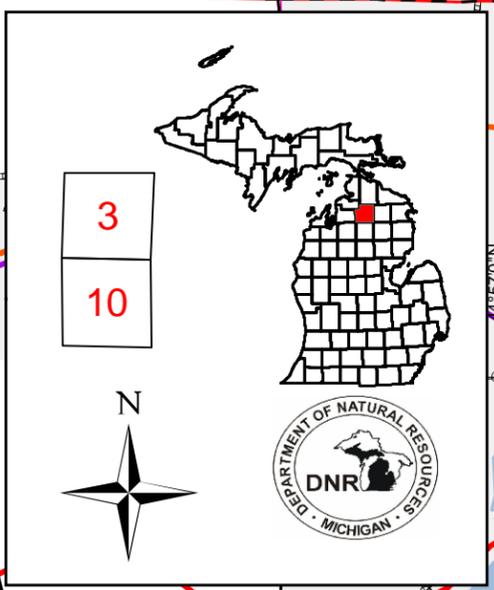
- **The following 3 reports from the IFMAP Inventory System are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **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: 001
 T29N R01W Sec 03, 10
 County: Otsego
 Unit: Gaylord
 YOE: 2014
 Acres: 1,246 GIS Calculated
 Examiner: Kim Lentz
 Map Revised: 05/16/2012
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- Remonumented Section Corners
- Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Pipe
- Power
- Snowmobile Trail
- Motorcycle (DNR Sticker)
- Motorcycle (SOS License)
- ORV Trail
- ORV Route
- Ski Trail
- Hiking Trail
- Bike Trail
- Horse Trail
- Streams
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Selection (Group, Single Tree)

Forest Stands

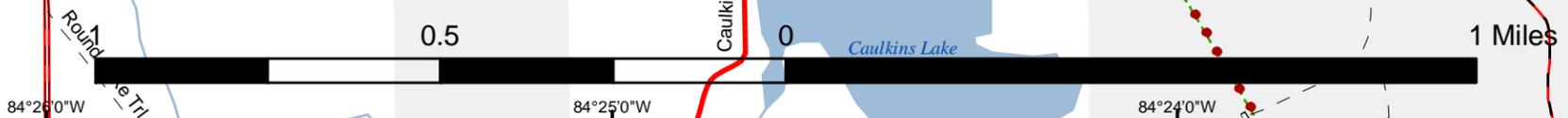
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest

Non-Forest Stands

Level 3

- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 623 - Emergent Wetland
- 790 - Other Bare/Sparsely Vegetated
- State Forest Land



Stand Boundary Map

Compartment: 001
 T29N R01W Sec 03, 10
 County: Otsego
 Unit: Gaylord
 YOE: 2014
 Acres: 1,246 GIS Calculated
 Examiner: Kim Lentz
 Map Revised: 05/16/2012
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Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

