



**Gwinn Forest Management Unit
Compartment Review Presentation
Compartment 242 Entry Year: 2014
Compartment Acreage: 1,593 County: Marquette**

Revision Date: 8/20/12

Stand Examiner: Theresa Sysol

Legal Description: T45N R29W Sec 25, 26, 35, 36

RMU (if applicable): Chain Lakes Moraine Management Area

Management Goals: To maintain the health and sustainability of the forest, while providing for wildlife, fisheries, environmental and recreational needs.

Soil and Topography: Ranges from level swamps and wetlands to rolling or only slightly hilly upland terrain. Major soils types include: Carbondale/Tawas, Greenwood/Dawson, Histosols and aquents, Rubicon sand, Rubicon-Keweenaw sand, Crosswell sand and Karlin sandy loam.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Essentially surrounded by State lands with the exception of some relatively small inholdings of nonindustrial private land in the surrounding area. This private land is generally held for the recreational use of deer hunting with production of forest products as a secondary objective. Thus, land use within the compartment is a mixture of both low key recreation and production of commercial forest products. Since the last 10 year cycle, 40 acres of State land was sold.

Unique, Natural Features: No specific concerns listed with MNFI. Potential for merlin, goshawk, osprey, and eagle in mature pine stands. Potential for wood turtle along Schwartz creek.

Archeological, Historical, and Cultural Features: None identified with HAL. Old ELF (Extreme Low Frequency) 100' ROW still crosses through compartment. This was a submarine communication system, which was established around 1985 for the Department of the Navy.

Special Management Designations or Considerations: Protection of the Schwartz Creek watershed through riparian buffers/no cut zones.

Watershed and Fisheries Considerations: Contains Johnson Lake, Koski Lake, and Schwartz Creek with its various tributaries.

Wildlife Habitat Considerations: Featured species include black bear, gray jay, northern goshawk, pileated woodpecker and red crossbill.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of medium-textured and coarse-textured glacial till. There is insufficient data to determine the glacial drift thickness. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. This rock could be used as dimension stone. A rock (?) quarry is indicated on the topo one-half mile to the northeast. Gravel pits are located two and one-half miles away, but potential should be good. The

abandoned Republic iron mine is located eight miles to the northwest. Sections 35 and 36 are leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: The Flat Rock Road and the Floodwood Road are the primary arteries of access with various lesser trail roads (two-track quality) branching from these into the interior of the compartment. Newly built roads are generally of a temporary nature, used for the removal of forest products, then bermed and/or obliterated once all harvesting and reforestation efforts are completed.

Survey Needs: None required for this entry period.

Recreational Facilities and Opportunities: The Porterfield Lake Motorcycle Trail winds extensively throughout the west half of the compartment and many of the treatments prescribed will impact the trail. In addition, there are opportunities for hunting, fishing, berry picking and scenic driving.

Fire Protection: This compartment falls within the “581 Zone Dispatch” area, which provides for a pre-planned dispatch of fire equipment from within the Gwinn Management Unit and/or surrounding Units, dependent upon the fire severity forecast for a specific day. High concentrations of jack/red pine cover types with the encroachment of recreational seasonal dwellings have warranted this pre-planning.

Additional Compartment Information:

- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Cover Type by Management Objective**
 - ◆ **Compartment Volume Summary**
 - ◆ **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 old growth**

Cover Type & Treatment Map

Compartment: 242
 T45N R29W Sec. 26, 35-36
 County: Marquette
 Unit: Gwinn
 YOY: 2014
 Acres: 1,593 GIS Calculated
 Examiner: Theresa Sysol
 Map Revised: 08/28/2012
 Map Phase: Pre-Review

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

Legend

- Remonumented Section Corners
- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Corners
- Structures
- Gate
- Berms
- Culverts
- Stream
- Intermittent Stream
- Power
- Motorcycle Trails (DNR License)
- Motorcycle (DNR Sticker)
- State Forest Land
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Shelter Wood (w/Reserves)
- Other Treatment - See Comments

