



**Gwinn Forest Management Unit
Compartment Review Presentation
Compartment 032 Entry Year: 2014
Compartment Acreage: 2,163 County: Marquette**

Revision Date: 8/20/2012

Stand Examiner: Ben Travis

Legal Description: T45N R26W, Sec. 1-3, 13-15

RMU (if applicable): Palmer Moraine Management Area

Management Goals: Planning will focus on timber management, fisheries management and wildlife habitat management. Public access, forest roads, forest regeneration, forest health, forest fire management, forest recreation, stream crossings, water quality and any resource damage are critical assessments considered during the forest mapping and inventory process. Overall management strives to provide for a diverse, healthy and productive forest through planning and implementation of sustainable, proper forest treatments.

Soil and Topography: Terrain ranges from lowland drainages supporting tag alder to tall rocky cliffs and highlands with oak, pine and aspen. Major soils series are: Michigamme - Rock outcrop, Rubicon - Ishpeming - Rock outcrop, Rubicon - Sayner Complex, Rubicon - Ocqueoc - Rock outcrop, Sundog - Rock Outcrop Complex, Pence Fine Sandy Loam, Rubicon - Keweenaw Complex, Dishno - Michigamme - Rock outcrop, Greenwood and Dawson, Carbondale and Tawas, Croswell Sand, Sundog Silt Loam, Karlin Sandy Loam, and Gogebic - Dishno Cobbly Silt.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is comprised of 4 separate blocks of consolidated state ownership. The two northern blocks are bordered by small private parcels on the north, west and east sides and by Upper Peninsula Power Company (UPPCO) lands on the south. The southwest block is bordered by state land to the west and south, and small private parcels to the north and east. The southeast block is bordered by UPPCO and small private parcels to the north, state lands to the east and southwest and small private parcels to east. Most private parcels have a camp or residence present. The UPPCO lands are adjacent to the Cataract Impoundment and Middle Branch of the Escanaba River. This land is open to the public for access of areas along the river. Most private parcels are forested and are often used for hunting purposes.

Unique, Natural Features: Green Creek, Middle Branch of Escanaba River and Mud Lake are found within the compartment. The Cataract Basin lies between the 4 blocks of state ownership comprising this compartment. There is a record of an old great blue heron rookery along Green Creek on boundary of sections 1 and 2. There is potential for goshawk and red-shouldered hawk. Potential exists for wood turtles along Green Creek.

Archeological, Historical, and Cultural Features: None contained in HAL database.

Special Management Designations or Considerations: Riparian zones along the Middle Branch of the Escanaba River and Green Creek are designated.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: Featured species include American woodcock, black bear, pileated woodpecker, and red crossbill.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium, medium-textured and coarse-textured glacial till, minor peat and muck and thin to discontinuous glacial till over bedrock. The glacial drift thickness varies between 10 and 200 feet. Archean Granite/Gneiss subcrops below the glacial drift. Some of the granite/gneiss has been/could be used as dimension stone. Gravel pits are located to the south and there should be some potential. Abandoned iron mines are located one mile to the east. Section 3 was previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: M-35, County Road 557, Crooked Lake Road, Cataract Road, and Kacey Lane are the primary access roads for this compartment. The northeast block of state land has a good DNR forest road network to the east of the Escanaba River. There isn't access for the portion of this block to the west of the Escanaba River. The northeast block of state land has fairly good DNR forest road network to the west side, but none to the east. The southwest block of state land has some DNR forest roads, but the southeast corner is problematic due to a private gate. The southeast block has a good DNR road network to the north and southeast, but the west portion is isolated by private parcels making any access questionable.

Survey Needs: There are no known survey needs.

Recreational Facilities and Opportunities: There are not any designated recreational facilities within this compartment. Hunting, fishing, trapping, canoeing, berry picking and off-road vehicle operation are important uses of this area.

Fire Protection: Pine cover types found in the northern portion of the compartment along with dispersed residences pose special concern for wildfire incidence. Very limited vehicle access in certain areas of this compartment are problematic for wildfire suppression.

Additional Compartment Information:

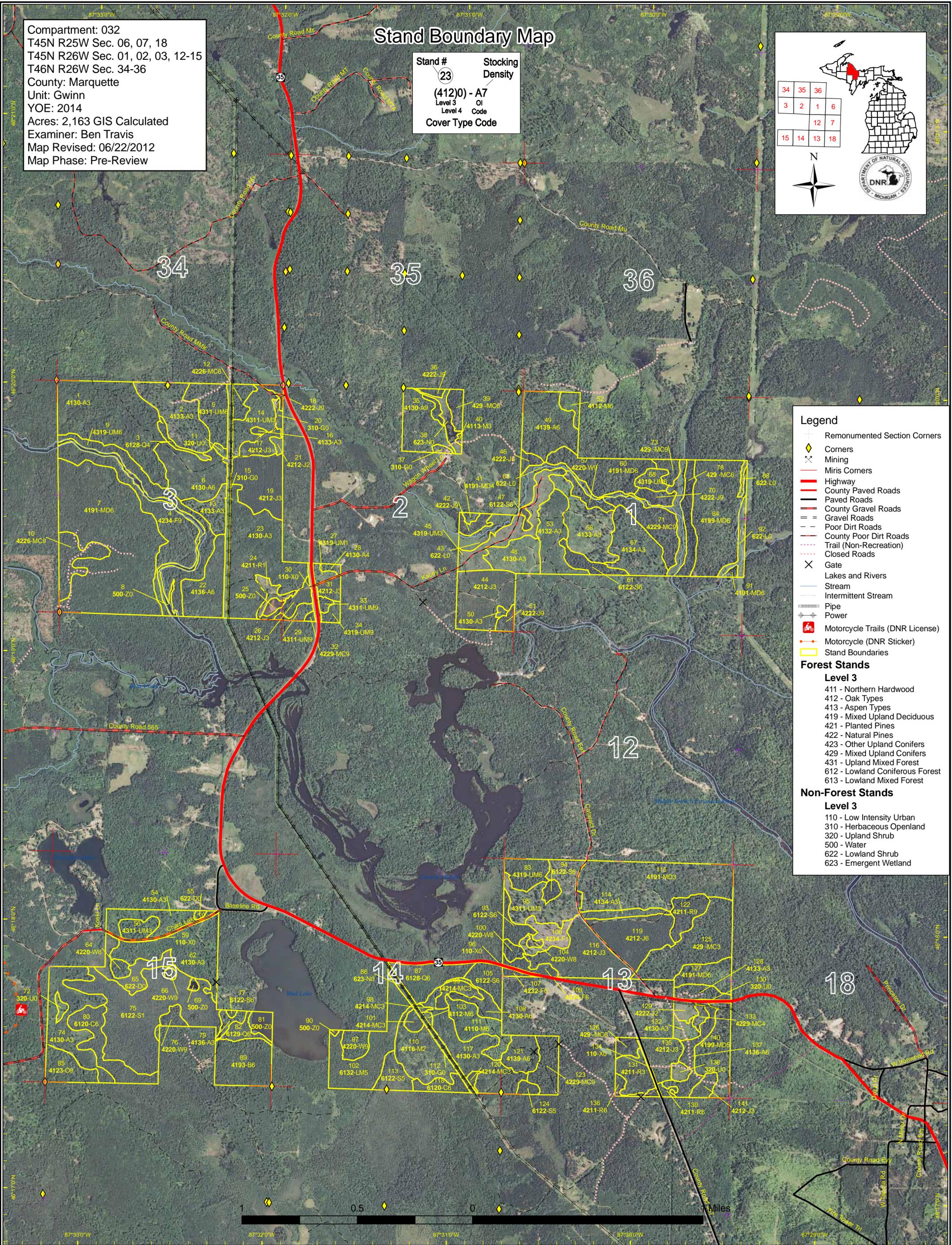
- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Cover Type by Management Objective**
 - ◆ **Compartment Volume Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **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**

Stand Boundary Map

Compartment: 032
 T45N R25W Sec. 06, 07, 18
 T45N R26W Sec. 01, 02, 03, 12-15
 T46N R26W Sec. 34-36
 County: Marquette
 Unit: Gwinn
 YOE: 2014
 Acres: 2,163 GIS Calculated
 Examiner: Ben Travis
 Map Revised: 06/22/2012
 Map Phase: Pre-Review

