Gladwin Forest Management Unit
Compartment Review Presentation
Compartment #115 Entry Year: 2014
Compartment Acreage: 1386 County: Midland

Revision Date: February 2012

Stand Examiner: Steven Nyhoff

Legal Description: T14N R1W Sections 30 and 31
T14N R2W Sections 24-27, 34, and 35

Identified Planning Goals ('Management Area' or 'RMU',if applicable): Midland Isabella

Management Goals: The compartment over the last 40 years has been managed heavily for aspen. In the last 20 years management has concentrated not only on the aspen but also swamp hardwoods.

Regeneration in the aspen types has been fair to good. In the swamp hardwoods regeneration cuts have taken more than 5 year to become established. The evidence for this delay in establishment of regeneration is deer.

The aspen in this compartment is to be harvested on a 40 year rotation instead of 50. This was done because of regeneration concerns. Several of the aspen stands are now 40 years old and are scheduled to be harvested as well as some of the mature oak. These harvests are designed to maintain the current species diversity. There are a couple of aspen stands that are being held to help balance out the age class distribution.

Soil and Topography: The soils in the compartment are mainly well-drained Covert Series and somewhat poorly drained Pipestone Series soils on the ridges. In the area between the ridges are mainly poorly drained Kingsville Series soils. Lastly in the river flood planes the soil is mainly poorly drained Choctah Series soils.

The land is mainly flat to rolling, except along the flood planes of the rivers, which are bordered by steep banks that go to a nearly flat flood plane.

Ownership Patterns, Development, and Land Use in and Around the Compartment:
The State Land is in two blocks. One is in section 25 of T14N R2W and section 19 and 30 of T14N R1W. The other one is in Section 27, 34, and 35 of T 14N R2W. The private land around the compartment is used for permanent residences and hunting properties.

Unique, Natural Features: There are records of Diarrhena along the Chippewa River within the compartment. There are also records of 2 Red-shouldered hawks to the north and to the south, records of wood turtle to the south, snuffbox mussel to the east, Diarrhena and Litospermum latifolium to the south of the compartment.

Archeological, Historical, and Cultural Features: No know sites in the area. There is a potential for sites in the compartment.

Special Management Designations or Considerations: The land in the compartment between the Salt River and Chippewa River and the associated flood planes has been designated as a Biodiversity Stewardship Area. This area is about 340 acres in size.

Watershed and Fisheries Considerations: The compartment has two good-fishing rivers in it; these are the Salt River and the Chippewa Rivers. Also, there are a few intermittent creeks that flow into these rivers. These need to be taken into consideration with any type of harvest that will occur in the area. Most of the proposed treatments in the area should have little or no impact on the rivers. The Salt River and Chippewa River primarily provide warm water fisheries and recreational activities. Care should be taken to prevent sedimentation.

Wildlife Habitat Considerations: This compartment contains a variety of vegetative types from both upland and lowland systems, making it suitable for a number of wildlife species. Game species likely to be present in this compartment include 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 include common yellowthroat, yellow-rumped warbler, gray catbird, redeyed vireo, white-throated sparrow, hermit thrush, red-breasted nuthatch, ruffed grouse, and American woodcock. The compartment is located close to the city of Colman, Mount Pleasant, and Midland and is easily accessible to hunters via Gordonville Road and Alamando Road.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of lacustrine (lake) sand and gravel and dune sand. Glacial drift thickness varies between 200 and 400 feet. Beneath the glacial drift are the Jurassic Red Beds and the Pennsylvanian Grand River and Saginaw Formations. The Saginaw Formation is used for clay/shale in other areas of the State. The nearest gravel pit is located just to the northeast, and gravel potential may be good in the compartment. Porter-Jasper Field is located in Section 34 & 35. It has produced over 50.5 MBO and 4.9 Bcf gas from the Dundee Formation. There are current oil and gas leases in the compartment in Section 34 & 35. The State has additional mineral rights in the compartment.

Most of the compartment is classified as development with restrictions. The main restriction is well spacing cannot be more dense then 1 well per 160 acres. This is because of the amount of wetlands in the area. Some areas, especially around the rivers, are classified as non-developable.

Vehicle Access: Most of the compartment outside the Biodiversity Stewardship Area has fair access. The Biodiversity Stewardship Area is only accessible through the private land to the west.

Currently there is a lot of activity in the western portion of the compartment because of Chevron doing the reclamation work on the Porter Oil Field Wells. To do this they have created a large number of temporary roads to access the old sites. During this process the access will be greatly increased. After the wells have been plugged and the road pulled back out the access will be back to what is usual for the area.

Survey Needs:

The compartment has many of its corners in so there is no immediate need for survey work.

Recreational Facilities and Opportunities: The compartment has good access to the Chippewa River and Salt River, which are heavily fished. There are several canoe liveries that operate on the Chippewa River. This area is also heavily used by anglers and trappers. However, there are no established facilities on State Land.

Fire Protection: The compartment is overall quite wet with not many highly combustible timber types so fire should not be as much of a problem in this area. There are many permanent and seasonal residences in the area that could present a problem if fire did occur.

Additional Compartment Information:

Trash dumping is a major problem along all the roads in sections 25 and 34 of T14N R2W and section 30 of T14N R1W. The major components of the trash are tires and appliances. There is Phragmites present in many of the drainages and wetlands of the compartment.