3
 10



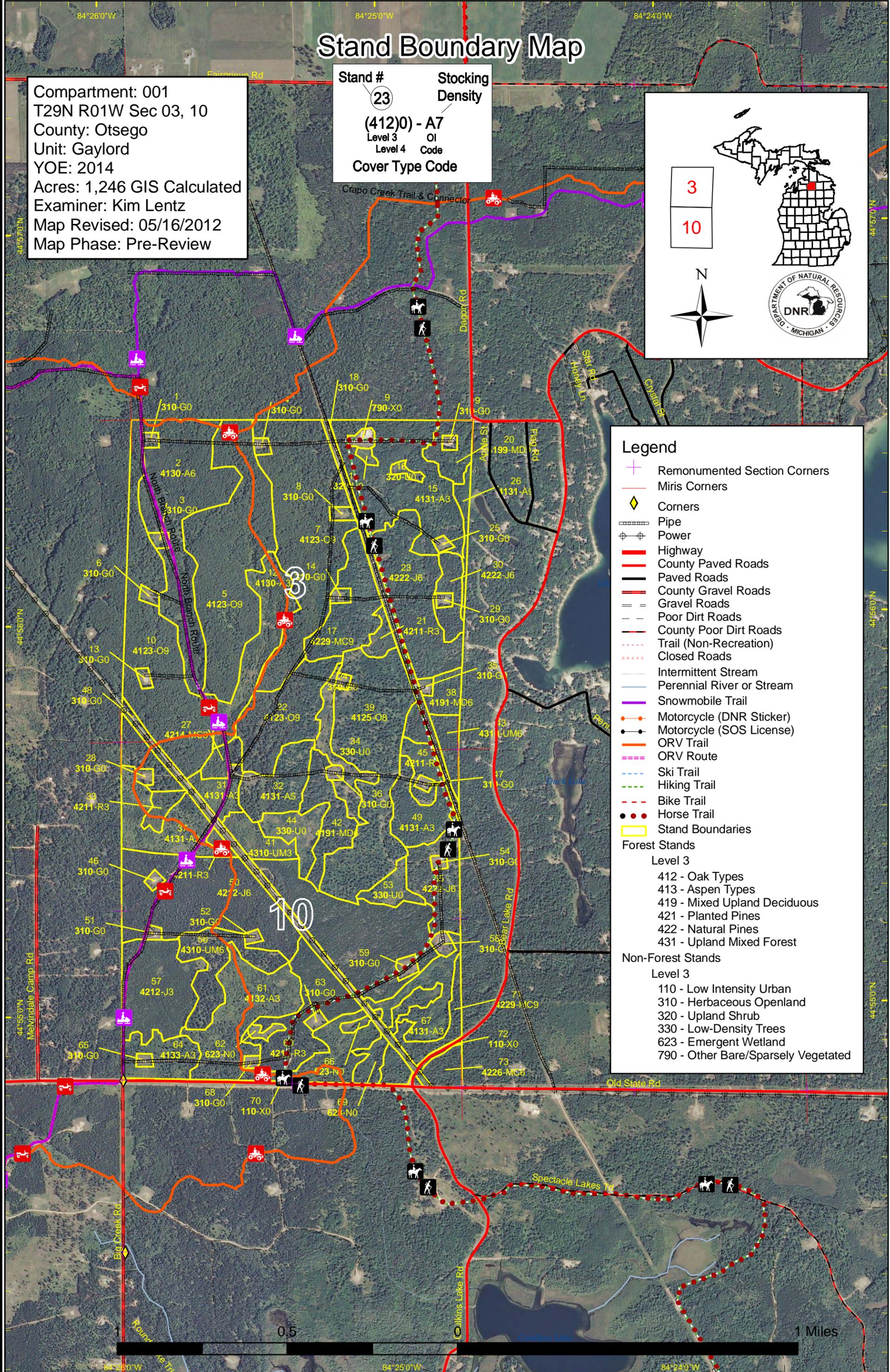
Legend

- Remonumented Section Corners
 - Miris Corners
 - Corners
 - Pipe
 - Power
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Closed Roads
 - Intermittent Stream
 - Perennial River or Stream
 - Snowmobile Trail
 - Motorcycle (DNR Sticker)
 - Motorcycle (SOS License)
 - ORV Trail
 - ORV Route
 - Ski Trail
 - Hiking Trail
 - Bike Trail
 - Horse Trail
 - Stand Boundaries
- Forest Stands**
- Level 3**
- 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
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- 110 - Low Intensity Urban
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10