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



Legend

- ⊕ Remonumented Section Corners
- ◇ Corners
- ⊗ Mining
- ⊕ Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- ⊗ Gate
- Lakes and Rivers
- Stream
- Intermittent Stream
- Pipe
- Power
- 🏍 Motorcycle Trails (DNR License)
- 🏍 Motorcycle (DNR Sticker)
- Stand Boundaries

Forest Stands

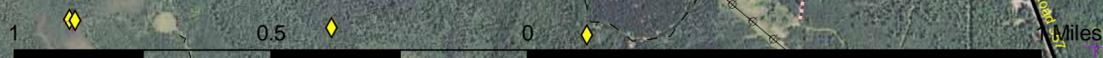
Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

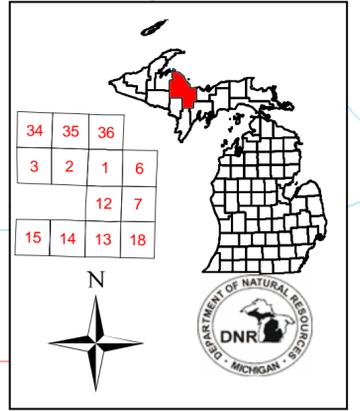
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



Dedicated & Proposed Special Conservation Area Map

Compartment: 032
 T45N R25W Sec. 06, 07, 18
 T45N R26W Sec. 01, 02, 03, 12-15
 T46N R26W Sec. 34-36
 County: Marquette
 Unit: Gwinn
 YOE: 2014
 Acres: 2,163 GIS Calculated
 Examiner: Ben Travis
 Map Revised: 09/12/2012
 Map Phase: Pre-Review

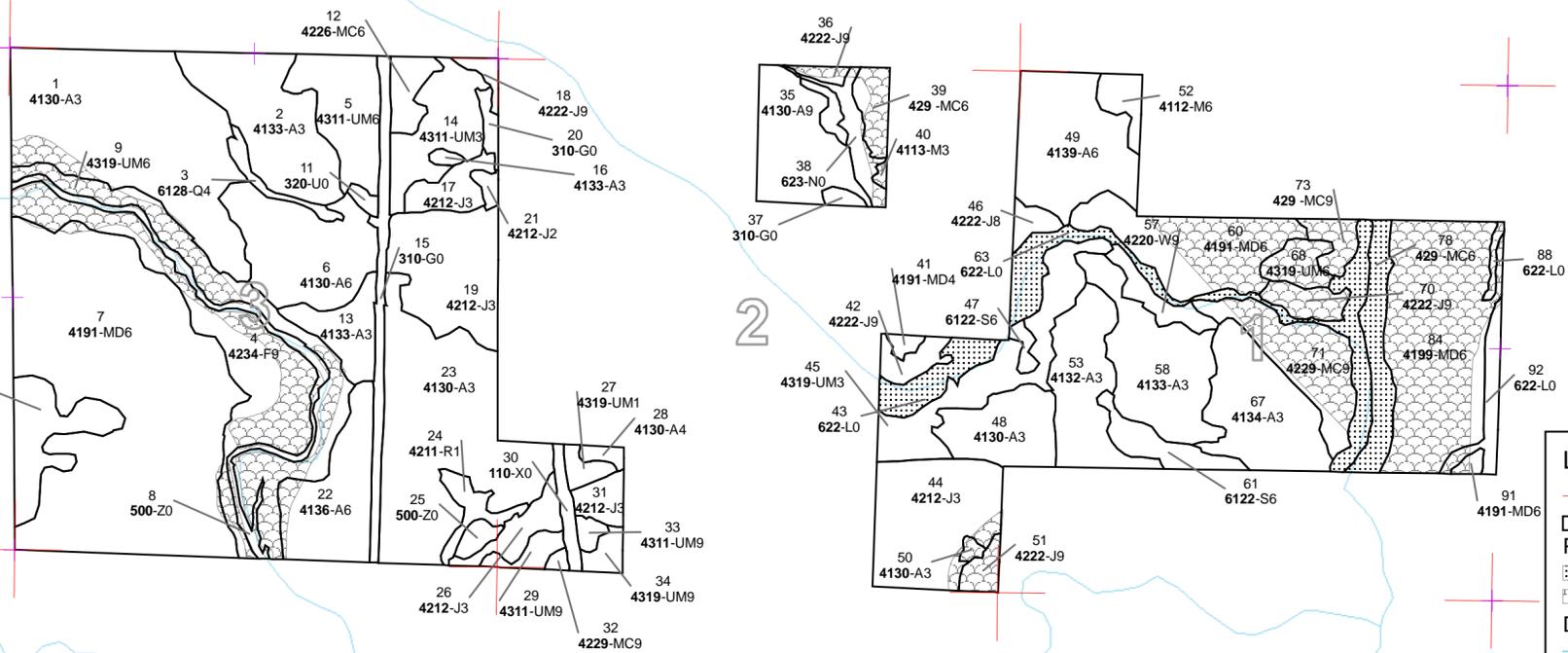
Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



34

35

36



2

6

12

Legend

- Miris Corners
- Stand Boundaries
- Proposed Special Conservation Areas
- SCA - Special Conservation Area
- SCA Removal
- Dedicated Special Conservation Areas
- Cold Water Streams

Forest Stands

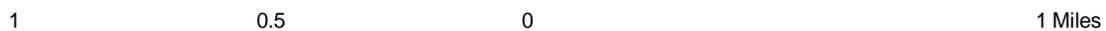
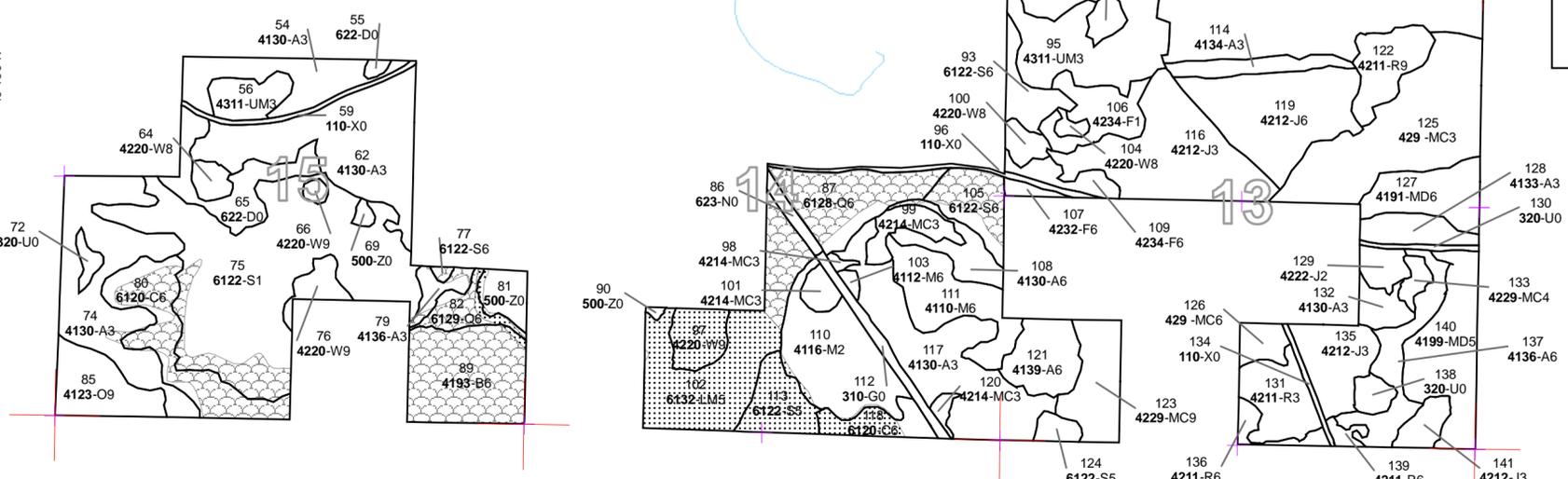
Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