Table 1 – Total Acres by Cover Type and Age Class

Gladwin Mgt. Unit **Compartment 115 Year of Entry 2014**

Steven Nyhoff : Examiner

Age Class

	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	Total
Aspen	7	83	79	10	100	0	0	0	0	0	0	0	0	213	**492**
Herbaceous Openland	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Low-Density Trees	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Lowland Aspen/Balsam Poplar	0	6	48	0	36	21	0	0	0	0	0	0	0	0	**111**
Lowland Deciduous	0	0	0	28	0	6	0	0	75	9	0	0	0	403	**522**
Lowland Shrub	64	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
Mixed Upland Deciduous	0	0	0	0	3	0	0	0	32	0	0	0	0	16	**50**
Oak	0	0	0	4	0	0	0	0	36	0	0	0	0	46	**86**
Urban	23	0	0	0	0	0	0	0	0	0	0	0	0	0	**23**
Water	26	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
Total	**132**	**89**	**127**	**42**	**139**	**28**	**0**	**0**	**143**	**9**	**0**	**0**	**0**	**678**	**1386**

Table 2 – Proposed Treatment Summaries

Gladwin Mgt. Unit
Year of Entry 2014

Compartment 115
Total Compartment Acres: 1386

Acres by Treatment Type

Commercial Harvest - 245	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	86	0	0	0	0	0	**86**
Lowland Aspen/Balsam Poplar	36	0	0	0	0	0	**36**
Lowland Deciduous	0	46	0	0	0	0	**46**
Mixed Upland Deciduous	0	11	3	0	0	0	**14**
Oak	0	0	16	46	0	0	**62**
Total	**122**	**58**	**19**	**46**	**0**	**0**	**245**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	73115002-Cut	3.1	4199 - Other Mixed Upland Deciduous	Medium Density Pole	40	1-50	Harvest	Seed Tree with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal

Prescription Specs: The stand is to be managed as a seed tree harvest. Retain all the white pine and some oak to maintain around 30 BA. The Scotts Pine in the stand should be removed from the landscape.

Other Comments: This area may be on old oil well site and may be cut in the process of plugging the well and site reclamation. This is currently going on in the western part of this compartment.

Next Steps: The site is expected to regenerate naturally with white pine, oak and aspen, if not interplant with red pine.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	73115003-Cut	35.7	6112 - Lowland Aspen	High Density Pole	40	81-110	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a 2" DBH final harvest with retention. The retention should be placed in the wettest areas. Also mark to reserves some of the larger oaks for structural diversity. In addition, retain all conifer except scotts pine which should be removed.

Other Comments: Some areas are wet so care must be taken to avoid rutting. Therefore harvest in dry summer or frozen winter conditions.

Next Steps: The stand is expected to regenerate naturally to aspen with some other species present.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
10	73115010-Cut	11.4	6119 - Mixed Lowland Deciduous Forest	High Density Log	80	81-110	Harvest	Single Tree Selection	6113 - Lowland Maple	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a selection taking the BA down to 80. When marking the stand favor the removal of ash and aspen. In addition, mark the stand for loggability.

Other Comments: Portions of the stand are wet and rutting could be a problem. Harvest between July and March during dry or frozen conditions to protect the soil and tree root systems. After the harvest the access roads should be elimated.

Next Steps: The stand is expected to regenerate but not with in the 5 year after harvest because of deer browse. The regeneration is expected to be a mix of mainly red maple and ash mixed with some oak.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
18	73115018-Cut	5.3	4125 - Black, N. Pin Oak	High Density Pole	80	51-80	Harvest	Seed Tree with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a seed tree harvest taking the BA down to 20 Sq Ft. The retention should be kept in pockets to protect areas of the best advanced regeneration. In addition, retain all native conifers.

Other Comments: Access to the stand will need to be though stands 7 or 13. Either of these routes has wet areas that will need to be addressed. In addition, there are areas in the stand that are wet so rutting could be a problem. Harvest between August and March during dry or frozen conditions.

Next Steps: The stand is expected to regenerate natural to oak with some other species mixed in.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
19	73115019-Cut	11.4	4199 - Other Mixed Upland Deciduous	High Density Log	80	81-110	Harvest	Single Tree Selection	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Harvest the stand by selection taking the BA down to 70 Sq Ft. When marking the stand favor the removal of aspen and ash but do not eliminate any one species. When marking the sale boundary the let that goes up into stand 7 could be left out of the sale. This would reserve an pocket of uncut trees for diversity.

Other Comments: This stand is a dry E-type but it still has areas that are wet and are prone to rutting. Therefore, harvest the stand from August to March during dry or frozen conditions.After the harvest the access roads should be elimated.

Next Steps: The stand is expected to regenerate to a mixture of lowland tree types. The regeneration is expected to take longer then 5 years mainly because of deer browse.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
27	73115027-Cut	8.4	4130 - Aspen	High Density Pole	40	81-110	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: The stand is to be clearcut DBH with retention. The retention should be kept in pocket protecting some of the wetter areas from logging damage. The retention should not exceed 5% of the area.

Other Comments: The stand is mainly an upland ridge that grades to lowland types along the edges. After the harvest the access roads should be elimated.

Next Steps: The stand is expected to regenerate to aspen.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
33	73115033-Cut	5.3	4125 - Black, N. Pin Oak	Medium Density Log	80	1-50	Harvest	Seed Tree with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a seed tree harvest taking the BA down to 20 Sq Ft. The retention should be kept in pockets to protect areas of the best advanced regeneration. In addition, retain all native conifers.

