



FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION

COMPARTMENT 55 ENTRY YEAR: 2014

Compartment Acreage: 1276 County: Gladwin

Revision Dates: Draft 6-20-12. Former Drafts: 5-26-12

Stand Examiner: Mark Reichel

Legal Description: T18N, R1E, Sec. 3, 9, 10; T19N R1E Sec. 33, 34

Timber Management and Cover Type Change: None of the aspen in this compartment was over 39 years of age. Several aspen stands were good candidates for early harvest to regulate aspen in Gladwin Management Unit, but these stands would put on a lot of volume in the next ten years, and there were better choices in other compartments. Thus only one small aspen/mixed deciduous stand will receive a seed tree harvest. 64 acres of mixed upland deciduous forest will receive selection or shelterwood harvests. 20 acres of oak will also receive shelterwood harvests, for a total of 105 acres treated this year of entry. Since the last inventory, aspen cover decreased by about 130 acres because a large stand in the northeast did not regenerate to aspen; it typed out as either oak or non-forested lowland types. For the same reason oak cover increased by about 30 acres and non-forested lowland cover types increased by 80 acres. 150 acres, including at least 50 acres of lowland hardwoods, was reclassified as mixed upland deciduous forest. Non red pine conifer cover increased by about 30 acres due to IFMAP cover types (vs. OI) and the “comeback” of white pine.

Soil and Topography and Habitat Types: This compartment lies just to the East of Smallwood Lake, formed by damming the Tittabawassee River. A low, broad aspen and oak ridge runs North-South through the middle of the entire compartment. A broad swamp hardwood drainage system with multiple channels runs along the entire West side of the compartment West of the ridge, draining South into the Tittabawassee River South of the compartment. The East side of the compartment is the edge of a large non-forested wetland area that drains East into Black Creek then South to the Tittabawassee. The Kotar habitat type for the majority of the central uplands in this compartment is PArVVb/AFO, which is some of the most mesic and relatively nutrient rich soils on state forest lands in Gladwin county. Soils are sandy loams or loamy sands that support red oak, red maple, aspen, white pine and northern hardwood forest. There are only traces of northern hardwood species in this compartment. This area has the potential to produce quality red oak. The western edge of this upland where it grades into the lowland system is PArVVb. The drainage system on the West side is unclassified lowlands, as is the wet areas in the Northeast part of the compartment. Roughly 275 acres in the north central part of the compartment and the eastern edge of section 3 are Kotar PArVCo habitat type, which consists of poorly drained and nutrient poor soils that also support red maple, white pine, oak and aspen, but with lower SI's. These are very good sites for red pine, and are at risk for getting “swamped” if clearcut.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is at the western edge of the large block of state land in eastern Gladwin County, and is surrounded by private land except for 1 ¼ miles along the Northeast edge. The western edge is close to Smallwood Lake and the homes along it; especially the Southwestern edge which borders the Wooden Shoe Village/White Star community. There are four private parcels South of the compartment, with only a few homes and

structures. There are nine private parcels along the north border; the homes on these parcels are along Ridge Rd.

Unique, Natural Features: According to the Michigan Natural Features inventory database and GDSE element occurrences layer, there have been no documented occurrences of threatened or endangered species in this compartment, nor were any discovered during inventory fieldwork. There is a bald eagle occurrence about 2/3 of a mile to the Northwest, on Smallwood Lake. There is also potential for eastern massasauga rattlesnake and Blanding's turtle in lowland brush, bog and marsh cover types in this compartment.

Archeological, Historical, and Cultural Features: The HAL database did not indicate any concerns in this compartment.

Special Management Designations or Considerations: There are currently no SCA's, ERA's, HCVA's or any other biodiversity stewardship areas or other special designations in this compartment.

Wildlife Habitat Considerations: This compartment contains the old Hay Township dump site which is regulated by a Directors Order restricting access during certain periods of time throughout the year. Both upland and lowland systems are present, making it suitable for a number of wildlife species. This area is heavily utilized by out-of-county grouse and woodcock hunters and remains a very popular location for archers and firearm deer hunters. Game species likely to be present in this compartment include black bear, bobcat, raccoon, coyote, wild turkey, ruffed grouse and white-tailed deer. Many bird species stand to benefit from the juxtaposition of lowland and upland habitats present in the compartment. These species include gray catbird, redbreasted vireo, white-breasted nuthatch, tufted titmouse, black-capped chickadees, eastern kingbirds and northern flicker. The compartment is easily accessible to hunters via M-61.

Fisheries Considerations: This compartment lies within the Tittabawassee River watershed. In this area, the fishery is warm water. Special concerns are primarily to guard against sedimentation.

Mineral Considerations: Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw Formation is used for clay/shale in other areas of the State. This area is predominantly sand, and gravel potential in the compartment is considered limited. Very little oil and gas exploration has occurred in this area. North Buckeye Field is located just to the west. The field, discovered in 1936, has produced over 21 MBO from the Devonian Dundee Formation. Most of the Compartment is leased for oil and gas exploration and parts of Sections 34 & 35 are nominated for the May 2012 auction.

Vehicle Access: The upland running the length of the compartment from South to North is adequately served by one main road originating off M-61, although it has a few nearly impassable holes. The road is gated (WLD) at M-61 and is closed by a director's order except during hunting season, due to continued trash dumping in the old Hay Township landfill. The road turns West at the North edge of the compartment and runs through private land (county easement), but the road is impassable. One other good dirt road runs East from the center of the compartment, and there are a few other short two tracks coming off the main road. Two of these, at the North end, were bermed after the last timber sale.

Survey Needs: There are no immediate needs for a survey to implement the timber sales proposed for this year of entry. But at least 12 monuments are needed to establish monuments for the entire compartment.

Recreational Facilities and Opportunities: The compartment is mainly used for deer and grouse hunting. The roughly 30 acre parcel in section 33 that borders Smallwood Lake has potential as a boat ramp. Parks Division assessed the site since the last inventory and did not pursue development of the site.

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	89	12	112	142	0	0	0	0	10	0	0	0	0	0	364
Bare/Sparsely Vegetated	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Bog	37	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Herbaceous Openland	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Low-Density Trees	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Aspen/Balsam Poplar	0	0	75	0	0	0	0	0	0	0	0	0	0	0	75
Lowland Conifers	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Lowland Deciduous	0	10	5	0	0	0	112	97	0	0	0	0	0	0	225
Lowland Mixed Forest	0	0	0	0	0	0	0	8	0	0	0	0	0	7	14
Lowland Shrub	72	0	0	0	0	0	0	0	0	0	0	0	0	0	72
Marsh	52	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Mixed Upland Deciduous	0	0	0	7	0	0	14	6	51	0	0	0	0	8	86
Natural Mixed Pines	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Northern Hardwood	0	0	0	0	21	0	10	0	0	0	0	0	0	0	31
Oak	0	37	30	0	0	0	78	0	21	0	0	0	0	0	167
Red Pine	0	0	0	0	0	30	0	0	0	0	0	0	0	0	30
Sand, Soil	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Treed Bog	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Upland Mixed Forest	0	0	0	0	0	0	13	10	2	0	0	0	0	0	25
Upland Shrub	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Urban	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
White Pine	0	0	0	0	0	0	11	0	0	0	0	0	0	4	14
Total	329	59	222	149	21	30	243	121	84	0	0	0	0	18	1276