Forest Stands

Level 3

- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

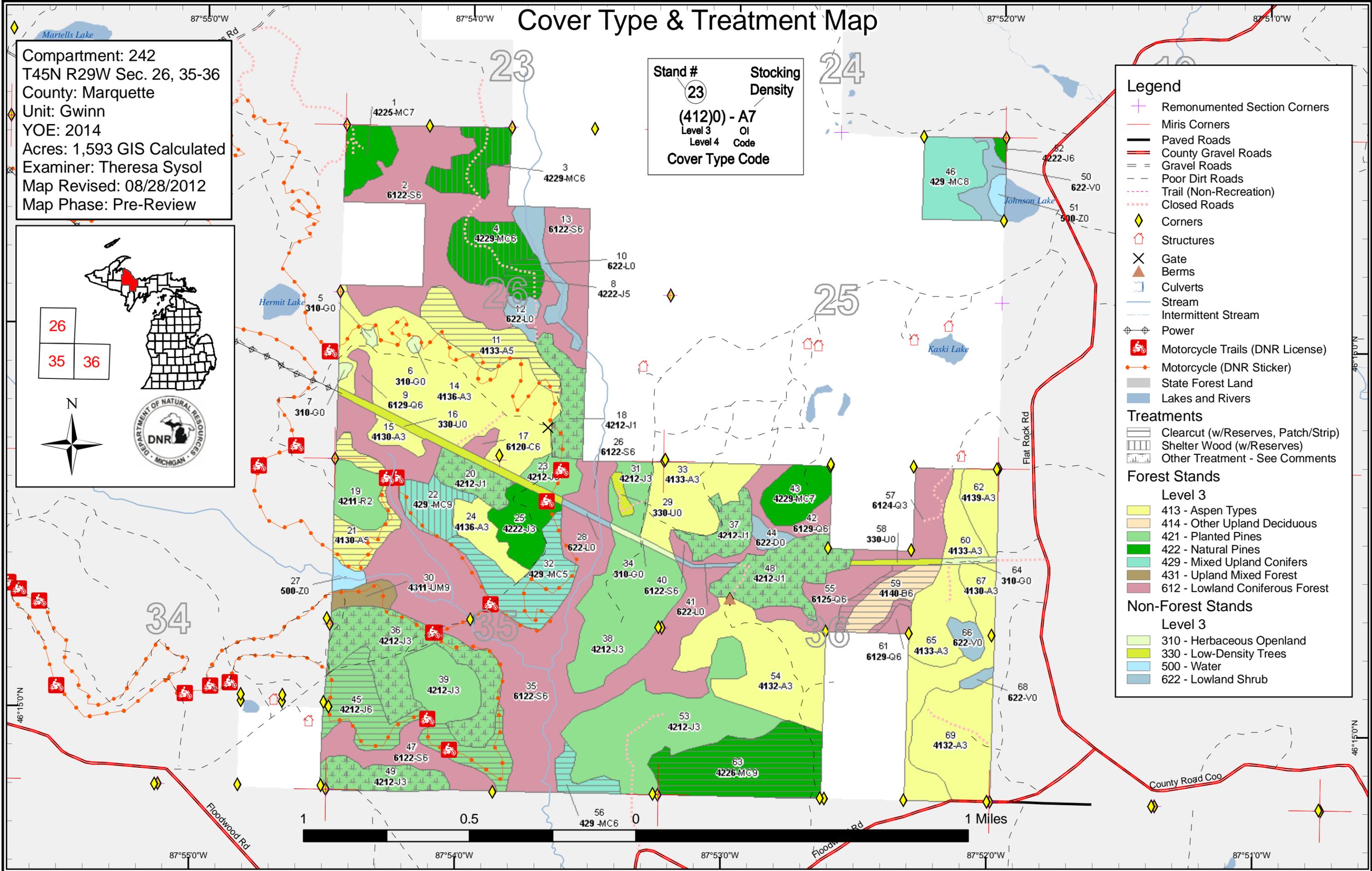
Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub

26
 35 36

N



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 T45N R29W Sec. 26, 35-36
 County: Marquette
 Unit: Gwinn
 YOE: 2014
 Acres: 1,593 GIS Calculated
 Examiner: Theresa Sysol
 Map Revised: 06/20/2012
 Map Phase: Pre-Review

Stand Boundary Map

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

26

35 36

Legend

- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- - - Closed Roads
- ✕ Gate
- ▲ Berms
- Culverts
- ◆ Corners
- ⌂ Structures
- Stream
- - - Intermittent Stream
- ⚡ Power
- 🏍️ Motorcycle Trails (DNR License)
- Motorcycle (DNR Sticker)
- Stand Boundaries