Other Comments: In addition, there are areas in the stand that are wet so rutting could be a problem. Harvest between August and March during dry or frozen conditions.

Next Steps: The stand is expected to regenerate natural to oak with some other species mixed in.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34	73115034-Cut	39.7	4139 - Aspen, Mixed Deciduous	High Density Pole	40	51-80	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a 2 inches DBH final harvest with retention. The retention should be placed in the wettest areas and not exceed 5% the area.

Other Comments: Some areas are wet so care must be taken to avoid rutting. Therefore harvest in dry summer or frozen winter conditions.

Next Steps: The stand is expected to regenerate naturally to aspen with some other species present.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
47	73115047-Cut	5.4	4125 - Black, N. Pin Oak	High Density Pole	80	51-80	Harvest	Seed Tree with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a seed tree harvest taking the BA down to 20 Sq Ft. The retention should be kept in pockets. In addition retain all native conifers.

Other Comments: In addition, there are areas in the stand that are wet so rutting could be a problem. Harvest between August and March during dry or frozen conditions.

Next Steps: The stand is expected to regenerate natural to oak with some other species mixed in.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
55	73115055-Cut	38.3	4130 - Aspen	High Density Pole	45	81-110	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested to 2 inches DBH with retention. The retention could be kept along the Chippewa River for visual and BMPs.

Other Comments: The stand does have some area of low wet ground so rutting could be a problem and need to be watched.

Next Steps: The stand is expected to regenerate to aspen mixed with maple.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
58	73115058-Cut	35.3	4125 - Black, N. Pin Oak	High Density Log	78	81-110	Harvest	Shelter Wood with Reserves	4125 - Black, N. Pin Oak	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a shelterwood harvest taking the BA down to 50. The marking of the stand favor the removal of aspen and ash and favor the retention of oak first and red maple second. In some area of high red maple density keep the BA higher to favor the promotion of single stem red maple into the overstory and not strump sprouts.

Other Comments: The stand has many pocket of low wet ground so rutting could be a problem. So harvest the stand between August and March during dry and frozen conditions.

Next Steps: The stand is expected to regenerate to a mixture of oak, aspen, maple, and ash. The regeneration may take longer then 5 years because of deer browse.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
60	73115060-Cut	10.6	4125 - Black, N. Pin Oak	High Density Log	88	81-110	Harvest	Shelter Wood with Reserves	4125 - Black, N. Pin Oak	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a shelterwood harvest taking the BA down to 50. The marking the stand favor the removal of aspen and ash and favor the retention of oak first and red maple second. In some area of high red maple density keep the BA higher to favor the promotion of single stem red maple into the overstory and not strump sprouts.

Other Comments: The stand has many pocket of low wet ground so rutting could be a problem. So harvest the stand between August and March during dry and frozen conditions.

Next Steps: The stand is expected to regenerate to a mixture of oak, aspen, maple, and ash. The regeneration may take longer then 5 years because of deer browse.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
68	73115068-Cut	34.8	6119 - Mixed Lowland Deciduous Forest	High Density Pole	78	81-110	Harvest	Single Tree Selection	6119 - Mixed Lowland Deciduous Forest	Cmpt. Review Proposal

Prescription Specs: Harvest the stand by selection taking the BA down to 70 Sq Ft. When marking the stand favor the removal of aspen and ash but do not eliminate any one species. The northern edge of the stand is the top of the bluff that overlooks the Salt River Flood Plain.

Other Comments: This stand is a dry E-type but it still has areas that are wet and are prone to rutting. Therefore, harvest the stand from August to March during dry or frozen conditions.

Next Steps: The stand is expected to regenerate to a mixture of lowland tree types. The regeneration is expected to take longer then 5 years mainly because of deer browse.

Proposed Start Date: 10/01/2013

Total Treatment Acreage Proposed: 244.7

Table 4 -- Treatments Prescribed with a Limiting Factor

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

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

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73010290-Cut	17.1	42110 - Planted Red Pine	High Density Pole	56		Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

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

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2009

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73010295-Cut	28.0	4122 - Oak, Pine	High Density Pole	83		Harvest	Clearcut with Reserves	4129 - Mixed Oak	Cmpt. Review Proposal

Prescription Specs: 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. 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

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

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 Specs: 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.

Other Comments:

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

Proposed Start Date: 10/01/2009

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

Other Comments:

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

Proposed Start Date: 10/01/2009

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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 Specs: Harvest the stand as a 2" spec final harvest. The retention should be placed to address visual concerns.

Other Comments:

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

Proposed Start Date: 10/01/2009

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73010312-Cut	34.7	42110 - Planted Red Pine	High Density Log	73		Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: 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.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2009

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

Prescription Specs: 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.

Other Comments:

Next Steps: After the stand is harvested replant the stand to red pine.

Proposed Start Date: 10/01/2009

73010323-Cut	160.2	42220 - Natural Jack Pine	High Density Pole	63		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: 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.

Other Comments:

Next Steps: After the harvest trench and replant to jack pine.

Proposed Start Date: 10/01/2009

73010324-Cut	34.3	42220 - Natural Jack Pine	High Density Pole	59		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: 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.

Other Comments:

Next Steps: After the harvest trench and plant jack pine.

Proposed Start Date: 10/01/2009

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

Prescription Specs: 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.