Table 2 – Proposed Treatment Summaries

Gladwin Mgt. Unit
Year of Entry 2014

Compartment 055
Total Compartment Acres: 1276

Acres by Treatment Type

Commercial Harvest - 96	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	0	0	10	0	0	0	0	10
Mixed Upland Deciduous	0	42	0	14	0	0	0	55
Oak	0	0	0	21	0	0	0	21
White Pine	0	0	0	10	0	0	0	10
Total	0	42	10	45	0	0	0	96



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
5	73055005-ShW	5.8	4199 - Other Mixed Upland Deciduous	Medium Density Log	75	111-140	Harvest	Shelterwood	4121 - Oak, Aspen	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Shelterwood to regen oak. Remove all aspen and maple by spec. Mark additional O and W with orange paint for removal to reach residual BA of 60.</p> <p><u>Other Comments:</u> Some good quality red oak. Ave BA 118. Use old landing @ N end with loop turnaround. Found: 1 witness tree on E side of Lakeshore Dr. at NE corner of stand, along with blue DNR carsonite "witness post" and one witness tree on W side of Lakeshore. Found: DNR monument and witness trees at NW corner of stand 5 to west, adjacent to Secord Lake. Also still blue marked trees along north end of stand 10 to west from harvest in '08.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
31	73055031-ShW	7.7	4191 - Mixed Upland Deciduous with Conifer	High Density Log	76		Harvest	Shelterwood	4122 - Oak, Pine	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Shelterwood harvest with MO of mixed stand of oak, white pine and other hardwoods. Remove all maple and aspen using contract specification; in addition mark X log sized white pine and oak (under 18" diam.) to reach a residual BA of 60. Remove about 2/3 of merchantable white pine volume for a residual white pine BA of roughly 10. Remove roughly 1/5 of oak, leaving the better quality hybrid oak, for a residual oak BA of about 43. Mark for logability and use regen protection spec to protect as much pole and sap sized pine and oak as possible, but some understory will have to be cut. There is good advanced regen starting to be suppressed; harvest will release this. Leave the scattered cherry and birch for biodiversity.</p> <p><u>Other Comments:</u> Age method coded as uneven aged because objective is to retain some supercanopy oak and white pine as well as poles, saps and seedlings. Shelterwood will release advanced regen and create new age class as well. Aspen is getting decadent: some mortality. Somewhat mesic upland with occasional hummocks. Not much more than 30% of canopy is log sized trees. Only places for landing are small clearing west of main road 100 yards NE of stand, or old loop turnaround off main road E of stand. Otherwise there are no clearings near stand and would either have to shortwood or clear a landing. North end seems a little poorer, sparser site; the supercanopy white pine in this area is a little branchy. In some areas vigor of oak in canopy is a little poor. Tr of B, F in canopy.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
58	73055058-Sel	41.5	4199 - Other Mixed Upland Deciduous	High Density Log	86		Harvest	Single Tree Selection	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<p><u>Prescription Specs:</u> Single tree selection: Harvest all aspen and ash by spec; mark additional red maple with orange to reach residual BA of 60. Leave all oak, birch, white pine and cedar. O.k. to make some 50 to 100 ft regen holes. Mark for logability. If possible expand treatment into E types to the west to salvage ash. No openings in area that can be used as landings. Use two landings, shared with stands 31 and 68. Improve loop road in stand 75 to south for access; determined at pre review that landing will be put in cutting unit, which will entail building short length of road North from loop to the South.</p> <p><u>Other Comments:</u> MO: Uneven aged upland oak/pine/maple/aspen. Increase oak and maintain aspen in stand. Southernmost 5 ac may be too wet: exclude from prescription. Northern 2/3 has much heavier white pine and balsam fir. Northern 1/5 gets wetter and is hummocky with heavy red maple saps and fir seedlings. Long, moderately narrow low area runs about 40% of length of stand near SW edge. 5-10% lowland, including drainages that would have to be armored to cross. Trace of BA (canopy); TA, C, BB (sub)</p> <p><u>Next Steps:</u></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
61	73055061- ShW_N	6.8	4125 - Black, N. Pin Oak	High Density Log	80	51-80	Harvest	Shelterwood	4125 - Black, N. Pin Oak	Cmpt. Review Proposal
<p><u>Prescription</u> Shelterwood: Remove all aspen and red maple by specification and mark additional 9 BA of poorer quality canopy oak to reach residual BA of <u>Specs:</u> 60. MO = O/M/BTA. Use landing for treatment to south.</p> <p><u>Other</u> BA is 90. Oak has lower ave diameter than southern treatment, and limited advanced regeneration (most of regen is suppressed oak saplings or <u>Comments:</u> offsite red maple). The oak in this stand is black/red hybrid and has fairly good stem quality. This northern treatment and western 1/2 of the southern treatment is on a very good Kotar PARVvb/AFO site. Trace of paper birch, American beech and quaking aspen in canopy, white pine in subcanopy.</p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										
61	73055061- ShW_S	14.3	4125 - Black, N. Pin Oak	High Density Log	80	51-80	Harvest	Shelterwood	4125 - Black, N. Pin Oak	Cmpt. Review Proposal
<p><u>Prescription</u> Shelterwood: Reduce BA to 50. Cut all red maple and chokecherry (which is merchantable) by spec., plus remove 10 BA of large, mature oak <u>Specs:</u> (mark for removal). Green mark one red maple and one chokecherry per acre as seed source and part of retention. USE REGEN PROTECTION SPEC AND BE VERY CAREFUL TO PROTECT ADVANCED REGEN. TRY TO SELECT LARGE OAK THAT CAN BE FELLED WHERE MAPLE AND CHERRY ARE REMOVED, NOT ON REGEN. Southeast corner sparser & more of mixed deciduous stand; apply prescription to extent possible but may end up excluding this area from treatment. Exclude the one mature beech and seedlings on SW edge from Rx when running red line. Use bracken opening in southeast part of stand as landing; would have to build 175 yards of road from main road to SE but there are two small trails connecting road to stand that would be a start. Alternately could create new landing at west edge of harvest adjacent to main road to west.</p> <p><u>Other</u> This treatment area has good advanced regen and is ready to have the oak BA reduced to release this regen. BA is 69; there is almost 20 BA of <u>Comments:</u> red maple and black cherry, and good cohorts of oak poles and 3-4" oak saplings. The oak in this stand is black/red hybrid and has fairly good stem quality. The western 1/2 of this treatment is on a very good Kotar PARVvb/AFO site; the southeast half of this treatment is a fairly good PARVCo site. Trace of paper birch, American beech and quaking aspen in canopy, white pine in subcanopy.</p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										
68	73055068- ShW	10.2	42200 - Natural White Pine	High Density Log	68	111-140	Harvest	Shelterwood	42201 - Natural White Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> Shelterwood: Cut all aspen by spec. In addition, mark white pine to reach residual BA of 60. Mark as little oak as possible, and leave all red <u>Specs:</u> pine and maple. Neither protect nor require cutting of white pine regen. Landing for this stand and at least South end of stand 46 should go in cutting units as determined at pre-review. This will entail building a short section of road North from the loop in stand 75 to the south, and clearing an area for a landing. Will have to widen and straighten loop road ; could widen entire loop (about 1 mile long) if producer wanted to.</p> <p><u>Other</u> MO is to maintain current species, especially the small percentage of early seral species, and to utilize the larger trees before they are <u>Comments:</u> unmerchantable.</p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>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
93	73055093-SdT	9.5	4139 - Aspen, Mixed Deciduous	High Density Log	85		Harvest	Seed Tree with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription: Seed tree harvest. Remove all aspen and red maple by spec. Leave all other spp. as seed source. Also Mark one large, good quality red maple per acre as seed source. These residual trees will serve as retention. No clearing for landing: clear landing in middle of E edge of stand to stay away from homes to N and S. Will have to cross ditch along Lakeshore Drive.