87°33'0"W 87°32'0"W 87°31'0"W 87°30'0"W 87°29'0"W

46°17'0"N

46°18'0"N

46°19'0"N

46°20'0"N

46°21'0"N

46°17'0"N

46°18'0"N

46°19'0"N

46°20'0"N

46°21'0"N

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 +	Uneven Age	
Aspen	170	226	42	119	0	0	17	61	0	0	0	0	0	0	635
Cedar	0	0	0	0	0	0	0	0	0	0	32	0	0	0	32
Herbaceous Openland	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Jack Pine	5	118	66	0	0	0	0	6	19	0	0	0	0	0	215
Lowland Conifers	0	0	0	0	0	0	21	0	7	0	4	0	0	0	32
Lowland Mixed Forest	0	0	0	0	0	0	40	0	0	0	0	0	0	0	40
Lowland Shrub	44	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Lowland Spruce/Fir	0	0	0	0	0	8	4	14	3	20	90	0	0	0	140
Marsh	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Mixed Upland Deciduous	0	77	0	0	17	0	0	174	89	0	0	0	0	0	357
Natural Mixed Pines	0	0	7	0	0	0	18	26	0	1	0	0	16	0	67
Northern Hardwood	0	0	29	1	0	0	27	0	0	0	0	0	0	0	57
Oak	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15
Paper Birch	0	0	0	0	0	0	0	0	0	31	0	0	0	0	31
Planted Mixed Pines	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13
Red Pine	0	20	0	0	0	0	0	6	13	0	0	0	0	0	38
Treed Bog	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Upland Conifers	0	47	0	0	14	0	0	11	0	0	0	0	5	0	77
Upland Mixed Forest	68	28	0	0	21	0	7	6	14	38	0	0	0	0	183
Upland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Upland Spruce/Fir	13	0	0	0	6	0	0	0	2	43	0	0	0	0	64
Urban	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Water	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
White Pine	0	0	0	0	0	0	0	0	4	9	2	5	11	0	31
Total	393	516	157	120	58	8	134	304	151	157	128	5	32	0	2163



Table 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit
Year of Entry 2014

Compartment 032
Total Compartment Acres: 2163

Acres by Treatment Type

Commercial Harvest - 201	Site Prep - 0	Tree Planting - 26	Prescribed Burn - 0	Other - 0
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	51	0	0	0	0	0	51
Jack Pine	10	0	0	0	0	0	10
Lowland Spruce/Fir	0	0	13	0	0	0	13
Natural Mixed Pines	23	0	0	1	0	0	24
Northern Hardwood	0	26	0	0	0	0	26
Paper Birch	0	0	31	0	0	0	31
Red Pine	0	0	0	0	13	0	13
Upland Conifers	5	0	0	0	0	0	5
Upland Mixed Forest	0	0	14	7	0	0	21
Upland Spruce/Fir	0	0	8	0	0	0	8
Total	88	26	65	8	13	0	201