Forest Stands

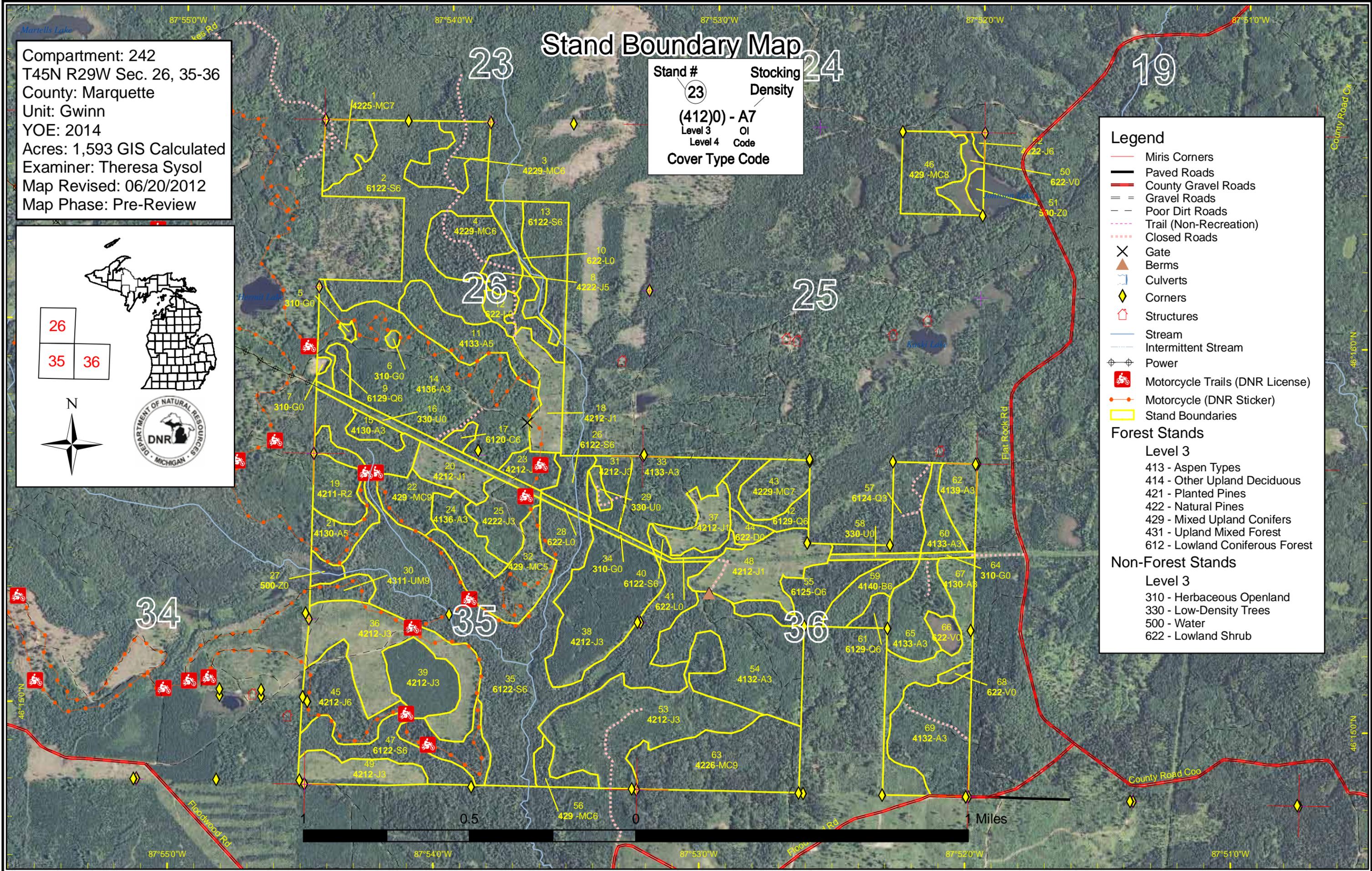
Level 3

- 413 - Aspen Types
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- 421 - Planted Pines
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Non-Forest Stands

Level 3

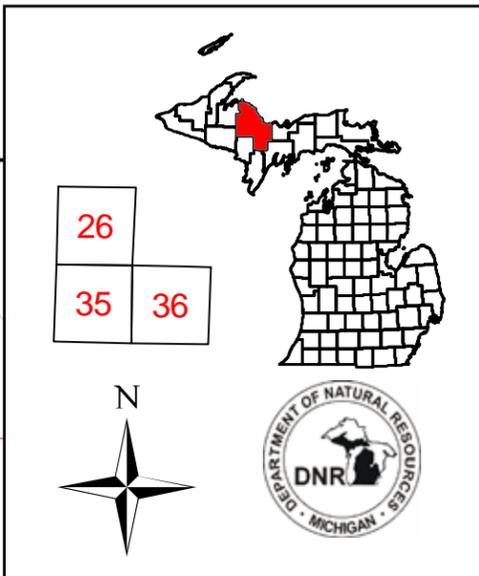
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



0.5 0 1 Miles

Dedicated & Proposed Special Conservation Area Map

Compartment: 242
 T45N R29W Sec. 26, 35-36
 County: Marquette
 Unit: Gwinn
 YOE: 2014
 Acres: 1,593 GIS Calculated
 Examiner: Theresa Sysol
 Map Revised: 08/28/2012
 Map Phase: Pre-Review



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

Legend

- ✚ Remonumented Section Corners
- Miris Corners
- ▭ Stand Boundaries
- ▨ Proposed Special Conservation Areas
- ▩ SCA - Special Conservation Area
- ▧ SCA Removal
- Dedicated Special Conservation Areas
- Cold Water Streams

Forest Stands

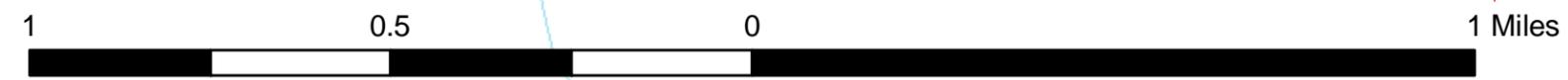
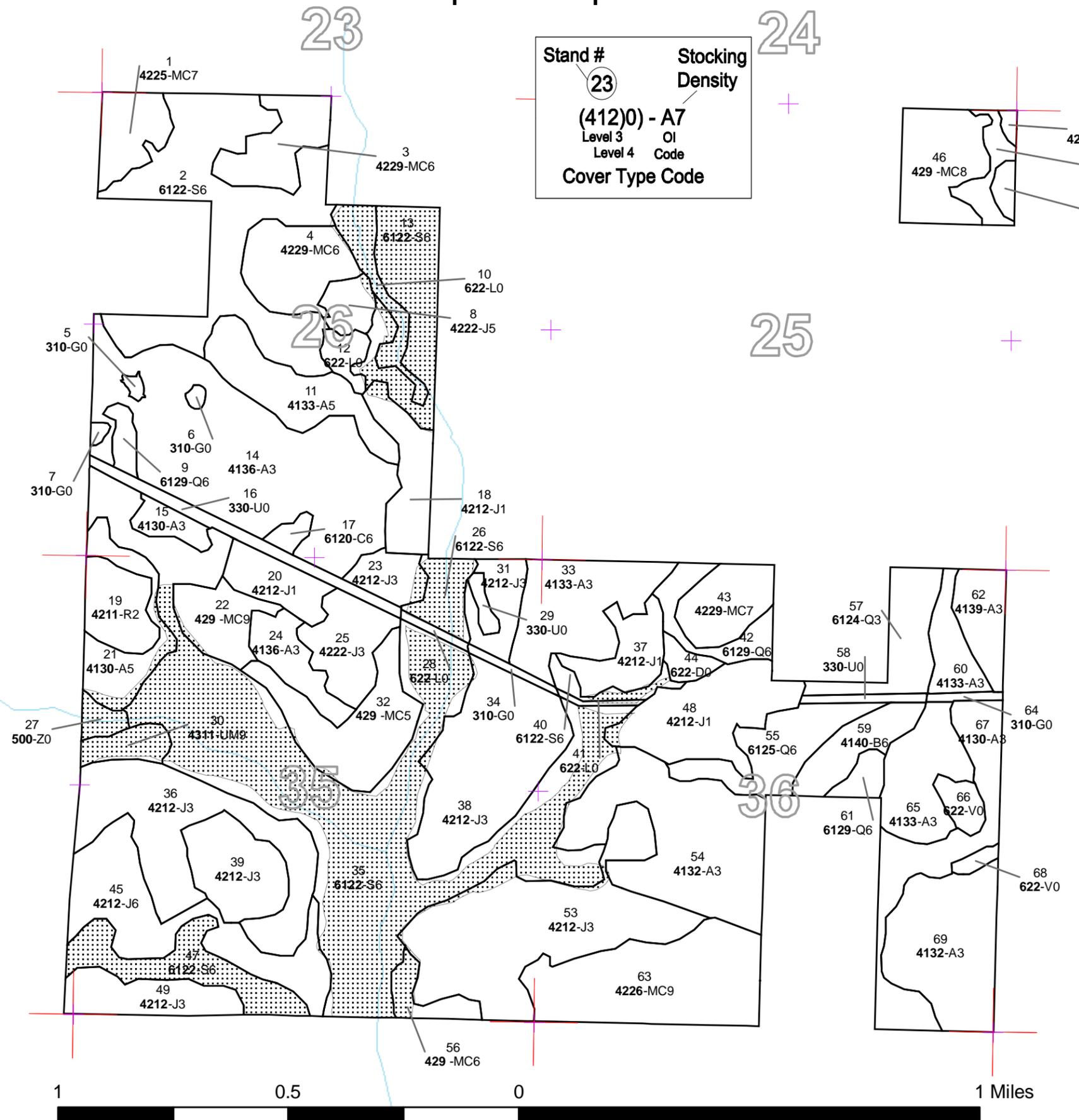
Level 3

- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



87°55'0"W 87°54'0"W 87°53'0"W 87°52'0"W

46°15'0"N

46°15'0"N

87°51'0"W

87°55'0"W

19

24

23

25

26

34

35

36

31

Table 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneren Age
Aspen	49	96	218	0	0	47	0	0	0	0	0	0	0	0	410
Bog	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Cedar	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
Herbaceous Openland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Jack Pine	162	134	72	9	0	0	0	46	0	0	0	0	0	0	422
Low-Density Trees	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Lowland Conifers	0	20	0	0	0	0	0	0	25	10	12	0	0	0	67
Lowland Shrub	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	273	0	5	0	0	80	358
Natural Mixed Pines	0	0	0	0	0	0	56	0	0	0	0	0	0	78	134
Paper Birch	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15
Red Pine	0	16	0	0	0	0	0	0	0	0	0	0	0	0	16
Treed Bog	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Upland Conifers	0	0	0	0	0	0	0	57	0	0	0	0	0	27	84
Upland Mixed Forest	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	285	267	289	9	0	47	56	111	313	10	21	0	0	184	1593



Table 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit
Year of Entry 2014

Compartment 242
Total Compartment Acres: 1593

Acres by Treatment Type

Commercial Harvest - 280	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 162
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	47	0	0	0	0	0	0	47
Jack Pine	53	0	0	0	0	0	0	53
Lowland Conifers	6	0	0	0	0	0	0	6
Natural Mixed Pines	56	0	0	44	0	0	0	101
Paper Birch	15	0	0	0	0	0	0	15
Upland Conifers	41	0	0	16	0	0	0	57
Total	219	0	0	60	0	0	0	280