Other Comments: MO is same species mix as exists currently. Did not find monument on north boundary of stand at NE corner of NW 1/4 NE 1/4 Sec 9, but found private monument 200 ft S: "B, B, L & A PS 9433". According to survey, bearing running both N & S of this iron is S 01deg 58' W. Line running S is 613.35 ft long, ending at a set 1/2" X 18" re-rod that is PS capped. There is a remon monument at the SW corner of sec 4, 1/4 mi west of where monument in NW corner of stand should be, but line would have to be run through subdivision. I found a remon monument on line along N end of stand, just E of Lakeshore Dr. Bearing from this mon running E is S 89 deg looks like 13' 15" W. Appears on survey map to continue along same bearing to west. Good mostly upland with a few vernal ponds. Heavy false cedar ground cover. Tr of RO, O in canopy.

Next Steps:

Proposed Start Date: 10/01/2013

**Total Treatment
Acreage Proposed: 96.0**

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



S
t
a
n
d

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

#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Error

Limiting Factor and No
Treatment Reason

**Total Treatment
Acreage Proposed: 0**

**Out of YOE -- Treatments
Prescribed with No Limiting Factor**

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73010274-Cut	26.5	42260 - Natural Pine, Mixed Deciduous	High Density Log	105		Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription: The stand is to be harvested as a 2" spec final harvest. The retention should be focused along the snowmobile trail.

Specs:

Other

Comments:

Next Steps: After the harvest replant the stand to red pine, expand the unplanted area around the Leota Weather Station.

Proposed

Start Date: 10/01/2009

73010290-Cut	17.1	42110 - Planted Red Pine	High Density Pole	56		Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
---------------------	------	--------------------------	-------------------	----	--	---------	---------------------	--------------------------	-----------------------

Prescription: The stand needs to be thinned by a systematic thinning individual tree marking taking the residual BA down to 110.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2009

73010295-Cut	28.0	4122 - Oak, Pine	High Density Pole	83		Harvest	Clearcut with Reserves	4129 - Mixed Oak	Cmpt. Review Proposal
---------------------	------	------------------	-------------------	----	--	---------	------------------------	------------------	-----------------------

Prescription: The stand should be harvested as a 2" spec final harvest. The harvest should retain all red and white pine as well as marked oak for retention.

Specs: This retention should be focused along the snowmobile trail.

Other

Comments:

Next

Steps: After the stand is harvested interplant with red pine.

Proposed

Start Date: 10/01/2009

73010296-Cut	39.4	42260 - Natural Pine, Mixed Deciduous	High Density Pole	68		Harvest	Clearcut with Reserves	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
---------------------	------	---------------------------------------	-------------------	----	--	---------	------------------------	---	-----------------------

Prescription: The stand is to be harvested as a 2" spec final harvest. The retention should be a mixture of individually mark oak and pine. The retention

Specs: should be concentrated along the snowmobile trail.

Other

Comments:

Next

Steps: After the stand is harvested plant to red pine.

Proposed

Start Date: 10/01/2009

**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
73010299-Cut	15.5	4122 - Oak, Pine	High Density Log	105		Harvest	Clearcut with Reserves	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription: The stand is to be harvested to 2" DBH but do not cut any red or white pine. Focus any addition retention to the area along the snowmobile trail.
Specs:

Other Comments:

Next Steps: After harvest interplant red pine this will lead to a mixed oak/pine stand.

Proposed Start Date: 10/01/2009

73010308-Cut	21.7	42211 - Natural Red Pine, Mixed Deciduous	High Density Pole	73		Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
--------------	------	---	-------------------	----	--	---------	------------------------	--------------------------	-----------------------

Prescription: The stand is to be final harvested to 2" DBH. The retention should be placed along the Township property for visual consideration. In addition the boundary should be marked along the top of the bluff that overlooks the Muskegon River Food plain
Specs:

Other Comments:

Next Steps: After harvest replant the stand to red pine.

Proposed Start Date: 10/01/2009

73010310-Cut	6.8	42211 - Natural Red Pine, Mixed Deciduous	High Density Pole	73		Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
--------------	-----	---	-------------------	----	--	---------	------------------------	--------------------------	-----------------------

Prescription: Harvest the stand as a 2" spec final harvest. The retention should be placed to address visual concerns.
Specs:

Other Comments:

Next Steps: After the harvest plant the stand to red pine.

Proposed Start Date: 10/01/2009

73010312-Cut	34.7	42110 - Planted Red Pine	High Density Log	73		Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
--------------	------	--------------------------	------------------	----	--	---------	---------------------	--------------------------	-----------------------

Prescription: The stand is to be harvested as a thinning taking the BA down to around 120 sq ft. Concentrated the removal on damaged trees and leave the scattered live and dead oak. Focus the retention along the snowmobile trail.
Specs:

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2009

**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
73010314-Cut	9.2	42140 - Planted Mixed Pine	High Density Pole	73		Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> The stand should be final harvest the stand to 2" DBH. The stand should have red pine and oak marked to met retention or leave the SE corner of the stand for retention.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> After the stand is harvested replant the stand to red pine.</p> <p><u>Proposed Start Date:</u> 10/01/2009</p>									
73010323-Cut	160.2	42220 - Natural Jack Pine	High Density Pole	63		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> This stand is in an established KW Block. Harvest the stand as a 2" clearcut. The retention should be left in strip going from the southwest to northeast and should be approximatly 33' wide. These strips are being left to simulate fire skips.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> After the harvest trench and replant to jack pine.</p> <p><u>Proposed Start Date:</u> 10/01/2009</p>									
73010324-Cut	34.3	42220 - Natural Jack Pine	High Density Pole	59		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> This stand is in an established KW Block. Harvest the stand as a 2" DBH final harvest. The retention in the stand should be left in strip going from the southwest to northeast going through the entire block. These strips should be approximately 33' wide.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> After the harvest trench and plant jack pine.</p> <p><u>Proposed Start Date:</u> 10/01/2009</p>									
73010325-Cut	86.7	42221 - Natural Jack Pine, Mixed Deciduous	High Density Pole	59		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> This stand is in an established KW Block. Harvest the stand as a 2" DBH final harvest. The retention in the stand should be left in strip going from the southwest to northeast going through the entire block. These strips should be approximately 33' wide.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> After the harvest trench and plant jack pine</p> <p><u>Proposed Start Date:</u> 10/01/2009</p>									

**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
73010334-Cut	7.3	42121 - Planted Jack Pine, Mixed Deciduous	High Density Pole	72		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> The stand is to be harvested as a 2" Spec final harvest. <u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> After the harvest replant the stand to jack pine. <u>Proposed Start Date:</u> 10/01/2006</p>									
73010336-Cut	32.5	4122 - Oak, Pine	High Density Log	94		Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest the stand as a 2" spec, except for oak which is to be cut to 4" DBH and white pine to be cut to 6" DBH. In addition mark some trees for retention <u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> The stand is expected to regenerate to a mixture of aspen, oak, maple, and jack pine. <u>Proposed Start Date:</u> 10/01/2006</p>									
73010338-Cut	86.7	42290 - Natural Mixed Pine	High Density Pole	74		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> This stand is in an established KW Block. Harvest the stand as a 2" DBH final harvest. The retention in the stand should be left in strip going from the southwest to northeast going through the entire block. These strips should be approximately 33' wide. <u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> After the harvest trench and plant jack pine for KW. <u>Proposed Start Date:</u> 10/01/2009</p>									
73010344-Cut	22.8	4125 - Black, N. Pin Oak	High Density Pole	96		Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest the stand as a 2" spec final harvest, except the oak which is to be cut to 4" DBH. In addition, do not harvest any white and red pine. <u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> The stand is expected to regenerate to a mixture of oak and aspen. <u>Proposed Start Date:</u> 10/01/2006</p>									

**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
73010420-Cut	1.5	42220 - Natural Jack Pine	High Density Pole	66		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription The stand should be harvested as a 2" spec final harvest. The retention should be kept in a small patch.