Other Comments:

Next Steps: After the harvest trench and plant jack pine

Proposed Start Date: 10/01/2009

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

Prescription Specs: The stand is to be harvested as a 2" Spec final harvest.

Other Comments:

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

Proposed Start Date: 10/01/2006

73010336-Cut	32.5	4122 - Oak, Pine	High Density Log	94		Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: 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

Other Comments:

Next Steps: The stand is expected to regenerate to a mixture of aspen, oak, maple, and jack pine.

Proposed Start Date: 10/01/2006

73010338-Cut	86.7	42290 - Natural Mixed Pine	High Density Pole	74		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: 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.

Other Comments:

Next Steps: After the harvest trench and plant jack pine for KW.

Proposed Start Date: 10/01/2009

73010344-Cut	22.8	4125 - Black, N. Pin Oak	High Density Pole	96		Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: 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.

Other Comments:

Next Steps: The stand is expected to regenerate to a mixture of oak and aspen.

Proposed Start Date: 10/01/2006

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

Other Comments:

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

Proposed Start Date: 10/01/2012

Total Treatment Acreage Proposed: 630.9

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4199 - Other Mixed Upland Deciduous	Medium Density Pole	3.1	40	1-50	10 years ago this stand was type as a grassy opening. It has been filling in with white pine, oak, and maple.
3	6112 - Lowland Aspen	High Density Pole	35.7	40	81-110	The stand is a matrix of uplands and lowlands with lowlands being the majority. Some areas are heavy to oak and some areas are heavy to red maple. Mortality is high in the super canopy oak. There are traces of white oak, beech, paper birch, hemlock, and green ash in the stand.
4	6112 - Lowland Aspen	High Density Pole	32.3	28	51-80	The stand is a matrix of uplands and lowlands with lowlands being the majority. The terrain is hummocky and there are areas of standing water present.
5	6119 - Mixed Lowland Deciduous Forest	Low Density Sapling	6.5	33	1-50	This stand is mainly lowlands with a couple slight upland knobs in it. The uplands make up around 15% of the stand. There is a lot of standing water present in it. The terrain is made up of hummocks. The stand is treed but the Site Index looks fairly low.
6	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	12.4	81	1-50	The terrain is hummocky and wet. The stand is a matrix of uplands and lowlands with the lowlands being about 75%. The uplands are made up of mainly two slight ridges. One is along the southern edge of the stand the other is more toward the northern end. The density of the trees in the stand is variable as well as the diameters.
7	4130 - Aspen	High Density Sapling	30.1	14		The stand is on a ridge. The ground cover is poverty grass and bracken fern. The density of the trees is variable. The terrain is slightly hummocky in the lower portions of the stand. It was final harvested in 1998 as a 2” spec final harvest.
8	6113 - Lowland Maple	Medium Density Log	2.2	80		The stand is fairly open. The trees are mainly along the river’s edge and on the slope going out of the flood plain.
10	6119 - Mixed Lowland Deciduous Forest	High Density Log	11.4	Uneven Age	81-110	The stand is a matrix of uplands and lowlands with the lowlands being the majority. There is a lot of standing water present. E.A.B. is in the stand but it is not extensive. However, there is mortality starting to show up in the stand.
12	6115 - Lowland Ash	Medium Density Pole	3.6	80	1-50	There is E.A.B. present in the stand, but it is not extensive. The stand is very wet with a lot of standing water present.
13	4130 - Aspen	High Density Pole	6.4	26	51-80	The terrain is hummocky. There are pockets of wet ground. Overall the stand looks to be doing well.
14	6119 - Mixed Lowland Deciduous Forest	High Density Log	9.3	Uneven Age	111-140	The stand is on the flood plain of the Chippewa River. The terrain is undulating. This makes the stand a matrix of uplands and lowlands. However, the lowland is the majority.
15	6112 - Lowland Aspen	High Density Sapling	3.5	26		The stand is very hummocky with pockets of standing water. It is a matrix of uplands and lowlands with the lowlands being around 75%. The uplands are in small pockets.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	4130 - Aspen	High Density Sapling	72.5	26	1-50	The terrain is hummocky to undulating. The stand is a matrix of uplands and lowlands with the uplands being about 75%. It has both upland and lowland openings that are sparsely treed.
18	4125 - Black, N. Pin Oak	High Density Pole	5.3	80	51-80	The stand is a matrix of uplands and lowlands with the uplands being the majority. The terrain is hummocky. The oak is mainly poorly formed black/red oak hybrid.
19	4199 - Other Mixed Upland Deciduous	High Density Log	11.4	80	81-110	The stand is a matrix of uplands and lowlands with the uplands being the majority
20	4130 - Aspen	Medium Density	5.2	5		This stand was set up as a negotiated 2" DBH final harvest. Only 5 acres of the sale was completed. It was cut between 2005 and 2008. The terrain is hummocky. In areas the soils were rutted. The stand is a matrix of uplands and lowlands with the uplands being the majority.
