Gwinn Forest Management Unit
Compartment Review Presentation
Compartment 212 Entry Year: 2014
Compartment Acreage: 1,531 County: Marquette

Revision Date: 8/20/12

Stand Examiner: Thomas Seablom

Legal Description: T48N R29W Section(s) 2, 12 – 14, 22 - 24

RMU (if applicable): Peshekee Highlands Management Area

Management Goals: Management goals range from maintaining timber production and wildlife habitat to protecting water quality. Timber management within this compartment is primarily for fiber production on an even-age basis. Unevenage northern hardwood management does take place, producing quality sawlogs. Wildlife habitat will continue to be maintained as it is within the current cover types.

Soil and Topography: The majority of soils in this compartment are silty loams. They range from being very deep with surface cobbles to shallow soils over bedrock. Soils range from Histosols in the open marshes, Minocqua muck in the drainages, to Peshekee and Keewaydin-Michigamme Rock outcrop complex in the highlands. The topography has considerable and sometimes quite abrupt, relief to it which limits access to the majority of the compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership in this vicinity is fairly fragmented. Historically, land has been held by timber companies with scattered State parcels and some private individual holdings. Recently, timber companies have begun to divest their holdings which as led to an increase in the number of private individual parcels. Development is minimal with the majority of it being in camps. The towns

Unique, Natural Features: *See MNFI database for specific concerns.* Potential for rare plants of rich mesic forests: Carex assiniboinensis, showy orchids, Ginseng, green spleenwort, Goblin Fern. Potential for rare plants of dry northern forest and dry mesic northern forest: Dalibarda repens, pine drops. Potential for goshawk and red shouldered hawk in hardwood stands. Potential for wood turtle along Kipple Creek and Koops Creek.

Archeological, Historical, and Cultural Features: None identified with HAL

Special Management Designations or Considerations: Use best management practices to protect riparian areas.

Watershed and Fisheries Considerations: Wolf Lake, Kipple Creek (the outlet for Brocky Lake), Koops Creek, and numerous other drainages flow through this compartment and feed into the Middle Branch of the Escanaba River.

Wildlife Habitat Considerations: Featured species include American marten, blackburnian warbler, gray jay, moose, and northern goshawk.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse-textured glacial till and glacial outwash sand and gravel and postglacial alluvium, some times thin to discontinuous. There is insufficient data to determine the glacial drift thickness. Precambrian Archean Granite/Gneiss subcrops below the glacial drift. This rock could be used as dimension stone. Gravel pits are located in the area and potential appears to be good. Abandoned iron mines are located to the south. This compartment was not previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: Vehicle access is very limited within this compartment. The Burma Truck Trail provides the primary access through the center of this compartment and the Dishno Road provides access to the northeast. Few side roads exist due to the topography and are primarily winter access roads.

Survey Needs: Survey corners will be needed prior to timber sale work beginning.

Recreational Facilities and Opportunities: Wolf Lake (a managed trout fishery) is located within this compartment. Snowmobile trail #5 runs north-south through this compartment as well.

Fire Protection: High rock bluffs and rugged terrain restrict mechanized attacks. Portable pumps and hand tools will be the primary method of suppression. Water sources include creeks and small ponds that are well distributed throughout the compartment.

Additional Compartment Information:

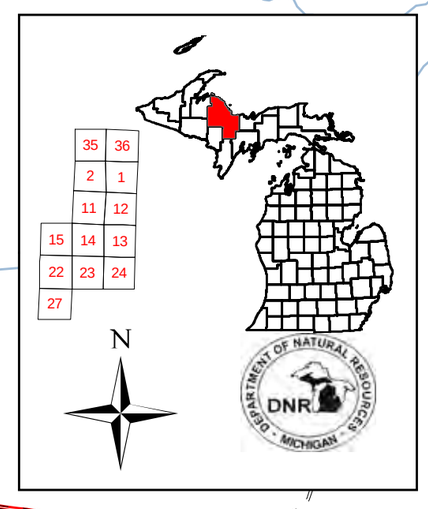
- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
  - **Cover Type by Age Class**
  - **Cover Type by Management Objective**
  - **Compartment Volume Summary**
  - **Proposed Treatments – No Limiting Factors**
  - **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
  - **Base feature information, stand numbers, cover types**
  - **Proposed treatments**
  - **Proposed road access system**
  - **Suggested potential old growth**