Specs:

Other

Comments:

Next The stand is to be replanted to jack pine after it is harvested.

Steps:

Proposed

Start Date: 10/01/2012

**Total Treatment
Acreage Proposed: 630.9**

Stand	Gladwin Mgt. Unit		5 – Forested Stands			Compartment: 055	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
1	4130 - Aspen	Medium Density	4.7	3			
2	4119 - Mixed Northern Hardwoods	High Density Log	10.3	62	1-50		Dissected by fairly broad, deep drain that would be very difficult to cross. Northern 1/3 accessible from p.i. st 2. Tr of E, BC (canopy); W, O, BC, SB (sub)
3	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	4.7	68			
4	4319 - Mixed Upland Forest	Medium Density Log	10.2	76			Small U type along NW edge. Dissected by wet drain: S end would be difficult to access. N end BA too low to thin white pine: hold to increase BA. Could manage as uneven aged stand and cut with stand 1 to NW. Tr of R, E, BC, BA in canopy.
5	4199 - Other Mixed Upland Deciduous	Medium Density Log	5.8	75	111-140		Some good quality red oak. Ave BA 118. Use old landing @ N end with loop turnaround. Found: 1 witness tree on E side of Lakeshore Dr. at NE corner of stand, along with blue DNR carsonite "witness post" and one witness tree on W side of Lakeshore. Found: DNR monument and witness trees at NW corner of stand 5 to west, adjacent to Secord Lake. Also still blue marked trees along north end of stand 10 to west from harvest in '08.
6	6139 - Mixed Lowland Forest	High Density Log	6.6	Uneven Age			
7	6115 - Lowland Ash	High Density Log	64.8	62			
10	6119 - Mixed Lowland Deciduous Forest	Medium Density Log	1.3	75			Broad deep drainage with trees along "banks". An inclusion that runs length of stand 7 on west side. Tr of RO, SB, Hem in subcanopy.
12	4130 - Aspen	Medium Density	13.0	4			
14	4119 - Mixed Northern Hardwoods	High Density Pole	20.7	40			
16	4130 - Aspen	Low Density Sapling	30.9	3			
20	4125 - Black, N. Pin Oak	Medium Density Pole	20.6	68	1-50		SW end is a ridge of dense RP. Shelterwood harvested 2008: Lakeshore Power sale. No new regen except few RM stump sprouts at E edge, but this will be good O stand that will continue to fill in with new regen. E 2/3 little wetter with small patches of V. Found: Remon monument: red painted post. Trace of SB, R, M, WO (canopy); M, HS, B, M (sub)
21	4130 - Aspen	Medium Density	20.8	4			Clearcut '08: Lakeshore Power Sale. Regenerated fairly well, despite low to moderate deer browse. Nice supercanopy RO residual from harvest. Mostly M in southern 15% of stand. Tr of CC, B (canopy); SB, W (sub)





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	42200 - Natural White Pine	High Density Log	3.7	Uneven Age		Trace of B, SB, BC in subcanopy
25	4125 - Black, N. Pin Oak	Medium Density Log	39.1	68	1-50	Shelterwood harvested 2008: Lakeshore Power Sale. Low level of RM and O stump sprouting, and aspen sprouting. Fairly high level of deer browse on new regen. Trace of CC, BTA, B, R, WO, SM (canopy); M, BTA (sub)
26	4199 - Other Mixed Upland Deciduous	High Density Pole	6.1	68		Volume and ave D not very high, and not at rotation age. Not harvested with rest of old OI stand 15 (current p.i. st 21) in '08 because of this. Tr of B (canopy)
28	6132 - Mixed Lowland Forest with Cedar	High Density Log	7.7	76	51-80	Cedar drain.
29	4125 - Black, N. Pin Oak	High Density Log	5.2	68	1-50	More mesic and much more maple than st 21 to W. Small V patches and hummocky areas.
30	42110 - Planted Red Pine	Medium Density Log	10.1	52	141-170	Row thinned in 2008: Lakeshore Power sale. Very wet for R: V and moss ground cover in 66-75% of stand. 10% R over bog (lowland). HOLD. Reduce BA to 90 to 120 through individual tree marking in 2024, removing larger diam. trees. Will have some power poles. Will want to use dry/frozen and rutting spec. Tr of W, J, Tam (canopy); W, Vib, SB, CC (sub)
31	4191 - Mixed Upland Deciduous with Conifer	High Density Log	7.7	Uneven Age		Aspen is getting decadent: some mortality. Somewhat mesic upland with occasional hummocks. Not much more than 30% of canopy is log sized trees. North end seems a little poorer, sparser site; the supercanopy white pine in this area is a little branchy. In some areas vigor of oak in canopy is a little poor. Tr of B, F in canopy.
32	4310 - Pine, Oak Mix	Medium Density Log	4.8	68		Poorer, sparser site than st 21, thus was excluded from harvest. V ground cover much O' stand. In long term probably want to let it fill in with white pine and manage as white pine/oak uneven aged stand. Tr of QA in subcanopy.
34	6115 - Lowland Ash	Medium Density Pole	51.1	76		Mucky/peaty soil. Lot of dead/down cedar. More conifers, sparser and more slash toward south end, more maple toward Northeast end. Tr o' E, DW, BA, TA in subcanopy.
37	6127 - Lowland Pine	Low Density Log	2.3	68	1-50	Ground cover is leatherleaf/blueberry. Tr of Tam (canopy); R, O, M, Tam (sub)
38	4125 - Black, N. Pin Oak	Low Density Pole	25.2	25	1-50	Dissected by several drainages. Ground cover bracken and 5% V/L. Few naturally occurring JP at far N end have moderate growth. Kotar PArVCo habitat type. Trace of R, WO and SWO (canopy); Vib, Willow, W, R, M, SB and Haz (sub)
39	6119 - Mixed Lowland Deciduous Forest	Low Density Sapling	3.2	25		Inclusion: upland/lowland difference with p.i. st 31; forested/non with p.i. st 29.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	42290 - Natural Mixed Pine	High Density Log	2.4	68	51-80	Southwestern 40% is treed bog (23-35% cover, log to sap size). Rest is operable but reserve this small stand for age and species diversity. Tr of Tam, QA, B, J (canopy); Vib, J, SB, R, Tam (sub)
42	6113 - Lowland Maple	High Density Pole	1.9	25		Inclusion: forested/non difference with stands to east; upland/low to south; coniferous/decid to west. Tr of W in subcanopy.
44	4199 - Other Mixed Upland Deciduous	Medium Density Pole	7.3	37		Drainage cuts through NE corner; could be crossed. Very shallow, hummocky drain runs N-S through 3/4 of stand; also can be easily crossed. Found: monument w/ 2 cedar posts painted red on top between Lakeshore Dr and power line. Witness T @ NW edge O' this st: monument is 1" pipe due west of this. Tr of GA, R (canopy); W, B, F (sub)
46	42110 - Planted Red Pine	High Density Log	2.9	52	111-140	Row thinned in 2008: Lakeshore Power sale. HOLD. In 2024 probably want to reduce BA to 90 to 120 through individual tree marking, removing larger D trees. Will have some power poles. Tr of W, J, Tam (canopy); W, Vib, SB, CC (sub)
48	4125 - Black, N. Pin Oak	High Density Pole	13.5	68	1-50	5% lowland in two small patches at N. end. 1.5 acre clump of mature white pine at W edge. Northwestern lobe is sparse. Tr of R, B, BC (canopy); BC, W, R (sub).
49	4131 - Aspen, Oak	Medium Density	10.0	25		S end is hummocky. N end more L, P sized oak. Very low SI for aspen, but this stand DID regenerate to aspen. Tr of W (canopy); W, O, M (sub)
50	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	5.3	68		Tr of CC (canopy)
57	4125 - Black, N. Pin Oak	Medium Density Pole	4.6	25	1-50	Trace of QA, BC, Tam (canopy); W (sub)
58	4199 - Other Mixed Upland Deciduous	High Density Log	51.4	86		Northern 2/3 has much heavier white pine and balsam fir. Northern 1/5 gets wetter and is hummocky with heavy red maple saps and fir seedlings. Long, moderately narrow low area runs about 40% of length of stand near SW edge. 5-10% lowland, including drainages that would have to be armored to cross. Trace of BA (canopy); TA, C, BB (sub)
61	4125 - Black, N. Pin Oak	High Density Log	21.2	80	51-80	Northern 8 ac have BA of 90, slightly lower oak ave diameter, and limited advanced regeneration (most of regen is suppressed oak saplings or offsite red maple). Southern 13.2 ac has BA of 69, almost 20 BA of red maple and black cherry, and good cohorts of oak poles and 3-4" oak saplings. The oak in this stand is black/red hybrid and has fairly good stem quality. The northern treatment and western 1/2 of the southern treatment is on a very good Kotar PARVVb/AFO site; the southeast half of the southern treatment is a fairly good PARVCo site. Trace of paper birch, American beech and quaking aspen in canopy, white pine in subcanopy.
63	6115 - Lowland Ash	Low Density Sapling	13.2	76		Very low SI if age correct. Mucky soils with areas of marsh; lot of lowland "bunch grass" as ground cov. Tr of C (canopy); O, C (sub)