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
18	32032018-Cut	2.3	42220 - Natural Jack Pine	High Density Log	84	111-140	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> --Ben Travis : 08/23/2012 comments: A decision to leave some larger aspen (bigtooth if available) was made at the pre-review.										
<u>Specs:</u> Harvest jack pine and aspen. Retain white pine. Leave red pine and oak if present.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Upon completion of harvest, evaluate natural regeneration success to determine if a subsequent regeneration treatment may be necessary. If feasible, red pine could be handplanted in stand at a rate that would allow it to occupy the site with jack pine. This would allow a longer lived species to be retained in this travel corridor in the future. Jack pine, aspen, red pine and white pine are acceptable regeneration.										
<u>Proposed Start Date:</u> 10/01/2013										
29	32032029-Cut	3.9	4311 - Pine, Aspen Mix	High Density Log	68	51-80	Harvest	Shelterwood	4311 - Pine, Aspen Mix	Cmpt. Review Proposal
<u>Prescription</u> --Ben Travis : 08/23/2012 comments: A decision to leave some larger aspen (bigtooth if available) was made at the pre-review.										
<u>Specs:</u> Harvest the aspen, fir, spruce, maple, jack pine and white birch. Mark for removal 1/4 to 1/2 of the red pine to provide 20 to 40 square feet of residual BA. Red pine that is 26 inches Dbh and larger will be left as Legacy trees. Residual red pine stocking can be left higher near M-35. Retain most white pine unless trees in decline and/or needed for logging equipment operability. 26 inch Dbh and larger white pine will be left as Legacy trees. Leave oak and hemlock if present.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Pine, aspen, white birch, spruce, fir and maple are acceptable regeneration.										
<u>Proposed Start Date:</u> 10/01/2013										
32	32032032-Cut	1.0	42290 - Natural Mixed Pine	High Density Log	99	111-140	Harvest	Shelterwood	42290 - Natural Mixed Pine	Cmpt. Review Proposal
<u>Prescription</u> Harvest the aspen, fir, spruce, maple, jack pine and white birch. Mark for removal 1/4 to 1/2 of the red pine to provide 20 to 40 square feet of residual BA. Red pine that is 26 inches Dbh and larger will be left as Legacy trees. Residual red pine stocking can be left higher near M-35. Retain most white pine unless trees in decline and/or needed for logging equipment operability. White pine 26 inches Dbh and larger will be left as Legacy trees. Leave oak and hemlock if present.										
<u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work instruction 2.1 Reforestation". Pine, aspen, fir, spruce, white birch and maple are acceptable regeneration.										
<u>Proposed Start Date:</u> 10/01/2013										
34	32032034-Cut	3.6	4319 - Mixed Upland Forest	High Density Log	68	141-170	Harvest	Shelterwood	4319 - Mixed Upland Forest	Cmpt. Review Proposal
<u>Prescription</u> --Ben Travis : 08/23/2012 comments: A decision to leave some windfirm white spruce and larger aspen (prefer bigtooth if available) was made at the pre-review.										
<u>Specs:</u> Harvest the aspen, fir, spruce, maple, jack pine and white birch. Mark for removal 1/4 to 1/2 of the red pine to provide 20 to 40 residual BA. Red pine that is 26 inches Dbh and larger will be left as Legacy trees. Residual red pine stocking can be left higher near M-35. Retain most white pine unless trees in decline and/or needed for logging equipment operability. Leave oak and hemlock if present.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Pine, aspen, maple, fir, spruce and white birch are acceptable regeneration.										
<u>Proposed Start Date:</u> 10/01/2013										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
46	32032046-Cut	3.4	42220 - Natural Jack Pine	Medium Density Log	89	81-110	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Harvest jack pine, aspen, and maple. Retain some scattered cherry, spruce and white birch while removing rest. Leave buffer strip along creek.										
<u>Specs:</u> Retain any cedar, white pine, red pine, hemlock or oak if present.										
<u>Other</u> Stand is currently in potential old-growth. Recommend that at least north 1/2 of stand have this designation removed.										
<u>Comments:</u>										
<u>Next</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Pine, aspen, black cherry, maple, spruce, fir										
<u>Steps:</u> and white birch are acceptable regeneration.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
51	32032051-Cut	3.8	42220 - Natural Jack Pine	High Density Log	82	111-140	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Harvest jack pine, black spruce, fir, maple, aspen and white birch. Leave white pine. Reserve any red pine, cedar or hemlock if present. Leave										
<u>Specs:</u> buffer along river by excluding all lowland areas of black spruce closer to river and the steep slope to east side of stand.										
<u>Other</u> Stand is designated as potential old-growth. This designation should be removed from the portion of the stand supporting jack pine.										
<u>Comments:</u>										
<u>Next</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Jack pine, aspen, white birch, maple, fir, white										
<u>Steps:</u> pine, and spruce are acceptable regeneration.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
61	32032061-Cut	9.2	6122 - Black Spruce	High Density Pole	93	111-140	Harvest	Seed Tree with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
<u>Prescription</u> --Ben Travis : 08/23/2012 comments: A decision to provide for enhanced retention closer to 10% was made at the pre-review. Tamarack and										
<u>Specs:</u> spruce will be the primary species retained.										
Leave scattered spruce, tamarack and clumps of spruce and tamarack at approximately 3 to 4 chain intervals around site, removing remaining										
spruce, fir and tamarack. Leave white birch. Retain any white pine, cedar and hemlock if present.										
<u>Other</u> Site is not excessively wet, but logging operations will be need to be confined to winter/frozen months.										
<u>Comments:</u>										
<u>Next</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Spruce, tamarack, fir, and birch are										
<u>Steps:</u> acceptable regeneration.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2013										
71	32032071-Cut	22.9	42290 - Natural Mixed Pine	High Density Log	77	111-140	Harvest	Clearcut with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal
<u>Prescription</u> --Ben Travis : 08/23/2012 comments: A decision to leave windfirm white spruce and large aspen (prefer bigtooth) within the retention patches										
<u>Specs:</u> was made at pre-review.										
Harvest jack pine, aspen, maple, spruce, fir and white birch. May remove up to 50% of red pine. Use patch excluision to meet retention goals and										
to provide a buffer for the stream. Retain white pine. Leave any cedar, hemlock, yellow birch and oak if present.										
<u>Other</u> Stand is currently designated as potential old-growth. Recommend that this designation be removed.										
<u>Comments:</u>										
<u>Next</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Pine, aspen, maple, birch, fir and spruce are										
<u>Steps:</u> acceptable regeneration. A forest treatment proposal may need to be developed for site prep and establishment of jack pine in suitable areas if										
natural recruitment is inadequate.										
<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
83	32032083-Cut	13.8	4319 - Mixed Upland Forest	High Density Pole	84	111-140	Harvest	Seed Tree with Reserves	4319 - Mixed Upland Forest	Cmpt. Review Proposal
<p><u>Prescription</u> --Ben Travis : 08/23/2012 comments: A decision was made at pre-review to leave all black cherry unless needed for logging equipment operability.</p> <p><u>Specs:</u></p> <p>Retain all white pine, oak and some scattered white spruce, white birch and cherry. Harvest the white birch, jack pine, aspen, maple, fir, and spruce. Leave red pine, hemlock, cedar and yellow birch if present. Leave some small retention patches.</p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work instruction 2.1 Reforestation". Aspen, pine, oak, maple, fir, white birch and spruce are acceptable regeneration.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
94	32032094-Cut	3.5	6122 - Black Spruce	High Density Pole	85	111-140	Harvest	Seed Tree with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
<p><u>Prescription</u> --Ben Travis : 08/23/2012 comments: Wildlife prefers that retained spruce be left at a 3 chain spacing.</p> <p><u>Specs:</u></p> <p>Leave single black spruce or small clumps of spruce at a 3 to 5 chain interval to serve as seed source after cutting. Leave some scattered black cherry. Harvest remainder of spruce and cherry. Cut tamarack, fir, jack pine, aspen, white birch and maple. Retain white pine. Leave any yellow birch, red pine, cedar or hemlock if present.</p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Spruce , fir and tamarack are preferred regeneration. Aspen, white pine, maple, and white birch are acceptable regeneration.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
107	32032107-Cut	1.8	42320 - Upland Spruce	High Density Pole	85	81-110	Harvest	Seed Tree	42320 - Upland Spruce	Cmpt. Review Proposal
<p><u>Prescription</u> Leave scattered spruce and other appropriate tree species to serve as a seed source and to provide for some aesthetic considerations along M-35. Retain cedar, hemlock and white pine if present. Harvest remainder of spruce, fir, white birch, maple, jack pine, tamarack and aspen.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> No retention is prescribed due to small stand size.</p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Spruce, fir, aspen, birch, maple and pine are acceptable regeneration.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
109	32032109-Cut	5.9	42340 - Upland Spruce/Fir	High Density Pole	47		Harvest	Seed Tree with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Leave scattered and small groups of spruce and other appropriate tree species to serve as a seed source and to provide for some aesthetic considerations along M-35. Retain cedar, hemlock and white pine if present. Harvest remainder of spruce, fir, white birch, maple, jack pine, tamarack and aspen.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Spruce, fir, aspen, birch, maple and pine are acceptable regeneration.</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
122	32032122-Cut	13.0	42110 - Planted Red Pine	High Density Log	83	141-170	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Mark red pine and white pine for harvest to achieve a residual stocking level of 70 to 100 square feet. Retain any oak if present. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Stand is not being regenerated at this cutting cycle so regeneration survey is not needed. <u>Proposed Start Date:</u> 10/01/2013										
126	32032126-Cut	5.0	429 - Mixed Upland Conifers	High Density Pole	77	141-170	Harvest	Clearcut	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> --Ben Travis : 08/23/2012 comments: A decision to leave some large aspen (prefer bigtooth) was made at pre-review. <u>Specs:</u> Leave red pine, white pine, cherry and white birch. Retain any oak if present. Mark some leave trees closer to private lines if needed for aesthetic values. Harvest jack pine, fir, aspen, maple and spruce. It is unlikely that the 3% retention threshold will be met due to small size of stand and need to create open condition to regenerate jack pine. <u>Other Comments:</u> The forest road passing through stand functions as a driveway for several landowners. <u>Next Steps:</u> Upon completion of harvest, evaluate regeneration success to determine if a subsequent regeneration treatment may be necessary, such as scarification or trench/seed. Jack pine, red pine, white pine, aspen, white birch, maple and spruce are acceptable regeneration. <u>Proposed Start Date:</u> 10/01/2013										
137	32032137-Cut	15.2	4136 - Aspen, Mixed Conifer	High Density Pole	67	81-110	Harvest	Clearcut with Reserves	4136 - Aspen, Mixed Conifer	Cmpt. Review Proposal
<u>Prescription</u> --Ben Travis : 08/23/2012 comments: A decision to leave some black spruce was made at the pre-review. <u>Specs:</u> Harvest aspen, white birch, jack pine, fir, maple and spruce. Leave white pine. Retain any cedar, oak or hemlock if present. May remove up to 50% of red pine. <u>Other Comments:</u> <u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Aspen, white birch, pine, oak, maple, fir and spruce are acceptable regeneration. <u>Proposed Start Date:</u> 10/01/2013										
21	32032021-Plant	1.8	42120 - Planted Jack Pine	Medium Density Sapling	15		Tree Planting	Hand Plant	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Objective is to increase stocking of jack and/or red pine by planting. Use of herbicide as a site prep treatment is an option. Trenching may also be employed. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Follow-up treatment with an appropriate regeneration survey. <u>Proposed Start Date:</u> Unspecified										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	32032024-Plant	5.8	42111 - Planted Red Pine, Mixed Deciduous	Low Density Sapling	18		Tree Planting	Hand Plant	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Objective is to increase tree stocking of jack and/or red pine and diversify the stand. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next Steps:</u> Follow-up treatment with appropriate regeneration survey. <u>Proposed Start Date:</u> Unspecified										

110	32032110-Plant	15.7	4116 - Mixed N. Hardwood - Aspen	Medium Density Sapling	27		Tree Planting	Machine Plant	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Site will be herbicided to prepare for trenching and planting of red pine seedlings. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next Steps:</u> Follow-up planting with appropriate regeneration survey. <u>Proposed Start Date:</u> 10/01/2013										

20	NF_32032020-Plant	2.4	3101 - Poverty Grass, Cladonia				Tree Planting	Hand Plant	42140 - Planted Mixed Pine	Cmpt. Review Proposal
<u>Prescription</u> Hand plant red pine and/or jack pine to fully stock opening and eliminate places for illegal dumpjng. Use of herbicide as a site prep treatment is an option. Trenching may also be employed. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next Steps:</u> Follow-up treatment with an appropriate regeneration survey. <u>Proposed Start Date:</u> Unspecified										

**Total Treatment
Acreage Proposed: 134.0**



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
49	32032049-Cut	35.6	4139 - Aspen, Mixed Deciduous	High Density Pole	77	81-110	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> --Ben Travis : 08/23/2012 comments: A decision to incorporate paper birch, windfirm white spruce and large bigtooth aspen into the retention patches was made at pre-review.</p> <p>Harvest aspen, maple, white birch, spruce and fir. Retention will be met with patch exclusions. If purer patches of maple are found, they should be excluded. Retain white pine. May remove up to 1/2 of red pine. Leave any cedar, hemlock, yellow birch and oak if present.</p> <p><u>Other Comment:</u> Was unable to locate survey monument at NW corner of stand.</p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work instruction 2.1 Reforestation". Aspen, fir, spruce, birch, maple and pine are acceptable regeneration.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p> <p><u>Limiting Factor and No Treatment Reason</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										

52	32032052-Cut	5.4	4112 - Maple, Beech, Cherry Association	High Density Pole	60	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Use individual tree selection marking to reduce residual basal area of stand to between 70 and 90 square feet. Leave some scattered larger aspen. Leave a subset of white birch. Favor oak by not removing unless needed for equipment operability. Leave white pine, red pine, white spruce, cedar, and hemlock. Favor leaving cherry, yellow birch and oak.</p> <p><u>Other Comment:</u></p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Maple, oak, aspen, birch, spruce and pine are acceptable regeneration.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p> <p><u>Limiting Factor and No Treatment Reason</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										