Cover Type & Treatment Map

Compartment: 212
T48N R29W Sec. 1, 2, 11-15, 22-24, 27
T49N R29W Sec. 35, 36
County: Marquette
Unit: Gwinn
YOE: 2014
Acres: 1,531 GIS Calculated
Examiner: Thomas Seablom
Map Revised: 08/28/2012
Map Phase: Pre-Review

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



87°56'0"W 87°55'0"W 87°54'0"W 87°53'0"W 87°52'0"W 87°51'0"W
46°36'0"N 46°35'0"N 46°34'0"N 46°33'0"N 46°32'0"N

Dishno Rd
Wolf Lake Rd
Log Lake
Wolf Lake
Brocky Lake
Kipple Creek
Trembath Lake
County Road Aaw
County Road Aad

3 4191-MD9
1 500-Z0
2 6120-C6
5 4112-M9
6 6129-Q5
8 623-N0
18 429-MC8
13 4115-M9
9 4113-M6
23 622-L0
24 6129-Q5
17 6122-S6
7 4112-M9
4 4115-M9
12 4191-MD6
22 4191-MD6
20 6122-S6
14 622-L0
10 4137-A3
11 4220-W9
15 6122-S6
25 4191-MD8
16 6124-Q4
21 6124-Q4
26 6124-Q6
19 4232-F9
30 4130-A3
33 6120-C5
35 4134-A6
29 6122-S1
27 4233-F6
28 4134-A6
31 4232-F6
34 6129-Q6
32 622-L0
36 4134-A6
38 4319-UM6
39 622-L0
42 6121-T9
40 6129-Q4
43 4191-MD6
44 4134-A9
41 4130-A9
45 6121-T5
37 4139-A6

1 0.5 0 1 Miles

Legend

- Survey Grade
- Remonumented Section Corners
- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Stream
- Intermittent Stream
- Powerline
- Snowmobile Trails
- Snowmobile Trail
- 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

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

Non-Forest Stands

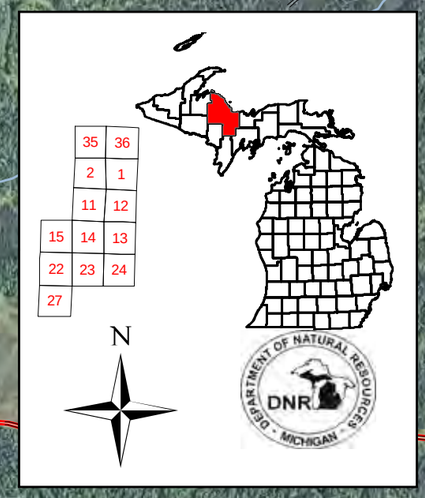
Level 3

- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

Stand Boundary Map

Compartment: 212
T48N R29W Sec. 1, 2, 11-15, 22-24, 27
T49N R29W Sec. 35, 36
County: Marquette
Unit: Gwinn
YOE: 2014
Acres: 1,531 GIS Calculated
Examiner: Dean Wilson
Map Revised: 07/31/2012
Map Phase: Pre-Review

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



Legend

- Survey Grade
- Remonumented Section Corners
- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Stream
- Intermittent Stream
- Powerline
- Snowmobile Trails
- Snowmobile Trail
- Stand Boundaries

Forest Stands

Level 3
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

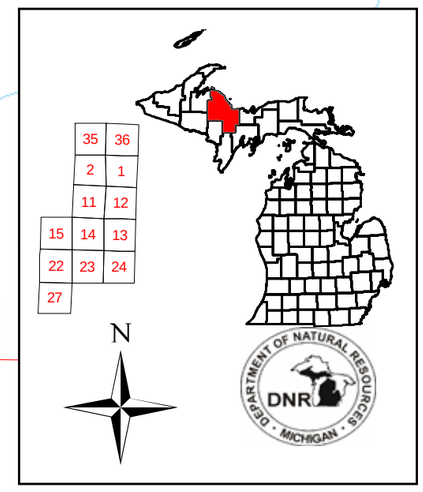
Level 3
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