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	4130 - Aspen	High Density Sapling	88.6	25		W end more mesic, E end has tr of hazel. Stand in process of self thinning. Portions of stand have hypoxylon canker (roughly 5 acres), mostly along main road that goes east in to comp 63. Mortality from hypoxylon is low at this point. Site is Kotar PARVVb/AFO (fairly rare on Gladwin County state forest land), and would be very good site to trench and plant Red Pine next rotation. Tr of CC, B, W (canopy); W, SB, F, Rose, sumac, haz, J, AO (sub)
66	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	5.3	76	51-80	Aspen decadent and dying, EAB mortality advancing. Will leave roughly 35 BA of mostly red maple. Very prohibitive access and wet. Tr of Haw, W, BC, B and F in subcanopy.
68	42200 - Natural White Pine	High Density Log	10.5	68	111-140	Good opportunity to utilize large diameter trees and maintain small percentage of early seral and intolerant/midtolerant species in stand (aspen, red pine, oak)
70	6119 - Mixed Lowland Deciduous Forest	High Density Pole	9.7	65		More upland (hummocky) with larger timber and some oak at S. edge. Tr of O, BC in understory.
71	6119 - Mixed Lowland Deciduous Forest	High Density Pole	16.4	76		Stand consists of three large drainages: very wet. Most of QA dead, rest very decadent. Tr of CW, SWO, BC (canopy); BB, F (sub)
73	4125 - Black, N. Pin Oak	Low Density Sapling	13.9	12		Tr of B, W (canopy); Rose, W, SB (sub)
74	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	9.8	76	51-80	30-40% upland. Aspen decadent and will die out of stand soon. EAB active in stand with some mortality. 36 BA of red maple is what will be left. Very prohibitive access and wet. Tr of Haw, W, BC, B, F in subcanopy.
75	4130 - Aspen	High Density Pole	17.3	38		Red maple is offsite. Higher SI than p.i. stand 61. Good candidate for red or white pine trenching and planting in 10 years; site is Kotar PARVVb/AFO, which is a better site than most in Gladwin county. Tr of F, B, R, RO (canopy); SB, BC, M, F (sub)
76	4132 - Aspen, Jack Pine	High Density Sapling	8.9	25		Looks like Kotar PVCd: low SI (50-55). NOT AN ASPEN SITE: Consider harvesting early and planting pine. Looks like jack pine site (J SI seems to be better), but Kotar map says this is mostly a PARVVb/AFO site with a little PARVCo. Tr of R (canopy); J, W and SB (sub)
77	4125 - Black, N. Pin Oak	Low Density Sapling	23.3	13		Rx burn in 1999 is considered year of origin. Burn successfully stimulated good oak regeneration. Was classified as G type in '92; no record of timber harvest before this. Few supercanopy oak and red pine. Some mortality from fire in large oak. Northern portion has more supercanopy oak and some small sedge openings. Tr of R, B, SB, W in canopy.
78	4311 - Pine, Aspen Mix	Medium Density Log	8.1	68		1st age is 68. When aspen is rotation age in 2024, assess level of white pine regen. Could manage as pine or aspen. Aspen has been suppressed by pine. Tr of R, BC (canopy); O, R, J (sub)

Stand	Gladwin Mgt. Unit		5 – Forested Stands			Compartment: 055
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014
						General Comments:
79	4130 - Aspen	Medium Density	4.7	12		Tr of B, J (canopy); Willow, Haz (sub)
81	6113 - Lowland Maple	Medium Density Pole	32.5	60		Oak ridge a few acres in size at far SW end. NE 1/3 much wetter drainage. Rest is more mesic and could possibly be operable. Tr of W, BC, GA (canopy); O, W (sub)
82	4130 - Aspen	High Density Sapling	7.0	12		Tr of SB, M, W, O, R, J (canopy); W, AO (sub)
85	4130 - Aspen	High Density Pole	48.6	38		Nice stand. Good vigor. Little wetter at S 1/3 to 1/2. Soil is slightly finer than many local soils. Trace of B, W, O (canopy); W, F, R, BC, AO, SB, O, CC (sub)
87	4139 - Aspen, Mixed Deciduous	Medium Density Pole	12.4	38		SE corner is pole/sap sized E type with M, B, O, CC, W, QA, TA (10% of stand). Very low SI compared with stand to N: THIS IS NOT AN ASPEN SITE. When harvest, clearcut and plant red or white pine. Small hummocks. Tr of SWO, J, R, BC (canopy); W, Vib, M, SB (sub)
88	6119 - Mixed Lowland Deciduous Forest	Low Density Sapling	10.2	12		If this was aspen, it didn't regen as aspen. Small bog at E end, ridge at N end, small marsh in center. DNR cedar post and painted witness trees "found" in NE corner. Tr of SB, Scotch pine, QA (canopy); willow (sub)
89	42110 - Planted Red Pine	High Density Pole	13.8	52	111-140	Row thinned 2008. Ave diameter 9.6". 15-20% of logs 10-14" D. Evaluate next YOY: could thin to 90 BA and have mostly a log/power pole sale. Heavy aspen regen in narrow areas at N and S end. There are a few small, healthy red pine seedlings since thinning. Tr of M, BS, BTA, O (canopy); R, F (sub)
90	4133 - Aspen, Mixed Pine	Low Density Pole	4.7	25		Formerly G type: tree crowns have expanded and trees have seeded in. Probably harvested with stand to N. Tr of AO, W in subcanopy.
92	4130 - Aspen	Low Density Sapling	8.1	4		Clearcut Nov '08: Lakeshore Power sale. 30-35% lowland. Regenerated fairly well. Residual white pine along rd. DNR survey mon. found at N end on E side of Lakeshore Dr. Trace of DW, W, HS, Vib in subcanopy.
93	4139 - Aspen, Mixed Deciduous	High Density Log	9.7	85		Good mostly upland with a few vernal ponds. Heavy false cedar ground cover. Tr of RO, O in canopy.
94	4199 - Other Mixed Upland Deciduous	Medium Density Pole	3.2	60		Add to FL layer because inaccessible. Estimated cover: Canopy 56% WP PLS size, 23% M PSL size, O 18% PLS size, B 3% PS size. Subcanopy with SB, M, O and W.
95	4130 - Aspen	High Density Pole	49.5	38		80-90% upland. Most of stand has shallow microrelief. Diam growth not enough to warrant early harvest. When harvest, consider doing aspen removal during dry/frozen conditions. Bisected by 2 narrow drainages running west into stand to west. Tr of W, O, BA, F, C, TAM, R (canopy); F, O, TA, SB, BB (sub)