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	32242003-Cut	19.5	42290 - Natural Mixed Pine	High Density Pole	82	51-80	Harvest	Shelter Wood with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Remove S/F (including submerchantable), JP, aspen, paper birch and selectively mark red pine (leaving 30-50 BA) to prep for natural regeneration. Leave smaller red and most white pine.</p> <p><u>Other Comments:</u> --Theresa Sysol : 08/20/2012 comments: per WLD at pre-review - leave some windfirm white spruce, if present Possibly allow chipping to remove smaller spruce/fir. May be able to negotiate with sale to the north, which was set-up in 2012.</p> <p><u>Next Steps:</u> Monitor regeneration success and possibly prescribe mechanical treatment of site to prepare mineral seedbed, if needed.</p> <p><u>Proposed Start Date:</u> 10/01/2012</p>										
11	32242011-Cut	28.1	4133 - Aspen, Mixed Pine	Medium Density Pole	51		Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Harvest all aspen, jack pine, balsam fir, spruce, red maple, and paper birch. Possibly mark a few healthy paper birch leave trees - most is already dying, though. Leave all oak, white and red pine and some smaller diameter spruce, fir.</p> <p><u>Other Comments:</u> --Theresa Sysol : 08/20/2012 comments: per ORV specialist - Be careful retaining trees close to trail that will blow down. Work with ORV specialist to address any ORV trail needs. Site is fairly rocky.</p> <p><u>Next Steps:</u> Monitor regeneration, per work instructions. Acceptable species include: aspen, spruce, fir, maple, birch and/or pine.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
21	32242021-Cut	19.0	4130 - Aspen	Medium Density Pole	56	51-80	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Harvest all species except white pine, red pine, hemlock and smaller white spruce. Leave any wildlife snag and cavity trees found.</p> <p><u>Other Comments:</u> --Theresa Sysol : 08/20/2012 comments: per ORV specialist - Be careful retaining trees close to trail that will blow down. Work with ORV specialist to address trail influence.</p> <p><u>Next Steps:</u> Monitor for regeneration, per work instructions. Acceptable species include: aspen, mixed pine</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
22	32242022-Cut	16.3	429 - Mixed Upland Conifers	High Density Log	77		Harvest	Shelterwood	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Remove merchantable BF, spruce, red maple, jack pine, aspen, and lightly thin red and/or white pine, where necessary, to encourage the natural regeneration process. Some paper birch and white spruce can be left (mark leave trees and/or species designation).</p> <p><u>Other Comments:</u> --Theresa Sysol : 08/20/2012 comments: per WLD at pre-review - leave some windfirm white spruce, if present. Per ORV specialist - Be careful retaining trees close to trail that will blow down. The ORV trail follows along the lower slope of the south portion of the stand. Will work with the ORV specialist to establish acceptable timber boundary lines. Do not allow chipping for regeneration purposes.</p> <p><u>Next Steps:</u> Mechanical site prep to expose mineral soil to prepare seedbed for natural regeneration and/or plant, if needed. Monitor for successful regeneration, per work instructions. Acceptable species includes mixed pine, mixed upland deciduous.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
32	32242032-Cut	33.3	429 - Mixed Upland Conifers	Medium Density Pole	71		Harvest	Clearcut with Reserves	42221 - Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Harvest all species except red and white pine, cherry and some white spruce. Retain snag/cavity trees, juneberry.										
<u>Specs:</u>										
<u>Other</u> --Theresa Sysol : 08/20/2012 comments: per ORV specialist - Be careful retaining trees close to trail that will blow down.										
<u>Comments:</u> Work with ORV specialist to provide for trail needs. Paper birch/maple knob at south end of stand can be retained/excluded from harvest. Do not allow chipping for regeneration purposes.										
<u>Next</u> Mechanical site prep required to expose mineral soil for natural seedbed. Monitor for successful regeneration, per work instructions. Acceptable										
<u>Steps:</u> regeneration mix includes: aspen, mixed pine and upland deciduous spps.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
45	32242045-Cut	45.6	42120 - Planted Jack Pine	High Density Pole	70	81-110	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Harvest all jack pine and aspen. Leave any red and white pine, cherry, and paper birch for diversity - mostly noted along trail edges.										
<u>Specs:</u>										
<u>Other</u> --Theresa Sysol : 08/20/2012 comments: per ORV specialist - Be careful retaining trees close to trail that will blow down.										
<u>Comments:</u> Work with ORV specialist to provide for trail influence needs. Depending on the health of the JP along the ORV trail route itself, some JP trees could be left, if desired. There are areas with immature, smaller JP (6" dbh and less) present - evaluate the need to cut or save, esp along trail. Do not allow chipping for regeneration purposes.										
<u>Next</u> Mechanical site prep to expose mineral soil to prepare seedbed for natural regeneration and/or plant, if needed. Monitor for successful										
<u>Steps:</u> regeneration, per work instructions. Acceptable species includes mixed pine, mixed upland deciduous.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
56	32242056-Cut	7.8	429 - Mixed Upland Conifers	High Density Pole	74	81-110	Harvest	Clearcut	4132 - Aspen, Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Harvest all aspen, jack pine, black spruce, balsam fir, staying out of lower grounds which buffer Schwartz Creek.										
<u>Specs:</u>										
<u>Other</u> Leave pole-sized white spruce and all red and white pine for diversity. Minor component of red maple and paper birch can be left also.										
<u>Comments:</u>										
<u>Next</u> Mechanical site prep required to expose mineral soil for natural seedbed and/or planting. Monitor for successful regeneration, per work										
<u>Steps:</u> instructions. Acceptable regeneration mix includes: aspen, mixed pine and upland deciduous spps.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
59	32242059-Cut	15.5	4140 - Other Upland Deciduous	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal
<u>Prescription</u> Harvest all aspen, balsam fir, spruce and most paper birch, marking a few as leave trees for seed. Leave all red pine, white pine and maple.										
<u>Specs:</u>										
<u>Other</u> per WLD at pre-review - Leave a few aspen and paper birch, possibly as patch(es)										
<u>Comments:</u>										
<u>Next</u> Monitor for successful regeneration, per work instructions. Acceptable species include: aspen, fir, spruce, paper birch and pine, in various										
<u>Steps:</u> amounts.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63	32242063-Cut	56.5	42260 - Natural Pine, Mixed Deciduous	High Density Log	66	51-80	Harvest	Clearcut with Reserves	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Harvest all species except red and white pine, and oak, if present. <u>Specs:</u> <u>Other Comments:</u> --Theresa Sysol : 08/20/2012 comments: per WLD at pre-review - leave some paper birch and large aspen, if present. rocky site <u>Next Steps:</u> Mechanical site prep may be required, to expose mineral soil to prepare natural seedbed and/or planting. Monitor for adequate regeneration of mixed pine, aspen, in various amounts, per work instructions. <u>Proposed Start Date:</u> 10/01/2013										
18	32242018-Other	18.8	42120 - Planted Jack Pine	Low Density Sapling	3		Other	Unspecified	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Monitor for successful regeneration, per work instructions. <u>Proposed Start Date:</u> 05/01/2013										
20	32242020-Other	14.1	42120 - Planted Jack Pine	Low Density Sapling	3		Other	Unspecified	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Monitor for successful regeneration, per work instructions. <u>Proposed Start Date:</u> 05/01/2013										
36	32242036-Other	57.4	42120 - Planted Jack Pine	High Density Sapling	3		Other	Unspecified	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Monitor for successful regeneration, per work instructions. <u>Proposed Start Date:</u> 05/01/2013										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	32242037- Other	16.1	42120 - Planted Jack Pine	Low Density Sapling	7		Other	Unspecified	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> Monitor for successful regeneration, per work instructions. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 05/01/2013										
48	32242048- Other	36.0	42120 - Planted Jack Pine	Low Density Sapling	4		Other	Unspecified	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> Monitor for successful regeneration, per work instructions. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 05/01/2013										
49	32242049- Other	19.2	42120 - Planted Jack Pine	High Density Sapling	3		Other	Unspecified	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> Monitor for successful regeneration, per work instructions. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 05/01/2013										
Total Treatment Acreage Proposed:		403.1								