1 Miles — 1 — 0.5 — 0

Dedicated & Proposed Special Conservation Area Map

Compartment: 212
T48N R29W Sec. 1, 2, 11-15, 22-24, 27
T49N R29W Sec. 35, 36
County: Marquette
Unit: Gwinn
YOE: 2014
Acres: 1,531 GIS Calculated
Examiner: Thomas Seablom
Map Revised: 09/10/2012
Map Phase: Pre-Review

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



Legend

- Remonumented Section Corners
- Miris Corners
- Stand Boundaries

Proposed Special Conservation Areas
- SCA - Special Conservation Area
- SCA Removal
- Boat Access Sites

Dedicated Special Conservation Areas
- Cold Water Streams
- Cold Water Lakes

Forest Stands

Level 3
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

1 **500**-Z0
2 **6120**-C6
3 **4191**-MD9
4 **4115**-M9
5 **4112**-M9
6 **6129**-Q5
7 **4112**-M9
8 **623**-N0
9 **4113**-M6
10 **4137**-A3
11 **4220**-W3
12 **4191**-MD6
13 **4115**-M9
14 **622**-L0
15 **6122**-S6
16 **6124**-Q4
17 **6122**-S6
18 **429** -MC8
19 **4232**-F9
20 **6122**-S6
21 **6124**-Q4
22 **4191**-MD6
23 **622**-L0
24 **6129**-Q5
25 **4191**-MD8
26 **6124**-Q6
27 **4233**-F6
28 **4134**-A6
29 **6122**-S1
30 **4130**-A3
31 **4232**-F6
32 **622**-L0
33 **6120**-C5
34 **6129**-Q6
35 **4134**-A6
36 **4134**-A6
37 **4139**-A6
38 **4319**-UM6
39 **622**-L0
40 **6129**-Q4
41 **4130**-A9
42 **6121**-T9
43 **4191**-MD6
44 **4134**-A9
45 **6121**-T5

1 0.5 0 1 Miles

87°55'0"W 87°54'0"W 87°53'0"W 87°52'0"W 87°51'0"W
46°36'0"N 46°35'0"N 46°34'0"N 46°33'0"N 46°32'0"N

Table 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit **Compartment 212 Year of Entry 2014**

Thomas Seablom : 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	0	168	0	0	0	0	0	0	20	280	0	0	0	0	**469**
Cedar	0	0	0	0	0	0	0	0	21	0	2	0	0	0	**24**
Lowland Conifers	0	15	0	0	0	0	0	0	48	43	88	9	0	0	**203**
Lowland Shrub	118	0	0	0	0	0	0	0	0	0	0	0	0	0	**118**
Lowland Spruce/Fir	0	0	0	0	0	11	0	40	0	27	32	0	0	0	**109**
Marsh	14	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	18	156	28	0	0	0	**202**
Northern Hardwood	0	0	0	0	0	0	0	0	0	25	76	0	54	0	**154**
Tamarack	0	0	0	0	0	0	0	0	17	0	8	0	0	0	**25**
Upland Conifers	0	0	0	0	0	0	0	17	0	0	0	0	0	0	**17**
Upland Mixed Forest	0	0	0	0	0	0	0	0	14	0	0	0	0	0	**14**
Upland Spruce/Fir	0	0	0	36	0	0	0	0	74	0	0	0	0	0	**110**
Water	52	0	0	0	0	0	0	0	0	0	0	0	0	0	**52**
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
Total	**185**	**183**	**0**	**36**	**0**	**11**	**0**	**57**	**213**	**531**	**233**	**9**	**54**	**0**	**1531**

Table 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit
Year of Entry 2014

Compartment 212
Total Compartment Acres: 1531

Acres by Treatment Type

Commercial Harvest - 935	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	301	0	0	0	0	0	**301**
Lowland Conifers	88	0	80	0	0	0	**167**
Lowland Spruce/Fir	0	0	72	0	0	0	**72**
Mixed Upland Deciduous	193	0	0	9	0	0	**202**
Northern Hardwood	16	75	0	0	0	0	**91**
Tamarack	9	0	8	0	0	0	**17**
Upland Mixed Forest	14	0	0	0	0	0	**14**
Upland Spruce/Fir	4	0	67	0	0	0	**72**
Total	**625**	**75**	**227**	**9**	**0**	**0**	**935**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	32212003-Cut	9.1	4191 - Mixed Upland Deciduous with Conifer	High Density Log	85	81-110	Harvest	Shelter Wood with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Shelterwood harvest removing white birch, balsam, and enough of the remaining species to bring the residual basal area to approx 40-50 ft/ac. Retain white pine, hemlock, and any cedar that may be in the stand.