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
97	6112 - Lowland Aspen	Medium Density Pole	40.9	25		31% pole sized. Grades from higher and drier at E edge to L type along power line. Tr of SWO, Black Gum, RO, E (canopy); BC, pumpkin ash, DW (sub)
99	6112 - Lowland Aspen	Medium Density Pole	34.0	25		There are areas where aspen Diam averages 6-7 inches and areas where it is 8-9 inches. Appears to be a bit older than 25. 25-35% upland. Will have to harvest during dry/frozen conditions when harvested. Narrow strip at S end between stands 87 and 88 grades into tag alder to west; this area may be good place for retention when harvested. Drainage that forms stand 87 continues north into this stand. Tr of pumpkin ash (canopy); E, RO seedlings, W, SWO, MH (sub)
100	4130 - Aspen	Medium Density	11.2	4		Clearcut 2008: Lakeshore Power sale. Regenerated well. Tr of B, R, W (canopy); BS, Rose, W (sub)
101	42110 - Planted Red Pine	Medium Density Pole	3.2	53		Thinned '08: Lakeshore Power sale. Oak is 80 years old. Tr of R, O, M in subcanopy.
102	4310 - Pine, Oak Mix	Low Density Log	1.5	85		Factor limit: narrow strip between 114 and 26 feet wide. Strip between Lakeshore Dr. and Private land: too narrow to operate in without impacting private land and/or Lakeshore Dr. ROW.
103	4130 - Aspen	High Density Pole	13.7	39		Candidate for early harvest to regulate aspen in Gladwin Unit as discussed at pre-review. Trace of BC, GA, W (canopy); B, W, CC, J, Vib, F (sub)



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
8	710 - Sand, Soil	2.5	N/A	Unspecified	Dirt portion of Lakeshore Dr. Drop down for Cover Type doesn't give me cover type 122 as option.
9	50 - Water	4.5	N/A	Unspecified	
11	3301 - Low Density Deciduous Tree	8.2	N/A	Unspecified	15-20% O, W, M, B, R, SB. 5% in middle actually part of stand 13
13	6225 - Bog	2.1	N/A	Unspecified	nearly pure bog
15	6225 - Bog	3.6	N/A	Unspecified	5-10% Tam, W, aspen sprouts
17	6225 - Bog	2.4	N/A	Unspecified	5-10% Tam, W, aspen sprouts
18	6224 - Treed Bog	1.7	N/A	Unspecified	20% marsh at S end. 15% QA, M, O, R
19	3105 - Mixed Upland Herbaceous	11.9	N/A	Unspecified	Bracken, Grass, upland short shrubs, some timber at W edge near Lakeshore Dr.
22	6225 - Bog	1.0	N/A	Unspecified	
23	3102 - Grass	5.4	Natural Regen	Aspen	16% maple stump sprouts. 3% of cover is aspen. Clearcut 2008: Lakeshore Power sale. Sprouts above browse line so I would call regenerated, but not 25% canopy. Ground cover marsh grass and trace of rose and TA.
27	6232 - Wet Prairie	4.9	N/A	Unspecified	marsh with 10-15% black ash and some maple
33	6224 - Treed Bog	2.1	N/A	Unspecified	Barely 15% B, O, W, Tr of Tam
35	629 - Mixed non-forested wetland	2.7	N/A	Unspecified	TA (short) over N and V. 30-40% at SW is low density trees (O, W) and braacken.
36	6225 - Bog	7.7	N/A	Unspecified	V, with 15% L, N.
41	6225 - Bog	3.1	N/A	Unspecified	5-10% W, J, Tam, QA
43	6225 - Bog	5.9	N/A	Unspecified	< 5% R, W, Tam
45	6224 - Treed Bog	3.8	N/A	Unspecified	Just > 15% Tam



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
47	6220 - Alder/willow	3.4	N/A	Unspecified	Willow and TA
51	11 - Low Intensity Urban	1.0	N/A	Unspecified	
52	6220 - Alder/willow	8.6	N/A	Unspecified	Mostly short, medium density willow (5' tall). 10-20% N
53	6230 - Cattail	8.5	N/A	Unspecified	50% open water, 40% N, 10% ash
54	6224 - Treed Bog	7.9	N/A	Unspecified	15% O, W, QA, M, SB over V. 30-40% upland (G, bracken)
55	3301 - Low Density Deciduous Tree	5.4	N/A	Unspecified	Large areas are treeless with bracken. Small, stunted, diseased bigtooth aspen clone at SW edge. Scattered O, W, Cherry
56	6220 - Alder/willow	6.4	N/A	Unspecified	Moderately dense TA, willow over marsh grass.
59	6225 - Bog	2.9	N/A	Unspecified	
60	6220 - Alder/willow	6.9	N/A	Unspecified	Moderately dense TA about 14' tall over marsh grass
62	6232 - Wet Prairie	16.4	N/A	Unspecified	Marsh: 30-35% willow 4 ft tall.
65	6220 - Alder/willow	15.0	N/A	Unspecified	50-50% willow/tag alder
67	3103 - Rubus-Fern	1.0	N/A	Unspecified	Bracken
69	6224 - Treed Bog	2.3	N/A	Unspecified	15% O, W, QA, M, SB over V. 30-40% upland (grass, bracken)
72	3105 - Mixed Upland Herbaceous	7.1	N/A	Unspecified	Power line clearing. G, bracken, upland shrub and herb. 5-10% lowland.
80	6225 - Bog	2.6	N/A	Unspecified	Small area of L and trees in SW corner.
83	6232 - Wet Prairie	1.4	N/A	Unspecified	20-30% V
84	3303 - Mixed Low Density Trees	3.0	N/A	Unspecified	20% M, O, R, B, W, SB