89	32032089-Cut	30.7	4193 - Birch, Aspen	High Density Pole	90	111-140	Harvest	Seed Tree with Reserves	4193 - Birch, Aspen	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Leave scattered white birch for seed purposes. Retain white pine and cedar. May remove up to 50% of red pine if warranted. Use exclusion patches if needed to meet retention requirements. Harvest white birch, maple, aspen, jack pine, spruce and fir. Leave oak, yellow birch and hemlock if present.</p> <p><u>Other Comment:</u> Stand is designated as potential old-growth. Recommend this designation be removed.</p> <p><u>Next Steps:</u> Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". White birch, aspen, fir, spruce, pine and maple are acceptable regeneration.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p> <p><u>Limiting Factor and No Treatment Reason</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
111 32032111-Cut	20.8	4110 - Sugar Maple Association	High Density Pole	65	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal

Prescription Trees will be individually marked in a selection cut to reduce basal area down to a target of between 70 and 90 square feet. Cherry and yellow birch will be left where appropriate. Cedar, oak, hemlock, white spruce and white pine will be retained if present. Aspen will be removed.

Other
Comment:

Next Follow-up treatment with a regeneration survey as outlined in "Work Instruction 2.1 Reforestation". Maple, cherry, birch, spruce, basswood, hemlock and white pine are acceptable regeneration.

Proposed
Start Date: 10/01/2013

Limiting Factor and No 2B: Unknown if access through
Treatment Reason adjacent landowner(s) is possible