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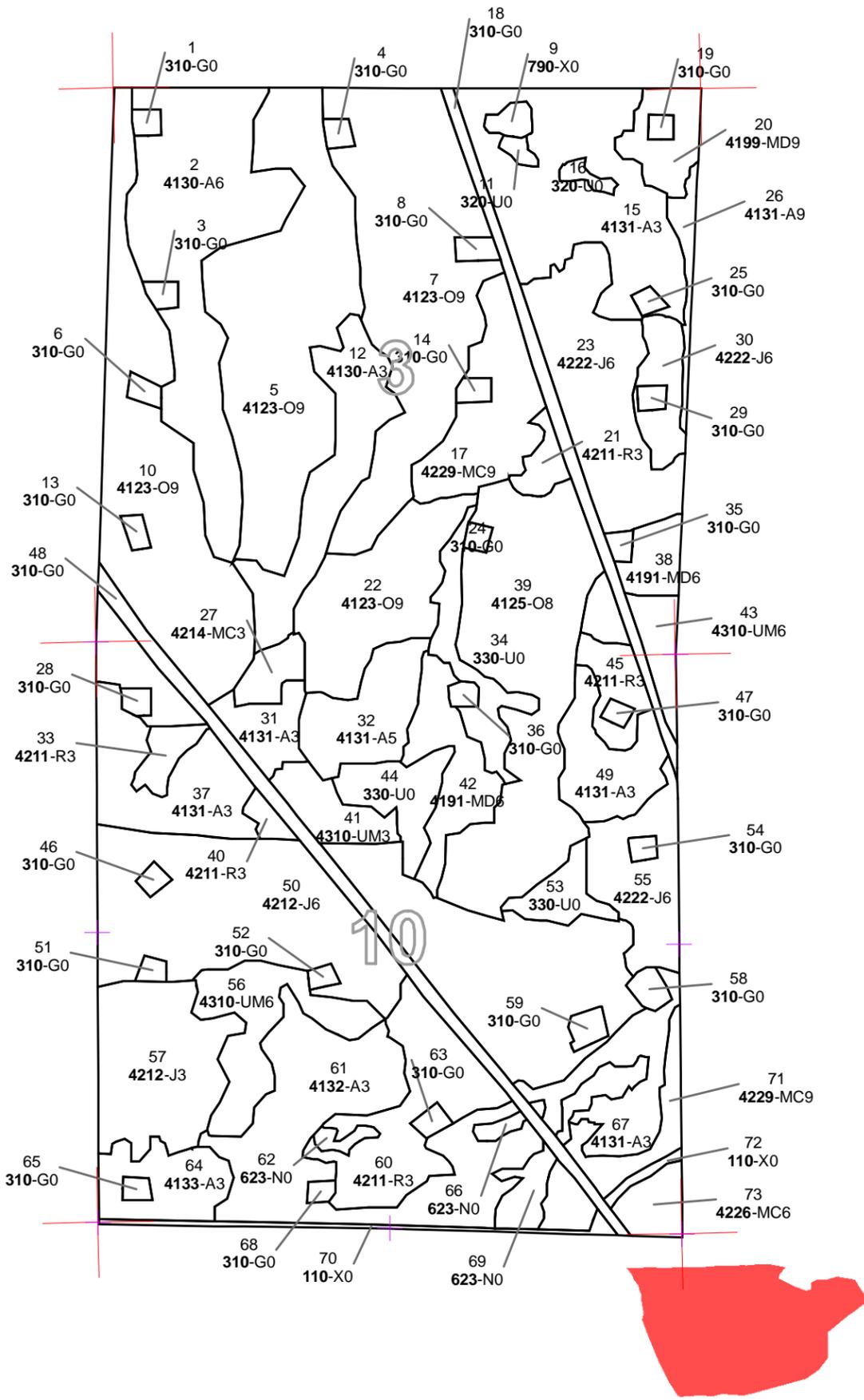
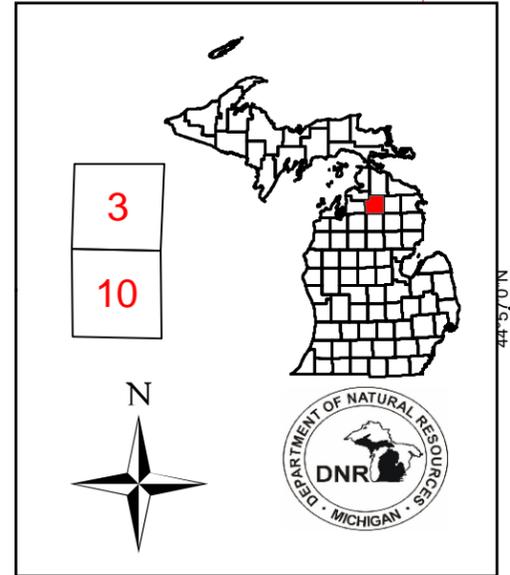
1 Miles



Dedicated & Proposed Special Conservation Area Map

Compartment: 001
 T29N R01W Sec 03, 10
 County: Otsego
 Unit: Gaylord
 YOE: 2014
 Acres: 1,246 GIS Calculated
 Examiner: Kim Lentz
 Map Revised: 05/16/2012
 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
- Dedicated Special Conservation Areas**
- Ecological Reference Areas
- Cold Water Streams
- Forest Stands**
- Level 3
 - 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
- Non-Forest Stands**
- Level 3
 - 110 - Low Intensity Urban
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 623 - Emergent Wetland
 - 790 - Other Bare/Sparsely Vegetated