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
86	6239 - Mixed Emergent Wetland	15.5	N/A	Unspecified	15% floating aquatic, 15% cattail, 15% L, 55% marsh.
91	6220 - Alder/willow	1.6	N/A	Unspecified	60% willow over V and marsh grass. 40% barely upland brush (1-2 ft tall shrubs). Scattered trees.
96	6225 - Bog	5.3	N/A	Unspecified	Mostly leatherlf. pure bog
98	629 - Mixed non-forested wetland	15.6	N/A	Unspecified	About 50% willow and 50% N.
104	6220 - Alder/willow	1.2	N/A	Unspecified	TA + B, BA, willow
105	629 - Mixed non-forested wetland	3.1	No	Unspecified	Lakeshore Drive paved portion and Highway 61. IFMAP drop down menu for non forested cover type does not give me cover type 122, which is road/parking lot (5-11-12). 720 is closest cover type.
106	6220 - Alder/willow	7.6	N/A	Unspecified	TA + B, Tam, W, BA, pumpkin ash, DW, HS, willow
107	3302 - Low Density Conifer Trees	2.1	N/A	Unspecified	G with 5-10% R, W, BS seedlings, and some AO. Looks like was trenched but didnt fully regen or wasnt planted.
108	6230 - Cattail	5.6	N/A	Unspecified	marsh with <5% 3-4' tall willow. Shallow water.
109	3202 - Autumn Olive/Honeysuckle	6.1	Yes	Red Pine	AO 30%. Trees 5% (R, BTA, W, elm, WA, O, B). Grass 38%. Old Hay township dump. Direct seed J or R with WLD approval?
110	3302 - Low Density Conifer Trees	1.5	N/A	Unspecified	20-25% bare sand from ORV's. Scattered trash from dump.
111	790 - Other Bare/Sparsely Vegetate	2.1	N/A	Unspecified	Wide spot near p.i. stand 89 is bare sand slope caused by ORV's. Stumps were placed throughout area to rehab; in process of rehab. Rest of area along highway 61 is bare soil, grass, upland herbaceous including bracken.



7 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

Stand	SCA Type	SCA Name	Acres	Comments



8 – DEDICATED CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
--------------------------	-------------	--------------------

Cover Type & Treatment Map

Compartment: 55
 T18N R01E Sec. 3, 9, 10
 T19N R01E Sec. 33, 34
 County: Gladwin
 Unit: Gladwin
 YOE: 2014
 Acres: 1,276 GIS Calculated
 Examiner: Mark Reichel
 Map Revised: 6/22/2012
 Map Phase: Pre-Review

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

33 34
 3
 9 10

N

Legend

- Miris Corners
- Highway
- Paved Roads
- - - Poor Dirt Roads
- · · · · Trail (Non-Recreation)
- · · · · Closed Roads
- Stream
- · · · · Intermittent Stream
- Lakes and Rivers
- ⊕ Powerline

Legend

Planned Regeneration

- ▨ Natural

Treatments

- ▨ Seed Tree (w/Reserves)
- ▨ Shelter Wood (w/Reserves)
- ▨ Selection (Group, Single Tree)

Forest Stands

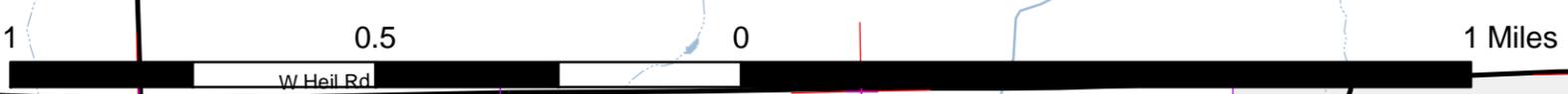
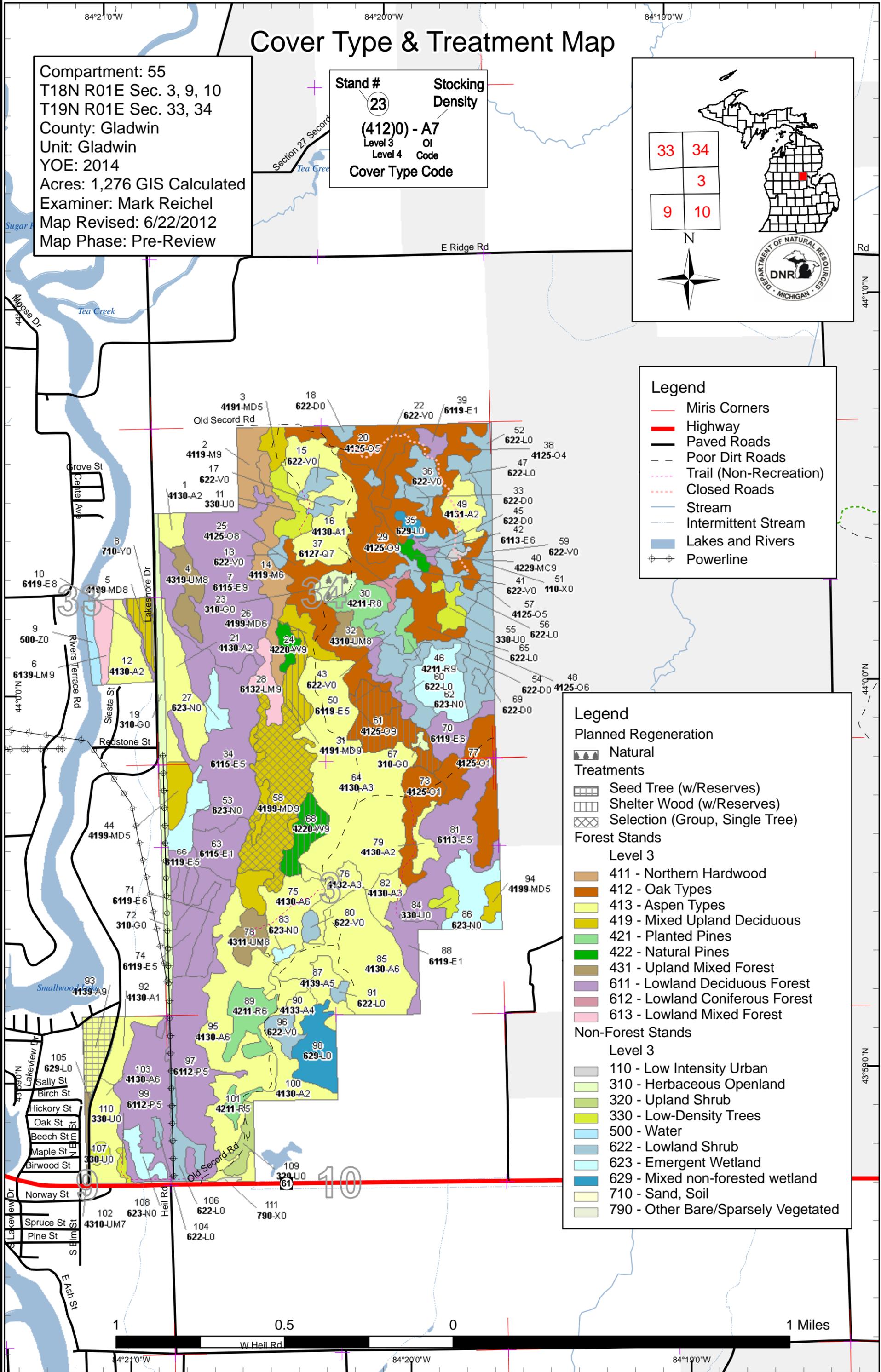
Level 3