22	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	13.8	36		This stand is very low and wet. There are inclusions of upland knobs present but they are widely scattered. There is a lot of standing water present. The quaking aspen is thick along the southern edge of the stand. However, much of the stand is made up of scattered swamp white oak mixed with quaking aspen, ash, and maple. E.A.B. is present in the stand and it is fairly extensive.
23	6119 - Mixed Lowland Deciduous Forest	Low Density Pole	7.6	36	1-50	This stand is low and wet. It has a heavy understory of tag alder and willow. There are some scattered larger swamp white oaks. However, much of what is present is paper birch, maple, and quaking aspen.
24	6113 - Lowland Maple	Low Density Pole	6.2	50	1-50	The stand is a sapling/pole stand over tag alder and winter berry. The ash is showing signs of E.A.B. There is a lot of standing water present.
26	4130 - Aspen	High Density Pole	9.7	30	81-110	The stand has a heavy black cherry component in the north end. The stand is on a ridge. The openings in the stand are located on the top of the ridge. There are also white pines stumps common in the south end.
27	4130 - Aspen	High Density Pole	8.4	40	81-110	The stand is on a ridge. There are some openings present. They are mainly on the top of the ridge. There are soundness issues in some of the aspen. The ridge has many old white pine stumps present.
30	4131 - Aspen, Oak	High Density Log	13.6	Uneven Age	81-110	The stand was set up to be harvested but it was not cut. The terrain is mildly hummocky. There are pockets of low wet ground. The aspen in the stand is declining.
32	6119 - Mixed Lowland Deciduous Forest	High Density Pole	8.8	91	81-110	The stand grades from oak, on the uplands, to swamp hardwoods near the Chippewa River.
33	4125 - Black, N. Pin Oak	Medium Density Log	5.3	80	1-50	The terrain is hummocky but the soils are dry. The aspen is declining. The oaks have poor form. At the current time, well closing activities are occurring.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	4139 - Aspen, Mixed Deciduous	High Density Pole	39.7	40	51-80	The stand is a matrix of uplands and lowlands with the uplands being around 70%. The terrain is mildly hummocky. The stand has inclusions of openings. These openings are either sparse uplands or lowland shrub pockets. E.A.B. is present in the stand and it is extensive.
35	4199 - Other Mixed Upland Deciduous	Medium Density Pole	6.8	80		This stand is an upland ridge. The terrain is undulating. There are numerous openings in the stand.
38	6119 - Mixed Lowland Deciduous Forest	High Density Pole	25.5	80	81-110	The terrain is hummocky with some scattered upland ridges. There are pockets of standing water. E.A.B. is present in the stand but it is not extensive. It is a matrix of uplands and lowlands with the lowlands being the majority.
39	6112 - Lowland Aspen	Medium Density	3.5	17		The terrain is hummocky. The stand has inclusions of uplands as well as some pockets of lowland shrubs.
40	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	8.1	80	1-50	The stand is a matrix of uplands and lowlands with the lowlands being about 75%. There are many areas of standing water. E.A.B. is present and fairly wide spread. The terrain is hummocky.
41	6110 - Cottonwood	High Density Log	3.9	Uneven Age	81-110	The stand is in a depression between two ridges. It has mature cottonwood, ash, and oak over saplings and poles. There is a lot of standing water.
42	6119 - Mixed Lowland Deciduous Forest	High Density Log	5.0	Uneven Age	81-110	The terrain is hummocky. There are numerous areas of standing water. The oak in the stand has a poor form. There are some areas of uplands, but they are scattered.
43	6112 - Lowland Aspen	Medium Density Pole	12.1	26	1-50	The stand is a matrix of uplands and lowlands with the lowlands being about 70%. The terrain is hummocky. There are inclusions of lowland shrubs.
44	6119 - Mixed Lowland Deciduous Forest	High Density Log	23.6	80	81-110	The stand is a matrix of uplands and lowlands with the lowlands being the majority. The terrain is hummocky. There are pockets of standing water present. E.A.B. is active in the stand but it is not extensive.
45	4130 - Aspen	High Density Sapling	1.6	3		The stand was harvested and the regeneration is good. However, there is significant deer browse on the regeneration.
47	4125 - Black, N. Pin Oak	High Density Pole	5.4	80	51-80	The terrain is undulating. Red maple is seeding into the stand while the aspen is declining. There are some oversized oaks present.
49	6112 - Lowland Aspen	Medium Density Pole	21.4	57	51-80	The stand is a matrix of uplands and lowlands with the lowlands being about 65%. There are inclusions of lowland shrubs in the stand. The area has E.A.B. but it is not extensive. The terrain is hummocky.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	4121 - Oak, Aspen	Medium Density Pole	4.4	30	1-50	This stand is a sparse oak knob that was cut to 4" DBH. The harvest was completed in January 2009. The aspen and oak has regenerated. There is an oil well, in the stand, that is being plugged. This action has removed a portion of the regeneration.
51	4199 - Other Mixed Upland Deciduous	Low Density Pole	6.1	80	1-50	The stand is sparse. The terrain is hummocky but not bad. There are inclusions of lowlands. The stand is seeding in with oak and maple.