Table 1 – Total Acres by Cover Type and Age Class

Kimberly Lentz : Examiner



	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 +		Uneren Age
Aspen	16	147	0	163	0	0	5	0	0	0	0	0	0	0	331
Bare/Sparsely Vegetated	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Herbaceous Openland	69	0	0	0	0	0	0	0	0	0	0	0	0	0	69
Jack Pine	0	37	0	129	0	22	0	10	0	0	0	0	0	42	241
Low-Density Trees	34	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Marsh	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	37	0	0	0	0	0	37
Natural Mixed Pines	0	0	0	0	0	7	0	0	15	0	0	0	0	27	49
Oak	0	0	0	0	0	0	0	0	280	0	0	0	0	76	356
Planted Mixed Pines	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Red Pine	0	21	32	0	0	0	0	0	0	0	0	0	0	0	53
Upland Mixed Forest	0	10	0	0	0	0	23	11	0	0	0	0	0	0	45
Upland Shrub	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Urban	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	144	221	32	292	0	29	28	22	332	0	0	0	0	145	1246



Table 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2014

Compartment 001
Total Compartment Acres: 1246

Acres by Treatment Type

Commercial Harvest - 221	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Jack Pine	32	0	0	0	0	0	32
Mixed Upland Deciduous	26	11	0	0	0	0	37
Oak	117	0	0	0	0	0	117
Upland Mixed Forest	35	0	0	0	0	0	35
Total	210	11	0	0	0	0	221