Total Treatment
Acreage Proposed: 92.5

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	4130 - Aspen	High Density Sapling	79.6	18	1-50	Stand in transition from sapling to pole stage. Good stocking. Some nice W8 groves. Red oak sawtimber, poletimber and saplings found. White birch poles present. White spruce, red pine, black spruce and white birch saplings located.
2	4133 - Aspen, Mixed Pine	High Density Sapling	34.0	8	1-50	Good aspen stocking. Aspen range from 12 to 16 feet tall. Some W8 patches. Some small embedded wetlands. Residual white pine sawtimber have healthy crowns. White pine saplings present. Infrequent red pine sawtimber and red oak poletimber found.
3	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	3.8	100	51-80	Marsh and tag alder inclusions at east end of stand. Mix of upland knolls and lowland.
4	42340 - Upland Spruce/Fir	High Density Log	43.4	91	111-140	Tall, steep slope divides this stand from one to west. Heavy fir and spruce blowdown. Tag alder along edge of river.
5	4311 - Pine, Aspen Mix	High Density Pole	21.3	40		Aspen range from 12 to 24 feet tall. White pine have healthy, vigorous crowns. Black spruce and red pine are infrequent overstory associates. Fir and white spruce saplings present.
6	4130 - Aspen	High Density Pole	33.8	27	51-80	Stand just transitioning into pole stage. Some areas where saplings outnumber small aspen poles. Good aspen stocking. Some patches of bare rock. Some small patches of W7. White birch, jack pine, white spruce and red pine saplings noted.
7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	142.2	70	81-110	Bigtooth in much better condition than trembling aspen. Nice trunk form to red oak poles and sawtimber. 14 to 26 inch Dbh oak sawlogs. Nice patches of hemlock saplings found to east. Widely scattered hemlock and sugar maple poles found. Black cherry and sugar maple sapling present. Patches of bigtooth aspen with larger average diameters.
9	4319 - Mixed Upland Forest	High Density Pole	35.5	91	51-80	Areas that have higher overstory spruce stocking while other areas have elevated overstory stocking levels of red maple and white birch. fairly steep, long slope above Escanaba River. Infrequent red oak seedlings found.
10	42260 - Natural Pine, Mixed Deciduous	High Density Log	17.8	68	81-110	Some 12 inch Dbh aspen. Aspen and jack pine both in decline with weak crowns and frequent snags. 4 to 6 stick jack pine. Midstoruy of small white pine poles.
12	42260 - Natural Pine, Mixed Deciduous	High Density Pole	6.8	25	51-80	White pine poles and sawtimber are short, limby trees, but with healthy crowns. Aspen are between 16 and 24 feet tall. Many white pine are transitioning from sapling to small pole stage. Larger diameter white pine found to west. Fir and red pine are infrequent overstory associates. White spruce, white pine and white pine saplings present.
13	4133 - Aspen, Mixed Pine	High Density Sapling	12.2	5		Aspen are approximately 14 to 16 feet tall. Excellent aspen stocking levels.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4311 - Pine, Aspen Mix	High Density Sapling	19.9	16		Aspen range from 16 to 20 feet tall. White pine poletimber are short, with rapidly tapering trunks. They have healthy foliage. White spruce saplings also found.
16	4133 - Aspen, Mixed Pine	High Density Sapling	1.1	27		Dense, featured white pine midstory.
17	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	7.8	17		Aspen stocking heavier to the southeast. Some pure aspen clones there. Jack pine is roughly 24 feet tall. Aspen ranges from 24 to 30 feet tall. Stray white pine poles present.
18	42220 - Natural Jack Pine	High Density Log	2.3	84	111-140	Many jack pine snags.
19	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	31.5	26	1-50	Patches of aspen clones, especially towards west edge. Excellent jack pine stocking. Jack pine are around 24 feet tall.
21	42120 - Planted Jack Pine	Medium Density	1.8	15		Short, "cabbage" jack pine. Very little self-pruning with so many holes in stocking. Jack pine ranges from 8 to 12 feet tall. Heavy sedge groundcover.
22	4136 - Aspen, Mixed Conifer	High Density Pole	26.6	32	51-80	1/3 or more of aspen stems are still sapling-sized. Aspen diameters range from 2 to 9 inches Dbh. Stand is fully stocked. Average diameter of aspen becomes lower as you proceed north. Patches of F2 understory. Black cherry and white spruce poles are present. White pine, red pine, white birch and oak saplings found.
23	4130 - Aspen	High Density Sapling	69.9	32		Moderate to good stocking levels. Stand just transitioning into small poletimber. Aspen range from 2 to 5 inches Dbh. White birch saplings present.
24	42111 - Planted Red Pine, Mixed Deciduous	Low Density Sapling	5.8	18		Stand was typed out as an opening last entry period. There are portions of stand that have been planted to jack and red pine in past. Red pine are 12 to 20 feet tall. This is an illegal dumping site. Infrequent red pine poles and sawlogs found. White birch and white pine saplings present.
26	42120 - Planted Jack Pine	High Density Sapling	7.7	17		Jack pine ranges from 16 to 18 feet tall. Good stocking. Infrequent red pine sawtimber/poles, white pine poles and red maple poles found. Red maple saplings, red pine saplings and black cherry saplings present.
27	4319 - Mixed Upland Forest	Low Density Sapling	3.3	5		The northwest portion of stand supports 10 to 16 foot tall jack pine saplings. Red maple stump sprouts are approximately 10 feet tall. Black cherry and white pine saplings present.
28	4130 - Aspen	Low Density Pole	1.9	68		Sparse overstory in many places. Feature stand is the white pine midstory. Red pine saplings present.
29	4311 - Pine, Aspen Mix	High Density Log	3.9	68	51-80	Jack pine is declining and there are numerous snags. Aspen likewise is overmature and ranges from 10 to 16 inches Dbh. Found some white spruce saplings.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	42120 - Planted Jack Pine	High Density Sapling	5.3	16		Jack pine ranges from 18 to 24 feet tall. Dense stocking. Trembling aspen and white pine poles present. Red maple and white pine saplings found.
32	42290 - Natural Mixed Pine	High Density Log	1.0	99	111-140	Jack pine is in serious decline. Most of the aspen and fir have fallen down.
33	4311 - Pine, Aspen Mix	High Density Log	2.0	99	81-110	Most aspen and birch are snags. Feature stand is the high quality white pine mid-story and white pine supercanopy trees. Red oak saplings present.
34	4319 - Mixed Upland Forest	High Density Log	3.6	68	141-170	Treatment was delayed last entry period for age/size class diversity. Jack pine and aspen snags common. Sparse foliage on jack pine crowns. Red pine saplings present.
35	4130 - Aspen	High Density Log	25.3	79	81-110	Aspen is overmature and in decline. Many snags and deadfalls. Some fresh windthrow of aspen as well. Jack pine is also very advanced in age/condition. Many jack pines have sparse foliage and there are numerous snags present. Terrain becomes more rugged with rock outcroppings to north. Aspen is mainly 4 and 5 stick in height. Jack pine is 5 and 6 stick in height. More overstory oak and white birch to the north. The DNR survey monument and BTs at the NW corner of this 40 were located. Black spruce, fir and white pine are minor overstory associates. Fir and black spruce saplings found.
36	42220 - Natural Jack Pine	High Density Log	4.4	80	141-170	Red maple, black cherry and white birch poles are present. White birch saplings found. Jack pine averages 5 sticks in height.
39	429 - Mixed Upland Conifers	High Density Pole	6.4	70	111-140	Exposed bedrock found to south portion of stand. More black spruce and tamarack found to north as site grades down to lowlands. Oak saplings found.
40	4113 - R.Maple, Conifer	High Density Sapling	0.6	30		Fringe of mature jack pine along wetland to west. Red maple is approximately 30 feet tall. Black cherry and white spruce saplings present.
41	4191 - Mixed Upland Deciduous with Conifer	Low Density Pole	1.6	45		
42	42220 - Natural Jack Pine	High Density Log	5.2	89	141-170	Patches of exposed bedrock. Jack pine snags common. Green creek corridor. 4 and 5 stick jack pine with diameters up to 16 inches Dbh. Scattered small white pine poles present. Fir, white pine and jack pine saplings found.
44	42120 - Planted Jack Pine	High Density Sapling	36.3	16		Jack pine planted in 1996. Jack pine ranges from 12 to 18 feet tall. Good stocking. Occasional white pine poles.
45	4319 - Mixed Upland Forest	High Density Sapling	27.4	5		Jack pine are between 3 and 4 feet tall. Good even distribution of jack pine saplings across site - stand will be fully stocked. Aspen found mainly to west end of stand. Aspen is 8 to 10 feet tall.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	42220 - Natural Jack Pine	Medium Density Log	3.4	89	81-110	Hills and bedrock near Green creek. Jack pine with advanced mortality rates. 50% to 75% of overstory has died in some areas. Jack pine diameters range from 12 to 18 inch Dbh. White birch, fir, trembling aspen and bigtooth aspen are infrequent overstory associates.
47	6122 - Black Spruce	High Density Pole	2.0	73	81-110	Spruce crowns are healthy. Small patch of mature jack pine near creek. Some overstory black spruce are up to 10 inches Dbh.
48	4130 - Aspen	High Density Sapling	19.0	5		Good to adequate stocking levels. Aspen ranges from 16 to 20 feet tall. White pine ranges from 16 to 32 feet tall.
49	4139 - Aspen, Mixed Deciduous	High Density Pole	35.6	77	81-110	Treatment of this stand was delayed last entry period for age/size class diversity. Numerous aspen snags and deadfall in certain clones. Aspen is overmature. Aspen ranges between 4 and 5 stick, with diameters up to 16 inch Dbh. Infrequent supercanopy red pine. White spruce and black spruce are uncommon overstory associates.
50	4130 - Aspen	High Density Sapling	1.1	16		Aspen range from 20 to 26 feet tall. Stand in topographic depression. Good stocking. Infrequent white pine poles. Jack pine, white spruce and white pine saplings present.
51	42220 - Natural Jack Pine	High Density Log	3.8	82	111-140	Jack pine snags are common. Weak jack pine crowns. Some 16 inch Dbh jack pine. Stand lies on long SW facing slope with some steeper micro-terrain. Red maple poles and white pine saplings present.
52	4112 - Maple, Beech, Cherry Association	High Density Pole	5.4	60	111-140	Dense sugar maple regeneration less than 1 foot tall. Leatherwood in stand. Nice timber management potential. Yellow birch, black cherry and white pine are uncommon overstory associates. Aspen in serious decline.
53	4132 - Aspen, Jack Pine	High Density Sapling	26.3	15		Aspen are 20 to 24 feet tall. Jack pine are 18 to 20 feet tall. Adequate stocking. Occasional white birch poles, white birch saplings and black cherry saplings.
54	4130 - Aspen	High Density Sapling	18.2	6		Aspen stocking levels are good. Aspen ranges from 12 to 16 feet tall. Red oak, black spruce and white birch saplings present.
56	4311 - Pine, Aspen Mix	High Density Sapling	8.3	16		White pine crowns healthy. Red oak saplings present.
57	42200 - Natural White Pine	High Density Log	6.5	120	81-110	White pine saplings present. Black cherry poles found. Less white pine in overstory to west.
58	4133 - Aspen, Mixed Pine	High Density Sapling	32.9	5		Patches of thicker white pine saplings and small poles. Stocking good to adequate. Aspen are around 16 feet tall.
60	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	31.9	79	51-80	Site is long south-facing slope. patches of pure F3 20 to 24 feet tall. Aspen found on upper slope. Black cherry poles present.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	6122 - Black Spruce	High Density Pole	9.2	93	111-140	Black spruce range from 3 to 6 stick tall. Tamarack range from 4 to 6 stick tall. Canopies are healthy.
62	4130 - Aspen	High Density Sapling	43.5	11		Very mixed species composition. Good aspen stocking levels. Aspen range from 16 to 30 feet tall. Small included treed bogs. Scattered patches of W8. Black cherry, fir and red pine saplings found.
64	42200 - Natural White Pine	Medium Density Log	3.6	150	51-80	White pine and white birch saplings found. Scattered red pine in overstory.
66	42200 - Natural White Pine	High Density Log	1.3	150	111-140	Trembling aspen and black spruce poles are present.
67	4134 - Aspen, Spruce/Fir	High Density Sapling	31.1	15		Very mixed species composition in overstory. Dense stocking. Residual white pine form a seed tree distribution. Purer aspen regeneration to east with heavier hazel understory. Aspen is approximately 30 feet tall. Patch of dense J3 12 to 16 feet tall along east side of stand. Black spruce, red maple and black cherry saplings present. Black spruce poles and red pine sawtimber are uncommon.
68	4319 - Mixed Upland Forest	High Density Pole	6.4	79	81-110	Aspen past rotation with fading crowns and snags. Gaps in stocking from mortality. White birch poles present. White pine saplings found.