53	4199 - Other Mixed Upland Deciduous	High Density Pole	7.4	80	51-80	The terrain is hummocky but the stand is on a ridge. . The aspen is declining. There are pockets of wet ground. The stand has traces of blackgum, black cherry, and swamp white oak. Threre is significant increase in aspen along Bradford Road.
54	6113 - Lowland Maple	Medium Density Pole	20.7	Uneven Age	1-50	This stand was harvested as a seed tree harvest retaining around 25 sq ft. All the aspen, birch, and marked trees were removed. The harvest was completed in January 2009. Currently the crown closure is around 60%. The regeneration is present. The terrain is hummocky. The stand is a matrix of uplands and lowlands with the lowlands being about 75%.
55	4130 - Aspen	High Density Pole	38.3	45	81-110	This stand was final harvested in 1977. The terrain is undulating to hummocky. It is a matrix of uplands and lowlands with the uplands being about 80%.
56	6119 - Mixed Lowland Deciduous Forest	High Density Log	14.9	Uneven Age	81-110	This stand had a selection harvest done in it 1998. The harvest included regeneration gaps. Many of the gaps have regenerated to a mixture of maple and ash. It is often mix with some oak. It is mainly lowlands with some areas of uplands. The terrain is hummocky. E.A.B. is present but it is not extensive. The cottonwood in the stand is heaviest in the south end.
57	4123 - Red Oak	Medium Density Log	20.1	80	51-80	The stand was marked as an oak shelterwood harvest. The residual is about 45 sq ft of oaks and other species. The harvest was completed in December 2008. Currently it has a crown closure of about 75%. The stand has a drainage running through the center of it. The deer browse is heavy on the young regeneration.
58	4125 - Black, N. Pin Oak	High Density Log	35.3	Uneven Age	81-110	The oak and aspen is declining. The stand is a matrix of uplands and lowlands and it is about a 50/50 mix. Gap dynamics are occurring in the stand. However the maple is the species that is capitalizing on them.
60	4125 - Black, N. Pin Oak	High Density Log	10.6	Uneven Age	81-110	The stand is mainly uplands with some lowland areas. The aspen is declining. The terrain is hummocky
62	6113 - Lowland Maple	High Density Log	22.8	Uneven Age	81-110	The stand is a matrix of uplands and lowlands with the lowlands being the majority. The terrain is hummocky. The stand has pockets of standing water. The aspen in the stand is declining.
63	6119 - Mixed Lowland Deciduous Forest	High Density Log	5.9	Uneven Age	81-110	The stand was not harvested with the oak to the north. It is on the Chippewa River Flood Plain. There is some beaver activity on the aspen.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	4131 - Aspen, Oak	High Density Log	199.4	Uneven Age		The stand is a matrix of uplands and lowlands with the uplands being the majority. It has been classified as a potential old growth stand. Currently there is some gap dynamics happening. The red maple is capitalizing on them. There are trace species of sugar maple, basswood, yellow birch, paper birch, white pine, hemlock and cedar. This was taken from O.I. data from 2004 inventory.
65	6119 - Mixed Lowland Deciduous Forest	High Density Log	27.4	Uneven Age	141-170	This stand had a selection harvest done in 1998. It included regeneration gaps. The gaps are regenerating to ash and maple. The stand is wet and the terrain is hummocky. E.A.B. is present in the stand but it is not extensive.
66	6119 - Mixed Lowland Deciduous Forest	High Density Log	143.2	Uneven Age	81-110	This stand is on the flood plain of the Little Salt River. It has traces of white pine, sycamore, and hackberry. The terrain is undulating. There is some E.A.B. present, but it is scattered.
67	6119 - Mixed Lowland Deciduous Forest	High Density Log	59.9	Uneven Age		The stand is on the flood plain of the Chippewa River.
68	6119 - Mixed Lowland Deciduous Forest	High Density Pole	34.8	Uneven Age	81-110	The stand is a matrix of uplands and lowlands with the lowlands being the majority. The terrain is hummocky. E.A.B. is present but not extensive. This stand goes up to the slope that overlooks the Little Salt River Flood Plain.
69	4130 - Aspen	High Density Sapling	11.5	15		This stand was final harvested to 2" DBH in 1998. The stand has extensive aspen. Most of it looks to be in good shape. The oak, in the stand, is mainly along the harvest road. The northwest end of the stand has a thick understory of witch hazel.
71	4199 - Other Mixed Upland Deciduous	High Density Log	8.8	Uneven Age	81-110	The terrain is hummocky but dry. It grades into the flood plain of the Chippewa River. There are pockets of standing water.
72	6113 - Lowland Maple	High Density Pole	8.0	Uneven Age	51-80	The stand is a matrix of uplands and lowlands with the lowlands being the majority. This stand was set up for a selection harvest retaining around 65 sq ft. The harvest was completed in December 2008. The harvested removed the aspen as well as marked trees. The aspen has not regenerated. However, there is some maple and ash regeneration mixed with some oak. The terrain is hummocky. Currently the crown closure is around 90%.
74	4199 - Other Mixed Upland Deciduous	High Density Pole	6.7	Uneven Age	51-80	The stand is on the flood plain of the Chippewa River. It is in a higher position in the landscape, then other stands on the flood plain. There is beaver activity on the aspen. There are also several pockets of standing water present.