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
5	52001005-Cut	81.3	4123 - Red Oak	High Density Log	84	81-110	Harvest	Clearcut with Reserves	4124 - Red with White Oak	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest with reserves. Create some retention islands larger in size to meet the 3%-10% acreage requirement. Select areas with</p> <p><u>Specs:</u> an existing pine component & healthy red & white oak. In addition, the remaining area will have some reserves by marking to leave scattered clumps with Oak and old relic Red Pine. These multi-species clumps will have 3-6 trees per clump. The average total BA is 91 sq.ft./acre. Once the marking to leave effort is done, the residual should not exceed 20 sq.ft./acre maximum. The intention is to create small groupings of red oak, white oak, red pine, & white pine. This will create small ecosystem cover & seed clumps favorable for wildlife.</p> <p><u>Other</u> Tree length harvest this stand to encourage scarification of the soil. Brush out any existing unofficial ORV trails especially those found on</p> <p><u>Comments:</u> hillsides. Protect the designated ORV trail that is well established. Protect snowmobile trail also.</p> <p><u>Next</u> Monitor success of natural regeneration. Acceptable regeneration will include red oak, white oak, aspen, or any of the native pines in the mix.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2013</p>										
20	52001020-Cut	11.1	4199 - Other Mixed Upland Deciduous	High Density Log	83	81-110	Harvest	Single Tree Selection	4121 - Oak, Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Selection cut to mark out some of the northern pin oak logs & pulp & favor leaving the Red Oak for seed source. Leave minor component of</p> <p><u>Specs:</u> white pine. Selectively mark red maple instead of species thin to control stump sprout competition with oak regen. Cut all merchantable aspen which is predominantly on outside edges of oak stand. This stand consists of 100 sq.ft. BA/AC. The targeted residual BA is 60-70 sq.ft. BA/AC. The residual density may drop lower along perimeter where aspen is predominant. Keep in mind aesthetics while marking adjacent to houses & Bear Lake subdivision. The intent is to leave the aspen in adjacent stand 26 to protect the hillside and adjacent lake with private homes.</p> <p><u>Other</u> Note: The Midland to Mackinaw Horse Trail needs to be protected during logging. This stand could be combined with stand 22 to specify a</p> <p><u>Comments:</u> shortwood operation, but is not mandatory. The aspen component is predominant along the west boundary.</p> <p><u>Next</u> Monitor success of regeneration. Acceptable regeneration is a mix of oak, aspen, and conifers.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2013</p>										
22	52001022-Cut	35.6	4123 - Red Oak	High Density Log	88	81-110	Harvest	Clearcut with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest with reserves. Create some retention islands larger in size to meet the 3%-10% acreage requirement. Concentrate one of the</p> <p><u>Specs:</u> retention islands in the southwest corner of stand to protect existing wildlife shrubs. Select areas with an existing pine component and healthy red & white oak. In addition, the remaining area will have some reserve by marking to leave scattered clumps with oak & old relic Red & White Pine. These multi-species clumps will have 3-6 trees per clump, and the BA could be higher in the clumps. Once the marking to leave effort is done, the residual should not exceed 20sq.ft./acre maximum. Protect hawthorne & junberry. Shortwood operation is required & this stand could be included with stand 20 for logging. Goal is to compare regen success with tree length v.s. shortwood harvest.</p> <p><u>Other</u> Nice Red Oak stand which has never been treated previously. Jack pine is mature with some mortality noted. A few old relic red pine 22" dbh.</p> <p><u>Comments:</u> Total average density is: 100 sq.ft.BA/AC with some areas as low as 50sq.ft.BA/AC.</p> <p><u>Next</u> Monitor the success of regeneration. Acceptable regeneration includes a mix of oak, pine, and aspen.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2013</p>										
30	52001030-Cut	10.2	42220 - Natural Jack Pine	High Density Pole	76	51-80	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest with reserves. Harvest mature jack pine, northern pin oak, aspen, & red maple. Mark a one chain buffer with red paint along the</p> <p><u>Specs:</u> private east boundary in order to save some oak in that buffer. Leave minor component of white pine, red pine.</p> <p><u>Other</u> Natural jack pine stand with good quality stems up to 6 pulp sticks per tree. Almost pure stand of jack pine with some Red pine, White Pine, &</p> <p><u>Comments:</u> Oak on edges of stand. Unofficial ORV trails from private can have brush left on them.</p> <p><u>Next</u> Monitor success of regeneration. Desired species is primarily jack pine with an oak component on edges. In the event that the jack pine does</p> <p><u>Steps:</u> not regenerate naturally adequately, Trench & Plant Jack Pine.</p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2013</p>										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	52001038-Cut	7.4	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	82	81-110	Harvest	Clearcut with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest with reserves. Mark to leave scattered clumps with a combination of red oak, white oak, red pine, & white pine. These multi-species clumps will have 3-6 trees per clump. The BA may be higher in the clumps, but the overall targeted residual is 20sq.ft./ac. Keep in mind adjacent private subdivision when leaving oak clumps for aesthetics also. Protect hawthorne & junberry.</p> <p><u>Specs:</u></p> <p><u>Other</u> Oak - pine stand with more oak overall than adjacent stands. Lots of east-west trails from private leading into state utilized by ORV's.</p> <p><u>Comments:</u> These trails can be eliminated by leaving logging slash. Midland to Mackinaw Horse Trail is located on pipeline & should be posted during logging.</p> <p><u>Next Steps:</u> Monitor success of regeneration. Mix of oak, conifers, & aspen is acceptable.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
42	52001042-Cut	18.4	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	85	51-80	Harvest	Clearcut with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest with minimal retention. Reserves will be established by marking several scattered clumps of 3-6 Oak & Pine, leaving them in groupings. Favor leaving any red or white oak in those clumps. Protect hawthorne & junberry, and create a retention area in the north end of this stand where these species are prevalent. NOTE: Minimize soil disturbance in adjacent opening to east by keeping logging landings out of stand 34. Encourage natural jack pine regeneration during logging when skidding tops to disperse seed, and leave 1/3 to 1/6 of topwood.</p> <p><u>Specs:</u></p> <p><u>Other</u> Small narrow stand with mature northern pin oak, jack pine, & aspen. Stand will not hold without notable volume/value loss.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Monitor success of regeneration to determine if planting pine would be needed. Mix of jack pine, aspen, & oak is acceptable regen.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
43	52001043-Cut	11.5	4310 - Pine, Oak Mix	High Density Pole	70	1-50	Harvest	Clearcut with Reserves	42250 - Pine, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest with reserves. Cut jack pine, aspen, & pin oak. Protect advanced oak regen. Mark clumps to leave, selecting healthy oak, red pine, & white pine in groupings of a minimum of 3-6 trees per clump. BA may be higher in clumps, but overall targeted residual is about 15-20 sq.ft./ac. Leave some residual clumps adjacent to Bear lake subdivision private boundary. Protect hawthorne & junberry.</p> <p><u>Specs:</u></p> <p><u>Other</u> Portions of this stand was cut in 1975 leaving jack pine & oak seed trees. Jack pine seed trees are mature with some mortality. Variable density with an area in the southeast with lots of pin oak stump sprout regen. Noted hypoxylon canker on aspen 4-6" dbh. Post Midland to Mackinaw trail.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Monitor the success of regeneration. Long term objective: Mixed pine, aspen, & oak stand. Consider planting pine if needed.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
55	52001055-Cut	22.3	42220 - Natural Jack Pine	High Density Pole	55	51-80	Harvest	Clearcut with Reserves	4310 - Pine, Oak Mix	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest with reserves. Mark some old relic Red Pine to leave adjacent to pipeline and horse trail. Sign trail during logging. Protect junberry and hawthorne. Specify in contract that logging will be restricted to winter months unless approved by Unit Manager to protect the Midland to Mackinaw Trail use.</p> <p><u>Specs:</u></p> <p><u>Other</u> Moderately to well stocked jack pine with some semi-open gaps in stand especially in the north half. Minor component of overmature n. pin oak. Quaking aspen in northwest part of stand. Minor component of red pine old relic logs.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Monitor results of harvest. In the event that the stand does not have an acceptable mix of jack pine, oak, and aspen regeneration, the next step will be to trench & plant red pine.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56 52001056-Cut	23.2	4310 - Pine, Oak Mix	High Density Pole	65	1-50	Harvest	Clearcut with Reserves	4310 - Pine, Oak Mix	Cmpt. Review Proposal