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

Non-Forest Stands

Level 3

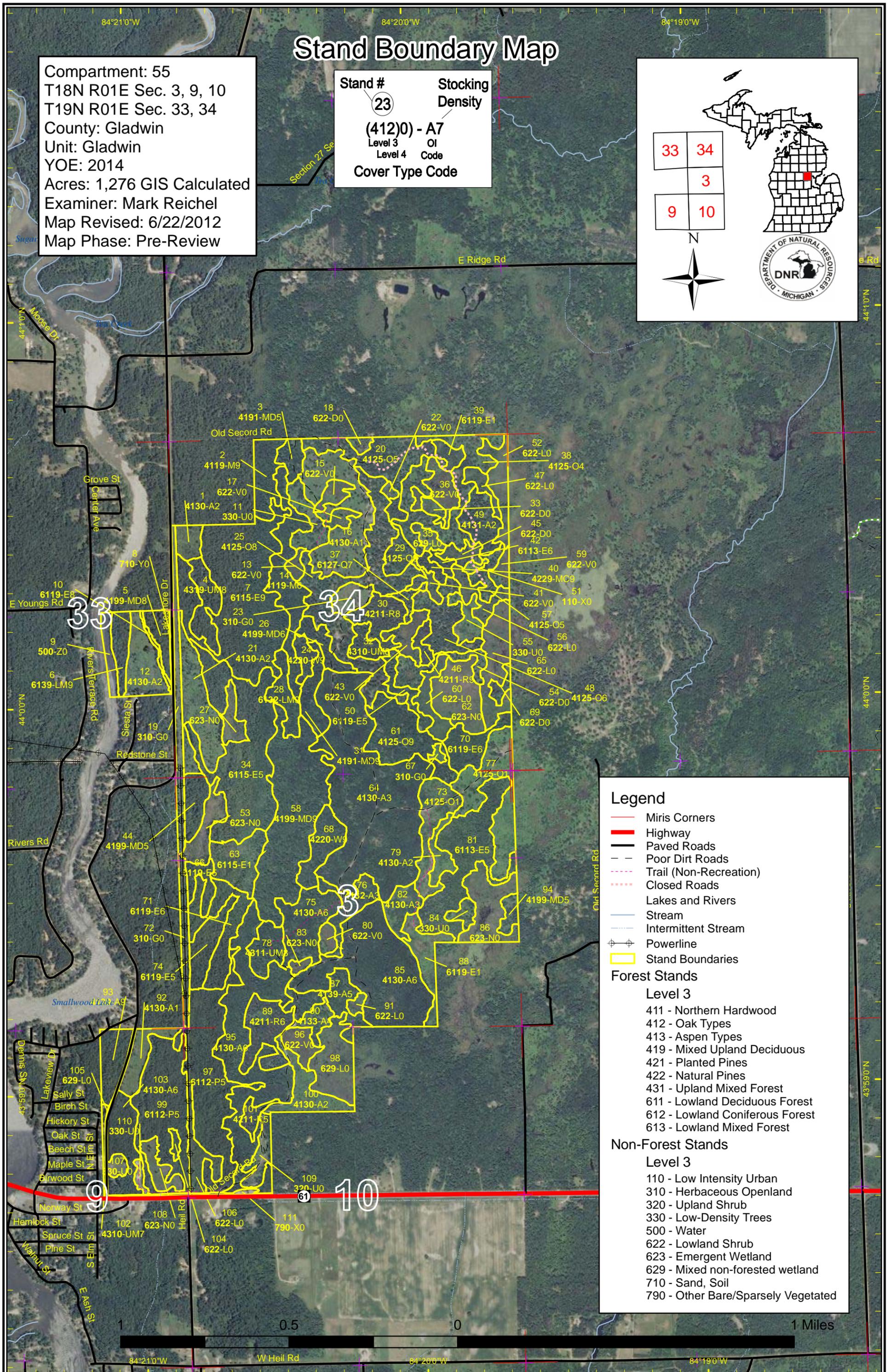
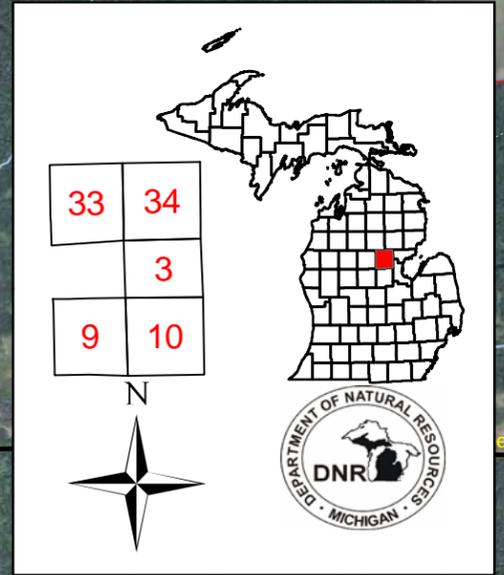
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand, Soil
- 790 - Other Bare/Sparsely Vegetated



Stand Boundary Map

Compartment: 55
 T18N R01E Sec. 3, 9, 10
 T19N R01E Sec. 33, 34
 County: Gladwin
 Unit: Gladwin
 YOE: 2014
 Acres: 1,276 GIS Calculated
 Examiner: Mark Reichel
 Map Revised: 6/22/2012
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- Highway
- Paved Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Lakes and Rivers
- Stream
- Intermittent Stream
- Powerline
- Stand Boundaries

Forest Stands

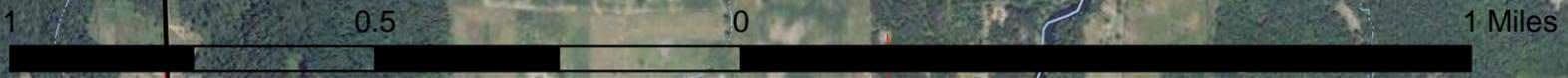
Level 3

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

Non-Forest Stands

Level 3

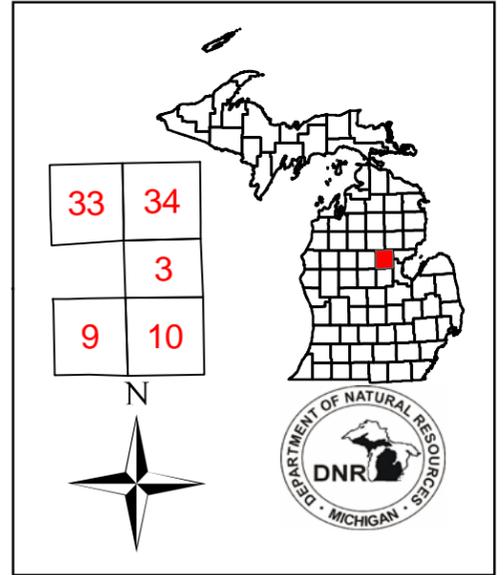
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand, Soil
- 790 - Other Bare/Sparsely Vegetated



Dedicated & Proposed Special Conservation Area Map

Compartment: 55
 T18N R01E Sec. 3, 9, 10
 T19N R01E Sec. 33, 34
 County: Gladwin
 Unit: Gladwin
 YOE: 2014
 Acres: 1,276 GIS Calculated
 Examiner: Mark Reichel
 Map Revised: 6/22/2012
 Map Phase: Pre-Review

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



- Legend**
- ✚ Remonumented Section Corners
 - Miris Corners
 - ▭ Stand Boundaries
- Forest Stands**
- Level 3**
- 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen Types
 - 414 - Other Upland Deciduous
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 429 - Mixed Upland Conifers
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3**
- 121 - Airports
 - 110 - Low Intensity Urban
 - 122 - Road/Parking Lot
 - 211 - Cropland
 - 212 - Non-Tilled Herbaceous Agriculture
 - 221 - Christmas Trees
 - 222 - Orchards/Vineyards/Nursery
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 500 - Water
 - 621 - Floating Aquatic
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland
 - 629 - Mixed non-forested wetland
 - 710 - Sand, Soil
 - 720 - Exposed Rock
 - 730 - Mud Flats
 - 790 - Other Bare/Sparsely Vegetated