75	6119 - Mixed Lowland Deciduous Forest	High Density Pole	7.3	Uneven Age	51-80	The terrain is hummocky. The stand is a matrix of uplands and lowlands with the lowlands being the majority. The overstory oak and aspen are declining.
76	4131 - Aspen, Oak	High Density Sapling	31.7	15		This stand was final harvested to 2" DBH in 1998. It is a matrix of uplands and lowlands with the uplands being around 80%. It is mainly on a ridge. The southeast corner is lower then the north leg. The oak regeneration has a high percentage of single stem trees.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
77	4130 - Aspen	Medium Density	9.9	15		This stand was final harvested to 2" DBH in 1998. About 75% of the aspen regeneration has basal wounds. The oak regeneration in the stand is mainly stump sprout origin.
78	6119 - Mixed Lowland Deciduous Forest	High Density Log	12.2	Uneven Age	81-110	This stand was set up for a selection harvest retaining around 65 sq ft. The harvest was completed in January 2009. Currently the crown closure is around 90%. The terrain is hummocky. There is a lot of standing water present. The aspen is declining. E.A.B. is present but not extensive
79	6119 - Mixed Lowland Deciduous Forest	High Density Pole	11.4	Uneven Age	81-110	The aspen is declining in the stand. E.A.B. is present but it is not heavy. The terrain is hummocky. The stand is self thinning as the aspen is coming down. There is heavy advanced regeneration present. The stand will progress to a nice swamp hardwood stand without any treatment. Currently any treatment would cause extensive damage to the advance regeneration.
80	4131 - Aspen, Oak	High Density Pole	13.9	45	81-110	This stand is land locked. It is a matrix of uplands and lowlands with the lowlands being the majority. There is a small pocket of pine in the north east portion of the stand.
82	6119 - Mixed Lowland Deciduous Forest	High Density Log	5.1	Uneven Age	51-80	The stand is on the flood plain of the Chippewa River. It is a matrix of uplands and lowlands with the lowlands being the majority.
83	6112 - Lowland Aspen	Low Density Sapling	2.1	15		The stand is a patchy mix of regeneration and non-forested wetlands. The crown closure is just over 25%.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3105 - Mixed Upland Herbaceous	1.4	No	Low (NonForested)	This stand is a gas pipeline R.O.W. The sign says it belongs to Consumers Energy. Their contact number is 1-866-789-6811.
9	629 - Mixed non-forested wetland	0.7	No	Low (NonForested)	The stand is heavy to cattails and marsh grass. There are scattered pockets of tag alder and willow.
11	6220 - Alder/willow	4.4	No	Low (NonForested)	This stand is mainly a low wet depression. The ground cover is a mixture of tag alder, willow, red osier dogwood, and Michigan holly.
16	3301 - Low Density Deciduous Tree	7.1	No	Low (NonForested)	The stand has about 20% crown closure. The overstory is mainly green ash mixed with red maple, swamp white oak and black ash. The understory is mainly tag alder, winter berry, and dogwood.
21	6220 - Alder/willow	2.0	No	Low (NonForested)	This stand is mainly tag alder and willow. There are inclusions of cattails and marsh grass also present.
25	6229 - Mixed lowland shrub	8.1	No	Low (NonForested)	The stand is mainly lowland shrubs with pockets of cattails and marsh grass. There are also scattered swamp white oaks, ash, and maple. The crown closure is around 20%.
28	629 - Mixed non-forested wetland	1.4	No	Unspecified	The stand is mainly cattail and marsh grass with some scattered paper birch, swamp white oak, red maple, and ash.
29	629 - Mixed non-forested wetland	13.3	No	Unspecified	The stand is mainly cattails and marsh grass with lowland shrubs, paper birch, red maple, ash, and swamp white oak.
31	629 - Mixed non-forested wetland	3.5	No	Low (NonForested)	The stand is in a depression. The ground cover is cattails and marsh grass with some scattered paper birch, swamp white oak, ash, and maple. The crown closure is less than 15%.
36	6229 - Mixed lowland shrub	8.7	No	Unspecified	This stand is mainly tag alder and willow mixed with other lowland shrubs. The stand has some scattered swamp hardwoods present.
37	11 - Low Intensity Urban	9.4	No	Unspecified	This is a road with a pipeline in the R.O.W.
46	50 - Water	13.4	No	Unspecified	This is a portion of the Chippewa River.
48	629 - Mixed non-forested wetland	13.7	No	Low (NonForested)	This is mainly cattails and marsh grass with some swamp hardwoods and lowland shrubs.
52	629 - Mixed non-forested wetland	7.8	No	Low (NonForested)	The stand is mainly cattails and marsh grass with lowland shrubs around the edges.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
59	3105 - Mixed Upland Herbaceous	3.1	No	Unspecified	This is a maintained powerline. It is mainly grass though the east side is a little wet.
61	11 - Low Intensity Urban	2.3	No	Unspecified	This stand is the Chippewa River Road and an associated pipeline. The pipeline is on the north side of the road.
70	11 - Low Intensity Urban	11.1	No	Low (NonForested)	The stand is Gordonville road and an associated pipeline. There are phragmighties in east end.
73	50 - Water	7.7	No	Unspecified	This is a portion of the Chippewa River.
81	3105 - Mixed Upland Herbaceous	1.1	No	Unspecified	This area was maintained by the private landowner to the north. It has since started to convert to upland shrubs.
84	50 - Water	4.9	No	Unspecified	This is a portion of the Chippewa River.