Prescription: Final harvest with reserves. Cut all aspen, oak, & jack pine. Leave scattered red pine & white oak in clumps if possible which will satisfy retention. Protect juneberry & hawthorne. Protect ORV trail during logging.

Other Comments: Mix of mature jack pine, northern pin oak, & quaking aspen. Low to moderately stocked stand with some mortality evident. Minor component of Red pine logs.

Next Steps: Monitor success of regeneration which can be a mix of oak, aspen, & mixed pine. Consider planting red pine in areas heavy to pine if natural regen is not adequate.

Proposed Start Date: 10/01/2013

**Total Treatment
Acreage Proposed: 221.0**

**Table 4 -- Treatments Prescribed with
a Limiting Factor**



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

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Error

Limiting Factor and No
Treatment Reason

**Total Treatment
Acreage Proposed: 0**

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2014



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

Other
Comments:

Next
Steps:

Proposed
Start Date: #Error

**Total Treatment
Acreage Proposed: 0**

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Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 001

Year of Entry: 2014



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4130 - Aspen	High Density Pole	67.9	36	1-50	Quaking aspen - 36 years old which is not mature yet. Very narrow strip of aspen & pine mix along north edge of stand north of trail road.
5	4123 - Red Oak	High Density Log	81.3	84	81-110	Healthy Red Oak stand with some mature big tooth aspen, red maple, & minor component of red & white pine.
7	4123 - Red Oak	High Density Log	82.0	85	51-80	Select cut completed in 2011 which was a delayed harvest for ten years. Stand has slash suitable for fuelwood permits currently.
10	4123 - Red Oak	High Density Log	81.0	83	51-80	Oak log stand cut in 2011. A marked selection cut that took 10 yrs. to sell & cut it. Residual oak is healthy. Lots of oak seedlings on ground. Red maple is stump sprouting.
12	4130 - Aspen	High Density Sapling	29.5	16		Final harvest completed in 1996. Aspen regeneration is adequate. Some lowly stocked areas in frost pockets. Site index noted previously was 58 for aspen. Red pine planted along road to replace some old relic pine that were cut.
15	4131 - Aspen, Oak	High Density Sapling	56.7	37		Mixed stand with quaking aspen and n. pin oak regenerating from a harvest done in 1975. Previously typed out with A3 in the north & O3 in the southeast. Some scattered white pine, red pine, & jack pine.
17	42290 - Natural Mixed Pine	High Density Log	27.0	Uneven Age	81-110	Mixed white pine stand with an oak component. Native white pine being predominant & represented in all size classes. Red pine, & jack pine intermixed also.
20	4199 - Other Mixed Upland Deciduous	High Density Log	11.1	83	81-110	Mixed oak-aspen stand next to Bear Lake subdivision. Red Oak component mixed with northern pin oak. Variable density ranges from 60sq.ft - 150 sq.ft./acre.
21	42110 - Planted Red Pine	High Density Sapling	4.7	14		Red pine planted in 1998. Minor component of jack pine, white pine, & northern pin oak intermixed.
22	4123 - Red Oak	High Density Log	35.6	88	81-110	Nice Red Oak stand which has never been treated previously. Jack pine is mature with some mortality noted. A few old relic red pine 22" dbh. Density does vary in some areas with the lowest being 60sq.ft./ac.
23	42220 - Natural Jack Pine	High Density Pole	42.5	Uneven Age	1-50	Two aged stand with jack pine seed trees left in overstory & jack pine also established in the understory. North end of stand is moderately stocked mixed oak logs with white pine in the understory. Jack pine appears healthy. Stand was previously cut in 1975.
26	4131 - Aspen, Oak	High Density Log	5.1	68	81-110	Mixed aspen & oak stand adjacent to Bear lake subdivision. Aspen on hillside leads to a small pond with houses on it. BMP & visual concerns.