70	42220 - Natural Jack Pine	High Density Log	6.0	70	141-170	Jack pine snags common. Jack pine averages 5 sticks.
71	42290 - Natural Mixed Pine	High Density Log	22.9	77	111-140	Old powerline ROW along west edge of stand. Will make a good access road. Jack pine is 4 to 6 stick tall. Jack pine snags and deadfall common. Also spruce and fir deadfall. Pine is heaviest in south and stand contains more aspen and birch to the north. Aspen averages 4 stick tall. Some upland fir/spruce patches. Infrequent red pine sawtimber. White pine, black cherry and white birch saplings present.
73	429 - Mixed Upland Conifers	High Density Log	5.3	120		
74	4130 - Aspen	High Density Sapling	39.5	6		Some small tag alder pockets within stand. Aspen ranges from 14 to 18 feet tall. Very diverse species mix in overstory. Mosaic of patch types due to different residual overstory left after harvest. White birch, tamarack, bigtooth aspen and black spruce poles present. White birch and white spruce saplings found.
75	6122 - Black Spruce	Low Density Sapling	90.5	102		Stand could be considered a treed bog in many areas. Cedar component is located along the south edge of stand. Some scattered small patches of black spruce covertime with larger trees. Cedar regeneration is very healthy and vigorous. Infrequent white pine and red pine sawtimber.
76	42200 - Natural White Pine	High Density Log	5.2	110		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
77	6122 - Black Spruce	High Density Pole	0.7	61	111-140	Deep Sphagnum mat. Black spruce have healthy, full crowns. Scattered 10 inch Dbh black spruce.
78	429 - Mixed Upland Conifers	High Density Pole	13.9	40	81-110	Stand includes steep, rocky face along east side. Scenic views from top of cliffs. Jack pine poles uncommon. White pine saplings present.
79	4136 - Aspen, Mixed Conifer	High Density Sapling	4.3	11		Pocket of residual red pine sawlogs to west of road. Aspen are from 16 to 24 feet tall. Highly scattered residual white pine sawlogs throughout stand. Scarce black spruce poles located. Found tamarack, black cherry, white birch, red pine and white pine saplings.
80	6120 - Lowland Cedar	High Density Pole	24.1	102	111-140	Overall health of overstory trees is very good. Vigorous, healthy cedar regeneration. Some open patches. Occasional red maple saplings and white pine sawtimber.
82	6129 - Mixed Coniferous Lowland Forest	High Density Pole	6.7	80	111-140	Stand borders Mud Lake. Cedar regeneration along shore of Mud Lake, 12 feet tall. Standing water in places. Open patches to canopy. Mosaic of cedar, spruce and tamarack patches. Cedar have sparse crowns away from lake. Some black ash saplings.
83	4319 - Mixed Upland Forest	High Density Pole	13.8	84	111-140	Treatment was deferred last entry for age/size class diversity. White pine crowns healthy. Black spruce contain between 5 and 6 sticks. Scattered red oak sawtimber found to north part of stand. Aspen contain between 4 and 5 sticks. White pine sawtimber have an even distribution across site. Black cherry, white birch and red oak saplings present.
84	4199 - Other Mixed Upland Deciduous	High Density Pole	61.2	82	111-140	Very steep, rocky slopes along west and east sides of stand. White pine sawtimber is well-distributed through stand. Center of stand trends towards aspen. Red oak saplings present. Single and multi-trunked red oak up to 18 inches Dbh. Hemlock and fir poles present. Bigtooth aspen still vigorous.
85	4123 - Red Oak	High Density Log	15.4	98	111-140	Stand extends into compartment to the west. Ridge. Single trunk and multi-trunked red oaks. Excellent timber quality. A component of 24 inch Dbh red oak. Small area with a M2 understory (red maple sprouts) east of two-track. White birch poles, white spruce poles and white pine sawtimber are present. Some oak saplings found.
87	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	21.4	69		Very poorly drained area. Moderately healthy cedar crowns. 2/3 of cedar boles have good form. Infrequent white pine and white birch in overstory.
89	4193 - Birch, Aspen	High Density Pole	30.7	90	111-140	All canopy species are over-mature. High percentage of white birch snags. White birch have nice form and range from 3 to 4 sticks in height. Some 18 inch Dbh bigtooth aspen. Cedar, black spruce and jack pine poles present. Pines are more frequent on ridgetops.
91	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	1.3	82	111-140	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
93	6122 - Black Spruce	High Density Pole	8.0	55	81-110	Black spruce range from 5 to 8 inches Dbh. Frequent black spruce small poles/large saplings. Spruce crowns healthy. Some gaps in stocking.
94	6122 - Black Spruce	High Density Pole	3.5	85	111-140	Spruce ranges between 3 and 6 sticks. Moderate frequency of blowdown. Black spruce range from 8 to 12 inches Dbh. Tamarack range from 10 to 16 inches Dbh. White birch and black cherry are infrequent overstory associates. Site seems to have as much upland as lowland areas. Spruce trees are beginning to show signs of insect problems with sap streamers and woodpecker excavations at the bases of some trunks.
95	4311 - Pine, Aspen Mix	High Density Sapling	37.1	7	1-50	Patchy distribution to white pine. Scarce red oak and red pine sawtimber, red oak and red pine poles and cedar poles. Jack pine, black cherry and black spruce saplings found. Aspen are about 16 feet tall.
97	42200 - Natural White Pine	High Density Log	8.6	96	111-140	
98	42140 - Planted Mixed Pine	High Density Sapling	0.8	23		Alternating rows of jack and red pine. Jack pine have poor form. Red pine have moderately good form with some crook. Bottom whorl of branches on red pine are just beginning to die. Infrequent red oak saplings found. Pine range from 16 to 24 feet tall.
99	42140 - Planted Mixed Pine	High Density Sapling	7.1	23		Alternating rows of red and jack pine. Plantation is fully stocked. Red pine branches with red needles up to 1/2 tree heights. Pine are 16 to 20 feet tall. Pines are shorter to the east and average 12 feet tall.
100	42200 - Natural White Pine	Medium Density Log	3.9	85	1-50	Some nice patches of 6 to 12 foot tall white pine saplings. Pine overstory has shelterwood spacing. Aspen, red pine and red maple saplings found.
101	42140 - Planted Mixed Pine	High Density Sapling	3.5	23		Alternating rows of jack and red pine. Plantation fully stocked. Jack pine have poor form. Red pine have good form. Bottom four feet of red pine boles have dead branches. Pine range from 16 to 24 feet tall.
102	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	39.6	69	1-50	Frequent standing water. Non-productive site due to saturated and flooded soils. Cedar is more frequent to the south. Cedar have healthy crowns. Cedar saplings found along edge of powerline corrior and range from 5 to 10 feet tall.
103	4112 - Maple, Beech, Cherry Association	High Density Pole	1.1	60	51-80	
104	42200 - Natural White Pine	Medium Density Log	1.6	100		Sparse red pine in overstory. White pine saplings found.
105	6122 - Black Spruce	High Density Pole	11.9	70	81-110	Some patches of cedar. Stand is mainly lowland with some small upland areas.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
106	42340 - Upland Spruce/Fir	Low Density Sapling	13.0	5		Jack pine are from 2 to 4 feet tall. Black spruce are from 3 to 4 feet tall. Aspen are 10 feet tall. Scattered black cherry saplings. Infrequent white pine poles.
107	42320 - Upland Spruce	High Density Pole	1.8	85	81-110	4 and 5 stick spruce. Some mortality in spruce and fir. Occasional cedar, trembling aspen and white birch in overstory. Stand extends onto private to the south. The private land was recently cut.
108	4130 - Aspen	High Density Pole	9.0	32	1-50	Some three stick aspen. Aspen diameters range from 3 to 9 inches Dbh. Adequate stocking. Some patches of elevated mortality, but overall stocking still OK. Many boulders in stand.
109	42340 - Upland Spruce/Fir	High Density Pole	5.9	47		Heavy mortality of fir. Some white spruce poles present.
110	4116 - Mixed N. Hardwood - Aspen	Medium Density	28.9	27		Large patches are upland brush dominated by cherry saplings. Many boulders. Aspen stocking increases to north. Isolated clones of aspen poles and saplings.
111	4110 - Sugar Maple Association	High Density Pole	20.8	65	111-140	Many boulders in stand. Good sawlog potential in first 16 feet of many sugar maple boles. Very infrequent hemlock poles.
113	6122 - Black Spruce	Medium Density Pole	11.1	95		Sporadic cedar in overstory.
114	4134 - Aspen, Spruce/Fir	High Density Sapling	7.6	23		Infrequent red oak saplings.
115	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	76.7	15		Diverse regeneration present. Many rock formations. Nice range of oak in all strata - saplings, small poles, poles and log classes. Particularly nice component of 1/2 and 1 stick tall red oak. Patches of W5/O5. Infrequent white pine sawtimber and white birch poles found.
116	42120 - Planted Jack Pine	High Density Sapling	39.0	17		Very good stocking. Jack pine are between 20 and 24 feet tall. Red and white pine saplings present. Residual red pine sawtimber, white pine sawtimber and white pine poletimber.
117	4130 - Aspen	High Density Sapling	40.2	12		Adequate stocking. Aspen is approximately 24 feet tall. Widely scattered white pine sawtimber. White pine saplings growing along disturbed edges of road. Red pine saplings found.
118	6120 - Lowland Cedar	High Density Pole	7.8	107	171-200	Cedar range from 2 to 10 inches Dbh. Good form to cedar boles. Scarce white pine in overstory.
119	42120 - Planted Jack Pine	High Density Pole	34.9	23	51-80	Full, consistent stocking as some large sapling jack pine in every plot besides the poletimber. Perhaps 1/3 of total jack pine stems are still in the sapling stage. Dead branches on bottom 50% of jack pine boles. Jack pine range from 3 to 7 inches Dbh. Jack pine are from 32 to 40 feet tall. Patches of aspen. Black cherry, white pine and red pine saplings found.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
120	42140 - Planted Mixed Pine	High Density Sapling	1.5	23		Alternate rows of red and jack pine. Trees are between 16 and 20 feet tall. Plantation fully stocked. Poor form to jack pine, good form to red pine.
121	4139 - Aspen, Mixed Deciduous	High Density Pole	13.5	34	51-80	Sparse red oak sawtimber. white pine saplings found.
122	42110 - Planted Red Pine	High Density Log	13.0	83	141-170	3 to 5 log trees - high quality sawlogs. Infrequent white birch poles. Illegal box blind and shooting lanes in stand.
123	42290 - Natural Mixed Pine	High Density Log	15.7	150	51-80	Pine crowns are healthy. Pines comprise a supercanopy. Very vigorous, high quality aspen saplings. Black cherry and red oak saplings found.
124	6122 - Black Spruce	Medium Density Pole	3.0	60		Overall, spruce contain 2 sticks. Crowns healthy on spruce.
125	429 - Mixed Upland Conifers	High Density Sapling	46.9	12		Patches of nice white pine regeneration 6 to 10 feet tall. Good stocking. Aspen 24 to 30 feet tall. White pine sawlogs present.
126	429 - Mixed Upland Conifers	High Density Pole	5.0	77	141-170	Off-site trembling aspen of lower timber quality (2 to 3 sticks). Bigtooth is in better condition. 5 to 6 stick tall jack pine with sparse foliage. Jack pine past rotation with snags present. Site is a mix of aspen clones and jack pine patches. Black spruce and white birch poles found. Black spruce, red oak, red maple and white pine saplings present.
127	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	15.7	45	81-110	Very steep hills with cliffs. Overstory hemlock and yellow birch present. Red pine saplings present.
128	4133 - Aspen, Mixed Pine	High Density Sapling	8.3	6		Infrequent hemlock sawtimber and cedar poles.
129	42221 - Natural Jack Pine, Mixed Deciduous	Medium Density	4.9	6		Jack pine saplings are about 3 foot tall on average. Aspen range from 8 to 10 feet tall. Scattered white pine poles. White pine, red maple, black spruce and fir saplings present.
131	42110 - Planted Red Pine	High Density Sapling	14.0	15		Very good stocking. Red pine range from 18 to 20 feet tall. Infrequent red oak poles found. Some red pine sawtimber, white pine poles, trembling aspen poles and trembling aspen saplings. Scotch pine is mixed in throughout the plantation.
132	4130 - Aspen	High Density Sapling	5.4	6		Aspen range from 6 to 10 feet tall. Stocking levels are moderate to good. Black cherry and red oak saplings present.
133	42290 - Natural Mixed Pine	Low Density Pole	2.9	76	51-80	Fir and black spruce saplings present. Aspen understory is approximately 12 feet tall.
135	42120 - Planted Jack Pine	High Density Sapling	15.0	15		Good jack pine stocking. Jack pine range from 12 to 18 feet tall. Found residual red oak sawtimber. Red maple saplings found.