Other Comments: Stand is on the way into the Wolf Lake BAS. Harvest will remove the hazard trees and will still be visually appealing.

Next Steps: Regeneration survey.

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
4	32212004-Cut	53.7	4115 - Y.Birch, Hemlock NH	High Density Log	150	141-170	Harvest	Single Tree Selection	4115 - Y.Birch, Hemlock NH	Cmpt. Review Proposal

Prescription Specs: Select cut down to 70-80 ft/ac. Concentrate removal around hemlock and white pine, and if present, yellow birch to promote those species. Limit chipping to provide coarse woody debris.

Other Comments: Very large hemlock in this stand.

Next Steps: Regeneration survey as per work instructions.

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
5	32212005-Cut	8.8	4112 - Maple, Beech, Cherry Association	High Density Log	90	111-140	Harvest	Group Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal

Prescription Specs: Use the group selection method and thin inbetween the groups down to 60-70 ft/ac. Strive to place gaps near yellow birch and hemlock. Limit chipping to provide coarse woody debris.

Other Comments:

Next Steps: Regeneration survey as per work instructions.

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
6	32212006-Cut	28.2	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	88		Harvest	Seed Tree with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal

Prescription Specs: Seed tree w/reserve harvest, leaving patches of approximately 15 seed trees per acre, favoring tamarack. Cut all trees between patches.

Other Comments: West side of stand has smaller diameter timber. Stand is quite wet.

Next Steps: Regeneration survey as per work instructions.

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
9	32212009-Cut	16.1	4113 - R.Maple, Conifer	High Density Pole	90	81-110	Harvest	Clearcut with Reserves	4113 - R.Maple, Conifer	Cmpt. Review Proposal

Prescription Specs: Clearcut w/reserves, retaining white pine, hemlock, and some wind firm white spruce and large aspen, preferably big tooth. Limit chipping to provide for coarse woody debris.

Other Comments: Buffer pond and creek accordingly.
Stand is currently listed as POG. Should be removed from this status.

Next Steps: Regeneration survey as per work instructions.

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
17	32212017-Cut	40.3	6122 - Black Spruce	High Density Pole	77		Harvest	Seed Tree with Reserves	6122 - Black Spruce	Cmpt. Review Proposal

Prescription Specs: Seed tree w/reserves; leaving approx. 10-15 black spruce and tamarack/acre (combined). Leave 2-3 aspen and/or white birch per acre where species are present in stand.

Other Comments: Leave appropriate buffer along Kipple Creek. Most of the cedar should fall in the buffer. Access is to this stand will be from the southwest corner of the adjacent hardwood stand to the north. This is the only area where a skidder will be able to access the stand.

Next Steps: Regeneration survey as per work instructions.

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	32212019-Cut	4.4	42320 - Upland Spruce	High Density Log	83		Harvest	Clearcut with Reserves	42320 - Upland Spruce	Cmpt. Review Proposal

Prescription Specs: Clearcut w/reserves. Reserves will be buffer along the creek.

Other Comments: The north part of this stand may not be easily accessible for harvest.

Next Steps: Regeneration survey as per work instructions.

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
26	32212026-Cut	31.6	6124 - Lowland Spruce-Fir	High Density Pole	93		Harvest	Seed Tree with Reserves	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal

Prescription Specs: Stand is currently on proposal from last entry period.

Other Comments: Sale was put up and sold but returned to the State. Currently a buyer has expressed interest in the sale so it is being re-advertised.

Next Steps: Regeneration survey as per work instructions if stand is harvested.