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Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 001
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Sapling	6.0	14		Red pine planted in 1998 to replace some of the native pine that was cut in an aspen final harvest. In addition, mix of pin oak, quaking aspen, & jack pine saplings in plantation.
30	42220 - Natural Jack Pine	High Density Pole	10.2	76	51-80	Natural jack pine stand with good quality stems up to 6 pulp sticks per tree. Almost pure stand of jack pine with some Red pine, White Pine, & Oak on edges of stand.
31	4131 - Aspen, Oak	High Density Sapling	9.4	16		Stand was final harvested in 1996. A few scattered oak left in overstory.
32	4131 - Aspen, Oak	Medium Density Pole	20.0	34	1-50	Younger stand with moderately stocked aspen & northern pin oak. Semi-open areas with big tooth aspen developing.
33	42110 - Planted Red Pine	High Density Sapling	5.1	14		Red pine planted in 1998. Pine appears healthy.
37	4131 - Aspen, Oak	High Density Sapling	26.4	16		Final harvested in 1996. A few scattered oak were marked to leave.
38	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	7.4	82	81-110	Oak - pine stand with more oak overall than adjacent stands. Lots of east-west trails from private leading into state utilized by ORV's.
39	4125 - Black, N. Pin Oak	Medium Density Log	75.7	Uneven Age	1-50	This stand was shelterwood cut in 1996. Oak seedlings that were previously on ground last inventory cycle are now 10-15' feet in height. Dense northern pin oak regeneration is both stump sprout & seed origin. Noted epicormic sprouting on overstory pin oak. Quaking aspen on stand edges.
40	42110 - Planted Red Pine	High Density Sapling	2.5	14		Planted red pine with some pin oak & quaking aspen intermixed.
41	4310 - Pine, Oak Mix	High Density Sapling	10.4	14		Red pine planted in 1998. Some aspen, jack pine, & oak saplings intermixed. Note: The south portion of this stand has some well established aspen established from a final harvest. The red pine was planted in area to restore some of the old relic red pine cut which caused some public complaint at that time.
42	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	18.4	85	51-80	Small narrow stand with mature northern pin oak, jack pine, & aspen. Stand will not hold without notable volume/value loss.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	4310 - Pine, Oak Mix	High Density Pole	11.5	70	1-50	Portions of this stand was cut in 1975 leaving jack pine & oak seed trees. Jack pine seed trees are mature with some mortality. Variable density with an area in the southeast with lots of pin oak stump sprout regen. Noted hypoxylon canker on aspen 4-6" dbh.
45	42110 - Planted Red Pine	High Density Sapling	8.7	14		Previously a small jack pine stand which was final harvested in 1996. Planted with red pine in 1998 - approximately 8 acres. Red pine 15' tall. Looks good, healthy.
49	4131 - Aspen, Oak	High Density Sapling	18.1	36		Stand was cut 36 years ago. Clones of aspen well established & stump sprout oak. 4-5" dbh with featured stand in sapling size class. Jack pine component in northwest end of stand by gas well.
50	42120 - Planted Jack Pine	High Density Pole	129.5	32	51-80	Jack pine planted in 1979. Overall non-merchantable with some 1 stick pine developing. (4"-6"dbh)
55	42220 - Natural Jack Pine	High Density Pole	22.3	55	51-80	Moderately to well stocked jack pine with some semi-open gaps in stand especially in the north half. Mature northern pin oak is defective. Quaking aspen in northwest part of stand. Minor component of red pine old relic logs.
56	4310 - Pine, Oak Mix	High Density Pole	23.2	65	1-50	Mix of mature jack pine, northern pin oak, & quaking aspen. Low to moderately stocked stand with some mortality evident. Minor component of Red pine logs.
57	42120 - Planted Jack Pine	High Density Sapling	36.7	17		Previous stand was final harvested, then planted with jack pine in 1995. Plantation looks healthy. No merchantable stems at this time.
60	42110 - Planted Red Pine	High Density Sapling	32.3	28	1-50	Red pine planted in 1984. Immature plantation which is primarily sapling size with some 1 pulp stick trees developing. Some old red pine relics left in stand.
61	4132 - Aspen, Jack Pine	High Density Sapling	62.2	18		Aspen was final harvested in 1994. Young stand regenerating with quaking aspen, pin oak, & jack pine. More of a white pine component in south half of stand. Small pothole wetland bogs within this stand.
64	4133 - Aspen, Mixed Pine	High Density Sapling	15.7	6	1-50	This stand was cut in 2006. Aspen is regenerating well with the primary stand being an A3 with a white pine comonent left in the east end of stand.
67	4131 - Aspen, Oak	High Density Sapling	19.7	18		Stand was final harvested in 1994. Quaking aspen primarily adjacent to a wetland bog drainage. Frost pocket in a portion of this stand. Northern pin oak predominant on hillsides. Quaking aspen looks good 25-30' height.
71	42290 - Natural Mixed Pine	High Density Log	14.8	82	51-80	Native mixed pine stand with white pine being predominant. Leave & favor for winter cover & for aesthetics adjacent to Bear Lake Road. Some wetland influence to north of stand.