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.

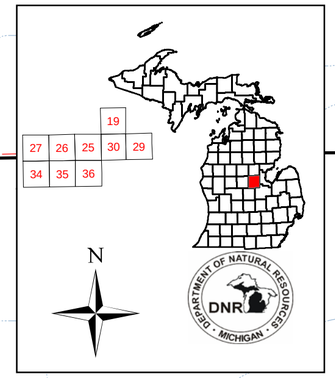
ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
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.

Cover Type & Treatment Map

Compartment: 115
T14N R01W Sec. 19, 29, 30
T14N R02W Sec. 25, 26, 27, 34, 35, 36
County: Midland
Unit: Gladwin
YOE: 2014
Acres: 1,386 GIS Calculated
Examiner: Steve Nyhoff
Map Revised: 06/22/2012
Map Phase: Pre-Review

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



Legend

- Remonumented Section Corners
- Corners
- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Pipe
- Power
- Lakes and Rivers
- State Forest Land

Treatments

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

Forest Stands

Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 611 - Lowland Deciduous Forest

Non-Forest Stands

Level 3

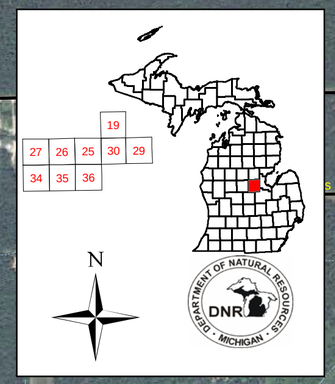
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland

1 0.5 0 1 Miles

Stand Boundary Map

Compartment: 115
T14N R01W Sec. 19, 29, 30
T14N R02W Sec. 25, 26, 27, 34, 35, 36
County: Midland
Unit: Gladwin
YOE: 2014
Acres: 1,386 GIS Calculated
Examiner: Steve Nyhoff
Map Revised: 06/22/2012
Map Phase: Pre-Review

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



Legend
- Remonumented Section Corners
- Corners
- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- Lakes and Rivers
- Stream
- Intermittent Stream
- Pipe
- Power
- Stand Boundaries

Forest Stands
- Level 3
  - 412 - Oak Types
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 611 - Lowland Deciduous Forest

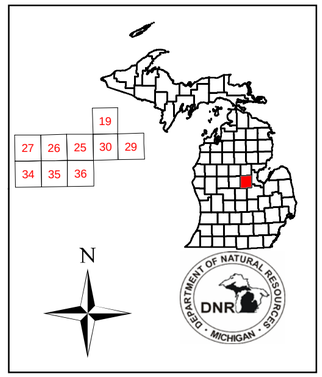
Non-Forest Stands
- Level 3
  - 110 - Low Intensity Urban
  - 310 - Herbaceous Openland
  - 330 - Low-Density Trees
  - 500 - Water
  - 622 - Lowland Shrub
  - 629 - Mixed non-forested wetland

1 0.5 0 1 Miles

Dedicated & Proposed Special Conservation Area Map

Compartment: 115
T14N R01W Sec. 19, 29, 30
T14N R02W Sec. 25, 26, 27, 34, 35, 36
County: Midland
Unit: Gladwin
YOE: 2014
Acres: 1,386 GIS Calculated
Examiner: Steve Nyhoff
Map Revised: 06/22/2012
Map Phase: Pre-Review

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



Legend
- Remonumented Section Corners
- Miris Corners
- Stand Boundaries

Dedicated Special Conservation Areas
- Cold Water Streams

Forest Stands
- Level 3
  - 412 - Oak Types
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 611 - Lowland Deciduous Forest

Non-Forest Stands
- Level 3
  - 110 - Low Intensity Urban
  - 310 - Herbaceous Openland
  - 330 - Low-Density Trees
  - 500 - Water
  - 622 - Lowland Shrub
  - 629 - Mixed non-forested wetland

19 30 27 26 25 34 35 36

1 310-G0; 2 4199-MD5; 3 6112-P6; 4 6112-P6; 5 6119-E2; 6 6119-E5; 7 4130-A3; 8 6113-E8; 9 629-L0; 10 6119-E9; 11 622-L0; 12 6115-E5; 13 4130-A6; 14 6119-E9; 15 6112-P3; 16 330-U0; 17 4130-A3; 18 4125-O8; 19 4199-MD9; 20 4130-A2; 21 622-L0; 22 6119-E5; 23 6119-E4; 24 6113-E4; 25 622-L0; 26 4130-A6; 27 4130-A6; 28 629-L0; 29 629-L0; 30 4131-A9; 31 629-L0; 32 6119-E6; 33 4125-O8; 34 4139-A6; 35 4199-MD5; 36 622-L0; 37 110-X0; 38 6119-E6; 39 6112-P2; 40 6119-E5; 41 6110-E9; 42 6119-E9; 43 6112-P5; 44 6119-E9; 45 4130-A3; 46 500-Z0; 47 4125-O6; 48 629-L0; 49 6112-P5; 50 4121-O5; 51 4199-MD4; 52 629-L0; 53 4199-MD6; 54 6113-E5; 55 4130-A6; 56 6119-E9; 57 4123-O8; 58 4125-O9; 59 310-G0; 60 4125-O9; 61 110-X0; 62 6113-E9; 63 6119-E9; 64 4131-A9; 65 6119-E9; 66 6119-E9; 67 6119-E9; 68 6119-E6; 69 4130-A3; 70 110-X0; 72 6113-E6; 73 500-Z0; 74 4199-MD5; 75 6119-E6; 76 4131-A3; 77 4130-A2; 78 6119-E9; 79 6119-E6; 80 4131-A6; 81 310-G0; 82 6119-E9; 83 6112-P1; 84 500-Z0

1 Miles — 1 — 0.5 — 0

84°33'0"W 84°32'0"W 84°31'0"W 84°30'0"W 84°29'0"W 84°28'0"W 84°27'0"W
43°34'0"N 43°33'0"N