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Gwinn Mgt. Unit

5 – Forested Stands

Compartment: 032

Year of Entry: 2014



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
136	42110 - Planted Red Pine	High Density Pole	3.7	74	81-110	Infrequent black cherry poles. 4 stick red pine.
137	4136 - Aspen, Mixed Conifer	High Density Pole	15.2	67	81-110	Aspen snags common. Stand was held last entry for age/size class diversity.
139	42110 - Planted Red Pine	High Density Pole	1.9	74		Thicker aspen understory to east, with some good gaps in canopy. Occasional trembling aspen, red maple, white birch and oak found in overstory. Red maple and white pine saplings present.
140	4199 - Other Mixed Upland Deciduous	Medium Density Pole	26.4	80	1-50	Boulders and exposed bedrock. Hilly site. Very steep ridges. Heavier oak overstory stocking to east. Nice form to most oak boles. Scattered small groves of hemlock sawtimber. Higher aspen sapling density as you proceed south. White pine saplings present.
141	42120 - Planted Jack Pine	High Density Sapling	5.2	15		Jack pine planted in 1997. Jack pine range from 16 to 20 feet tall. Good stocking levels. Occasional red pine sawtimber found. Sparse red oak saplings.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
8	50 - Water	12.4	No	Unspecified	Middle Branch of Escanaba River.
11	3201 - Sweet Fern	1.5	No	Unspecified	5 to 10 foot tall white pine saplings encroaching. Stand is approximately 60% open. Black cherry, jack pine and fir saplings present.
15	3102 - Grass	12.9	No	Unspecified	Powerline ROW.
20	3101 - Poverty Grass, Cladonia	2.4	Planted	Medium (NonForested)	Illegal dumping going on. Scattered jack pine, trembling aspen and black cherry saplings found.
25	50 - Water	2.7	No	Unspecified	Old sand/gravel pit that holds water for most of year. Fairly steep slopes down to water's edge.
30	11 - Low Intensity Urban	4.1	No	Unspecified	M-35 corridor.
37	3104 - Degraded	1.5	No	Unspecified	Site has been utilized by adjacent landowner as a backyard.
38	6233 - Wet Meadow	7.1	No	Unspecified	Sedge are the predominant cover. Several old beaver ponds. Some patches of leatherleaf and tag alder. Areas of flooded snags. Fringe of black spruce and tamarack saplings. Did not locate a flowage or stream.
43	6220 - Alder/willow	9.7	No	Unspecified	Predominantly willow with some interspersed marsh grass. Green Creek riparian zone.
55	6224 - Treed Bog	1.0	No	Unspecified	White pine and black spruce saplings predominate. Some tamarack saplings. Black spruce poles present.
59	11 - Low Intensity Urban	3.2	No	Unspecified	Crooked Lake Road corridor.
63	6220 - Alder/willow	25.3	No	Unspecified	Green Creek riparian corridor.
65	6224 - Treed Bog	15.4	No	Unspecified	Very sparse black spruce, tamarack, jack pine and white pine saplings. Leatherleaf. Fringe of black spruce poles and white pine sawtimber.
69	50 - Water	1.2	No	Unspecified	Bog pond.
72	3201 - Sweet Fern	2.2	N/A	Unspecified	Sparse grass and moss in patches. Site is covered with about 95% sweetfern. Scarce white pine saplings - 3 to 5 feet tall. Some red pine saplings. Few white pine sawlogs.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
81	50 - Water	6.4	N/A	Unspecified	Mud Lake.
86	6230 - Cattail	2.8	Yes	Unspecified	Powerline right-of-way. Ponds of water present.
88	6220 - Alder/willow	1.5	No	Unspecified	Stream floodplain.
90	50 - Water	0.4	No	Unspecified	Mud Lake.
92	6220 - Alder/willow	7.2	No	Unspecified	Stream floodplain and powerline ROW.
96	11 - Low Intensity Urban	3.6	No	Unspecified	M-35 ROW.
112	3105 - Mixed Upland Herbaceous	5.7	Yes	Unspecified	Powerline right-of-way.
130	3201 - Sweet Fern	1.6	No	Unspecified	Powerline ROW.
134	11 - Low Intensity Urban	1.8	No	Unspecified	Co Rd 557
138	3201 - Sweet Fern	3.6	N/A	Unspecified	Jack pine saplings found around outer 1/3 of stand. These saplings are around 10 to 12 feet tall. Isolated red pine sawlogs and oak poles located. Trembling aspen, white pine and red pine saplings present.



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	32032_20	2.4	
multiple - see	Unique Site - SCA	32032_SCA	9.8	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA1	8.9	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA10	39.0	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA11	29.4	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA12	26.8	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA13	15.7	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA14	17.6	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA15	3.2	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA17	7.4	RAU added SCA. Riparian and wildlife corridors.
multiple - see	Unique Site - SCA	32032_SCA2	10.7	RAU added SCA. Riparian and wildlife corridors.
multiple - see	Unique Site - SCA	32032_SCA20	17.1	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA21	8.6	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA3	67.3	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA4	20.3	RAU added SCA. Riparian and wildlife corridors.
multiple - see	Unique Site - SCA	32032_SCA5	13.9	



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	SCA Removal	32032_SCA6	141.0	RAU added SCA. Riparian and wildlife corridors.
multiple - see	Unique Site - SCA	32032_SCA7	65.1	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA8	10.2	RAU added SCA. Riparian and wildlife corridors.
multiple - see	SCA Removal	32032_SCA9	26.3	RAU added SCA. Riparian and wildlife corridors.



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.