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
4	32242004-Cut	24.6	42290 - Natural Mixed Pine	High Density Pole	85	51-80	Harvest	Shelter Wood with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Harvest all species, except red and white pine, which should be marked to 30-50 BA, to provide sufficient shade/protection for establishment of natural seedlings.</p> <p><u>Other Comment:</u> --Theresa Sysol : 08/20/2012 comments: per WLD at pre-review - leave some windfirm white spruce, if present Access will either need temporary bridge from the north, or, old flooded roadbed repaired if access is from the south. May require mechanical site prep to expose mineral soil to prepare seedbed.</p> <p><u>Next Steps:</u> Monitor regeneration for acceptable mix of pine, aspen, spruce and fir.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p> <p><u>Limiting Factor and No Treatment Reason</u> 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</p>										
8	32242008-Cut	7.6	42220 - Natural Jack Pine	Medium Density Pole	34		Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Harvest all species except red and white pine.</p> <p><u>Other Comment:</u> Set-up with adjacent stand for merchantability/access. Will need to repair old flooded roadbed or provide temporary bridge access. Recommend no chipping of tops for regeneration purposes.</p> <p><u>Next Steps:</u> Mechanical site prep to expose soil for mineral seedbed. Monitor for successful regeneration of pine, per work instructions.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p> <p><u>Limiting Factor and No Treatment Reason</u> 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</p>										
55	32242055-Cut	4.1	6125 - Lowland Black Spruce, Jack Pine	High Density Pole	86		Harvest	Clearcut	6125 - Lowland Black Spruce, Jack Pine	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Harvest all black spruce, jack pine, balsam fir, paper birch and tamarack which are accessible from the adjacent upland stand without impacting stand hydrology.</p> <p><u>Other Comment:</u> --Theresa Sysol : 08/20/2012 comments: per WLD at pre-review - leave white spruce Avoid cedar concentrations and wet areas prone to soil compaction; protect any intermittent drainages which may be present.</p> <p><u>Next Steps:</u> Monitor for successful regeneration, per work instructions, of mixed conifers.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p> <p><u>Limiting Factor and No Treatment Reason</u> 1C: Other dept or div proc/practices</p>										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
61 32242061-Cut	1.7	6129 - Mixed Coniferous Lowland Forest	High Density Pole	93		Harvest	Clearcut	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal

Prescription Remove merchantable black spruce, tamarack, balsam fir and paper birch along edges, where stand adjoins birch stand, yet leave solid cedar pockets to prevent windthrow.

Other Avoid soil compaction.

Comment:

Next Monitor for adequate regeneration, per work instructions, of mixed conifers.

Steps:

Proposed

Start Date: 10/01/2013

Limiting Factor and No 1C: Other dept or div proc/practices
Treatment Reason

**Total Treatment
Acreage Proposed: 38.0**

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



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42250 - Pine, Oak	Low Density Log	15.4	Uneven Age	1-50	"Porterfield Lake Road Sale" #109-04 - cut May/June, 2005. Left any cedar, oak, cherry RP, WP and spruce <9".
2	6122 - Black Spruce	High Density Pole	80.0	Uneven Age		Jack pine present along edges; pure cedar in places. Ground cover of lab tea, grasses, sphagnum all noted.
3	42290 - Natural Mixed Pine	High Density Pole	19.5	Uneven Age	51-80	With scattered low pockets containing lab tea, leatherleaf. Stand was select cut 1970-72 under t. sale #35-70
4	42290 - Natural Mixed Pine	High Density Pole	24.6	Uneven Age	51-80	Stand had E-W strip cuts from 1958 (#11-58A) and 1970 (#30-69A), where JP, BS and marked red pine were removed. Understory is heavy to S/F, although some RP is regenerating.
8	42220 - Natural Jack Pine	Medium Density Pole	7.6	34		Fire-origin JP from 1977 wildfire. Salvage cut of red pine under sale #8-77.
9	6129 - Mixed Coniferous Lowland Forest	High Density Pole	4.7	90	81-110	Red pine and W. spruce mainly on stand edges. Cedar interior - high water table; perched root system. Ground cover noted includes: sphagnum, lab tea, snowberry. Paper birch within is mainly dead; some saplings, though.
11	4133 - Aspen, Mixed Pine	Medium Density Pole	28.1	51		Cut under permit #11-58A in 1958-60. Some aspen dieback noted.
13	6122 - Black Spruce	High Density Pole	33.8	80		
14	4136 - Aspen, Mixed Conifer	High Density Sapling	110.1	26		"Floodwood Block" sale #012-84 - cut 1985. Some open areas within stand. Oak marked as leave trees. Newer ORV route established through stand.
15	4130 - Aspen	High Density Sapling	6.8	26		"Floodwood Block" sale #12-84 - cut 1985. Some open areas.
17	6120 - Lowland Cedar	High Density Pole	3.2	100		Small patch of cedar/spruce with little regeneration. Ground cover of sphagnum, lab tea.
18	42120 - Planted Jack Pine	Low Density Sapling	18.8	3		"Hermit Lake Road ELF Sale" #110-04 - cut June, 2004. Left any oak, birch, RP, WP and spruce <8" stump diameter. FTP C32-666: disk trench and seed completed 6/24/2008 (no herbicide used).
19	42110 - Planted Red Pine	Medium Density	16.4	14		"Snowflea-ORV Trail Block" #003-94 - cut 1996. FTP C31-360: disk trench/plant RP (herbicide 5/1997? Velpar L). Trace residual aspen pole/logs, pine, clumps of red maple. Ground cover noted includes: blackberry, sweet fern, bracken and blueberry. Rocky site.
20	42120 - Planted Jack Pine	Low Density Sapling	14.1	3		"Hermit Lake Road ELF Sale" #110-04 - cut May, 2006. Left any oak, cherry, RP, WP and spruce <8" stump diameter. Left PB for aesthetics. FTP C32-666: trench/seed completed 6/24/2008.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4130 - Aspen	Medium Density Pole	19.0	56	51-80	Stand left as buffer to ORV trail last entry - trail runs through most of stand. Lots of blowdown now, as well as standing dead/dying aspen and jack pine. Some small A regeneration starting, in places. Rocky site.
22	429 - Mixed Upland Conifers	High Density Log	16.3	77		Red and white pine stand, with some jack pine, spruce, aspen and birch mixed within. North end is steep ridgeline, which will be left. The ORV trail follows along the lower slope of the south portion of the stand. Will work with the ORV specialist to establish acceptable timber boundary lines.
23	42120 - Planted Jack Pine	High Density Sapling	9.8	14		"Schwartz Creek JP Sale" #002-95 - cut April/May, 1996. FTP C31-355: disk trench and seed 1997.
24	4136 - Aspen, Mixed Conifer	High Density Sapling	14.3	15		"Snowflea-ORV Trail Sale" #003-94 - cut Su, 1996. Left any oak, RP, WP, fir and PB seed trees. Ground cover of blueberry, bracken fern.
25	42220 - Natural Jack Pine	High Density Sapling	20.2	14		"Schwartz Creek JP Sale" #002-95 - cut April/May, 1996. FTP C31-355: disk trench/seed. Some mature aspen clones along edges.
26	6122 - Black Spruce	High Density Pole	10.7	88		Heavy tagalder, grasses within Schwartz Creek tributary; ground cover of club moss, sphagnum elsewhere.
30	4311 - Pine, Aspen Mix	High Density Log	8.0	73	51-80	Porterfield Lake Trail runs through stand. Ground cover of blueberry, bracken, sweet fern and wintergreen noted.
31	42120 - Planted Jack Pine	High Density Sapling	12.0	22		"Seven Locks Block" sale #009-84 - cut 1987-88. FTP 31-178: herbicide, disk trench and hand plant JP. Planted May, 1990
32	429 - Mixed Upland Conifers	Medium Density Pole	33.3	71		Stand left for diversity last entry. Very sparse stand, in places - open grown jack pine is limby, low quality to red maple. Dead/down jack pine and aspen; snags. Trail influence. Paper birch/maple knob at south end of stand can be retained/excluded from harvest.
33	4133 - Aspen, Mixed Pine	High Density Sapling	36.4	23		"Seven Locks Block" #009-84 - cut 1987-88. Some open-grown areas with JP/S/F and little to no aspen. Cherry brush.
35	6122 - Black Spruce	High Density Pole	203.3	88		contains Schwartz Creek and tributaries. Ground cover of sphagnum, snowberry.
36	42120 - Planted Jack Pine	High Density Sapling	57.4	3		"Floodwood Jack Pine Sale" #111-04 - cut Sp, 2006. FTP C32-639: herbicide, disk trench and seed completed 6/17/08. Trace amount of residual jack pine. Regeneration appears to be successful - continue to monitor.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	42120 - Planted Jack Pine	Low Density Sapling	16.1	7		"ELF West Softwood Sale" #112-04 - cut Su, 2004. FTP C31-465: disk trench and seed, herbicide, if needed. Planted Sp, 2012 w/ 2-0 JP - 688 t/ac (6" - 1' JP seedlings) - also "volunteers" present (heaviest on E. side of stand). Residual RP is mainly in clumps; edges with aspen regeneration. Scattered cherry, spruce "shrubs". Monitor regeneration for success.
38	42120 - Planted Jack Pine	High Density Sapling	59.7	22		"Seven Locks Block" #009-84 - cut 1987-88. FTPC31-178: herbicide, disk trench and plant. Planted May, 1990.