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Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 001
Year of Entry: 2014



S t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
73	42260 - Natural Pine, Mixed Deciduous	High Density Pole	7.2	58	51-80	Mixed pine stand with jack pine being predominant. Aspen, oak, and scattered white pine intermixed.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3102 - Grass	1.4	No	Unspecified	
3	3102 - Grass	1.5	No	Unspecified	
4	3102 - Grass	1.5	No	Unspecified	
6	3102 - Grass	1.5	No	Unspecified	
8	3102 - Grass	1.8	No	Unspecified	
9	790 - Other Bare/Sparsely Vegetate	2.4	No	Unspecified	
11	3205 - Mixed Upland Shrub	1.3	No	Unspecified	
13	3102 - Grass	1.3	No	Unspecified	
14	3102 - Grass	1.6	No	Unspecified	
16	3201 - Sweet Fern	1.7	No	Unspecified	
18	3102 - Grass	15.4	No	Unspecified	
19	3102 - Grass	1.2	No	Unspecified	
24	3102 - Grass	1.1	No	Unspecified	
25	3102 - Grass	1.2	No	Unspecified	
28	3102 - Grass	1.4	No	Unspecified	
29	3102 - Grass	1.3	No	Unspecified	
34	3303 - Mixed Low Density Trees	13.3	No	Unspecified	
35	3102 - Grass	1.3	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
36	3102 - Grass	1.3	No	Unspecified	
44	3303 - Mixed Low Density Trees	12.8	No	Unspecified	Less than 25% tree cover with some scattered aspen & jack pine 10'-15' in height.
46	3102 - Grass	1.2	No	Unspecified	
47	3102 - Grass	1.1	No	Unspecified	
48	3102 - Grass	20.3	No	Unspecified	
51	3102 - Grass	1.2	No	Unspecified	
52	3102 - Grass	1.1	No	Unspecified	
53	3303 - Mixed Low Density Trees	7.7	No	Unspecified	
54	3102 - Grass	1.2	No	Unspecified	
58	3102 - Grass	2.3	No	Unspecified	
59	3102 - Grass	2.2	No	Unspecified	
62	6239 - Mixed Emergent Wetland	1.9	N/A	Unspecified	
63	3102 - Grass	1.5	No	Unspecified	
65	3102 - Grass	1.2	No	Unspecified	
66	6239 - Mixed Emergent Wetland	1.9	No	Unspecified	
68	3102 - Grass	1.0	No	Unspecified	
69	6239 - Mixed Emergent Wetland	10.5	No	Unspecified	
70	11 - Low Intensity Urban	4.6	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
72	11 - Low Intensity Urban	1.6	No	Unspecified	



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



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
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.