39	42120 - Planted Jack Pine	High Density Sapling	24.3	14		"Schwartz Creek Jack Pine Sale" #002-95 - cut April/May, 1996. FTP C31-355: disk trench and seed. Trace amount of JP poles within.
40	6122 - Black Spruce	High Density Pole	5.4	101		small drainage within, some cedar
42	6129 - Mixed Coniferous Lowland Forest	High Density Pole	12.0	101		Ground cover of sphagnum, lab tea and grasses noted.
43	42290 - Natural Mixed Pine	Low Density Log	18.1	Uneven Age	1-50	"ELF West Softwood Sale" #112-04 - cut Su, 2004. ~30 BA residual RP, WP. Lots of small S/F regeneration starting.
45	42120 - Planted Jack Pine	High Density Pole	45.6	70	81-110	Delayed for diversity last entry; ORV trail influence. Heavy ground cover of sweet fern, blueberry with wintergreen and lichen moss noted. Some top dieback and breakage; more open-grown JP is limby and shorter in height with cherry brush.
46	429 - Mixed Upland Conifers	Medium Density Log	26.5	Uneven Age	51-80	"Johnson Lake Sale" #003-76 - cut 1979 (with comp't 241). Management for mixed pine/conifers recommended.
47	6122 - Black Spruce	High Density Pole	25.1	87		Low area between upland jack pine stands - wildlife corridor. Trace amount of jack pine poles.
48	42120 - Planted Jack Pine	Low Density Sapling	36.0	4		"ELF West Softwood Sale" #112-04 - cut Su, 2004. C31-465: herbicide 2006, trench/seed 9/11/07 and hand planted 5/15/2010 and Sp, 2012 (4/21/12: 2-0 JP @688 t/ac). Numerous "volunteers" of JP, BSpr, tamarack, aspen and BF present. Continue to monitor regeneration for success. Ground cover of sweet and bracken fern.
49	42120 - Planted Jack Pine	High Density Sapling	19.2	3		"Floodwood Jack Pine Sale" #111-04 - cut Su, 2006. FTP C32-639: herbicide, disk trench and seed completed 6/17/08. Some natural "volunteers" within. Trace residual amounts of JP, BF and aspen. Continue to monitor for regeneration success.
52	42220 - Natural Jack Pine	High Density Pole	1.4	31		"Johnson Lake Sale" #003-76 - cut 1979 (with compt 241 stand 51). Ground cover of blueberry noted.
53	42120 - Planted Jack Pine	High Density Sapling	79.5	13		"Scenic Overlook Jack Pine" #003-95 - cut 1995-97. FTP C31-367: herbicide w/Tordon 101 - 7/1998 and trench/seeded - 10/1998.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	4132 - Aspen, Jack Pine	High Density Sapling	64.3	24		"Schwartz Creek Block" #014-84 - cut 1986. Jack pine scattered, in pockets. Aspen breakage - hypoxylon.
55	6125 - Lowland Black Spruce, Jack Pine	High Density Pole	24.8	86		Jack pine/spruce dropping into lower cedar/tamarack mix with sphagnum ground cover. Cut accessible portion with adjacent stand (pre-inv stand 59) when prescribed.
56	429 - Mixed Upland Conifers	High Density Pole	7.8	74	81-110	Stand was left for diversity last entry. Aspen is dying; with conkers, dead branches evident. Jack pine in open areas are limby and dead/dying also. Ground cover includes club moss, strawberry, princess pine.
57	6124 - Lowland Spruce-Fir	High Density Sapling	20.3	16		"East End Floodwood Sale" #001-95 - cut su, 1995. Left RP, WP and advanced S/F regeneration. Some JP, QA, WP and tamarack regeneration noted as well.
59	4140 - Other Upland Deciduous	High Density Pole	15.5	80	81-110	Stand was held for diversity last entry. Quite a bit of blowdown within; dead aspen, balsam fir and birch.
60	4133 - Aspen, Mixed Pine	High Density Sapling	12.0	15		"Cranberry ELF Block" #004-94 - cut Su, 1996. Left PB seed trees, oak, WP and RP. Bushy, open-grown WP. Ground cover of sweet fern, bracken fern noted.
61	6129 - Mixed Coniferous Lowland Forest	High Density Pole	5.2	93		Small pocket of cedar/spruce mix - sphagnum ground cover.
62	4139 - Aspen, Mixed Deciduous	High Density Sapling	14.2	4		"Floodwood ELF Aspen" #113-04 (Unit 1) - cut March, 2007. Left any oak, cherry, WP - marked RP to cut, and cut S/F >8" stump diameter.
63	42260 - Natural Pine, Mixed Deciduous	High Density Log	56.5	66	51-80	Mix of jack pine and aspen - in decline. Ground cover noted includes bracken fern, hazel, grasses.
65	4133 - Aspen, Mixed Pine	High Density Sapling	25.5	14	1-50	"Cranberry ELF Block" #004-94 - cut Su, 1997. Left any oak, WP, RP and PB seed trees.
67	4130 - Aspen	High Density Sapling	34.7	5		"Floodwood ELF Aspen" #113-04 (Units 2,3,4) - cut May/June, 2006 (U3,4) and March, 2007 (U2). Left any oak, cherry WP, RP, and small S/F <8" stump diameter which was present. Left PB, RM and WS buffer surrounding bog for aesthetics.
69	4132 - Aspen, Jack Pine	High Density Sapling	44.6	16		"East End Floodwood Sale" #001-95 - cut Su, 1995. Left any oak, RP, WP, spruce and cherry; also left some PB along Floodwood Road.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
5	3104 - Degraded	1.2	No	Unspecified	Old grass type.
6	3104 - Degraded	1.1	No	Unspecified	Old grass type.
7	3104 - Degraded	1.0	No	Unspecified	leased gravel pit
10	6220 - Alder/willow	12.4	No	Unspecified	contains Schwartz Creek/tributary
12	6220 - Alder/willow	5.8	No	Unspecified	Old beaver flooding with dead snags, grasses, rocks.
16	3303 - Mixed Low Density Trees	11.2	No	Unspecified	Old ELF R.O.W.
27	50 - Water	4.3	No	Unspecified	beaver flooding
28	6220 - Alder/willow	1.8	No	Unspecified	Old ELF R.O.W. (crosses Schwartz Creek tributary)
29	3303 - Mixed Low Density Trees	2.7	No	Unspecified	Old opening filling in.
34	3103 - Rubus-Fern	2.3	No	Unspecified	Old ELF R.O.W. (last cleared in 1985?)
41	6220 - Alder/willow	1.4	No	Unspecified	Old ELF R.O.W.
44	6224 - Treed Bog	4.7	No	Unspecified	
50	6225 - Bog	8.2	No	Unspecified	Lowland adjacent to Johnson Lake (with leatherleaf)
51	50 - Water	3.3	No	Unspecified	Johnson Lake
58	3302 - Low Density Conifer Trees	3.2	No	Unspecified	Old ELF R.O.W.
64	3104 - Degraded	1.9	No	Unspecified	Old ELF R.O.W.
66	6225 - Bog	5.8	No	Unspecified	
68	6225 - Bog	2.3	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
multiple - see	Unique Site - SCA	32242_SCA	229.4	SCA - Riparian protection of Schwartz Creek and associated tributaries, preventing sedimentation, soil compaction and maintaining shade cover for creek.
47	Unique Site - SCA	32242047	25.1	SCA - No treatment due to BMP issues - seeps and intermittent drainages which adjoin Schwartz Creek.



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.