Proposed Start Date: 10/01/2006

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
28	32212028-Cut	45.6	4134 - Aspen, Spruce/Fir	High Density Pole	90		Harvest	Clearcut	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Specs: Clearcut, harvesting all trees except any white pine over 18-inches dbh. Limit chipping in order to provide coarse woody debris.

Other Comments: Very rugged stand, not all of it may be cut due to terrain.

Next Steps: Regeneration survey as per work instructions.

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
31	32212031-Cut	67.1	42320 - Upland Spruce	High Density Pole	87		Harvest	Seed Tree with Reserves	42320 - Upland Spruce	Cmpt. Review Proposal

Prescription Specs: Seed tree harvest w/reserves. Leave pockets of 10-15 trees well distributed thorughout the stand. Cut all other trees except any white pine and white cedar if present.

Other Comments: Parts of this stand are rugged, especially where it borders stand 28. Leave appropriate buffer along Kipple Creek.

Next Steps: Regeneration survey as per work instructions.

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
42	32212042-Cut	8.0	6121 - Tamarack	High Density Log	100		Harvest	Seed Tree with Reserves	6121 - Tamarack	Cmpt. Review Proposal

Prescription Specs: Seed tree w/reserves. Leave scattered, well distributed tamarack for a seed source. Cut all other trees over 2-inches dbh.

Other Comments: Very wet stand.

Next Steps: Regeneration survey as per work instructions.

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
44	32212044-Cut	6.0	4134 - Aspen, Spruce/Fir	High Density Log	85		Harvest	Clearcut	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Specs: Clearcut harvesting all trees. No retention due to small acreage.

Other Comments:

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Total Treatment Acreage Proposed: 318.9

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
12	32212012-Cut	27.1	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	93		Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Clearcut w/reserves. Leave scattered trees to meet retention, especially large, overmature aspen.

Other Comment: Very difficult to access this stand. Will have to come from the northeast as the remainder of the stand is fairly steep.

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
20	32212020-Cut	31.5	6122 - Black Spruce	High Density Pole	100		Harvest	Seed Tree with Reserves	6122 - Black Spruce	Cmpt. Review Proposal

Prescription Specs: Seed tree w/reserves, leaving patches of trees amounting to approximately 15 trees/acre.

Other Comment: Currently no access to the stand. If stand 25 to the south is sold, consider setting up this stand.

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	32212022-Cut	28.3	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	100		Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Clearcut w/reserves, retaining some wind firm white spruce, some large aspen (preferably big tooth), and a mix of present species to satisfy retention. Limit whole tree chipping to provide coarse woody debris.

Other Comment: Reassess this stand if/when Plum Creek builds a road into their property to the south.

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	32212024-Cut	19.9	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	85		Harvest	Seed Tree with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal

Prescription Specs: Seed tree w/reserves. Cut all trees except cedar, leaving well distributed patches, approximately 1 per acre, of 15 trees composed of current species in the stand.

Other Comment: Stand may be too wet. Reassess when setting up adjacent stands. Will need to bridge the creek to access the stand.

Next Steps: Regeneration survey as per work instructions if stand is harvested.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2G: Too wet (sensitive soils, does not include access issues)
Stand may be too wet. Re-assess as we had just received almost 2" of rain when the inventory was happening.

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
25	32212025-Cut	129.1	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	93		Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Stand currently on proposal from last entry period.

Other Comment: Sale was put up and sold but was returned to the State. It was decided not to re-advertise the sale at the time. Currently a buyer has expressed interest in the sale so it is being re-advertised.

Next Steps: Regeneration survey as per work instructions if stand is harvested.

Proposed Start Date: 10/01/2006

Limiting Factor and No Treatment Reason: 2E: Road needed
Access from west is limited by steep hillside and rugged terrain. Sale is currently on proposal from last entry period. See stand comments.

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34	32212034-Cut	87.6	6129 - Mixed Coniferous Lowland Forest	High Density Pole	105		Harvest	Clearcut with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal

Prescription Specs: Clearcut w/reserves. Retain cedar, white pine, and a mix of other species to satisfy 10% retention.

Other Comment: Very rugged and difficult to access this stand.

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed
Currently there isn't a road near this stand. It is also in a very rugged area and access from the north would be difficult.

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35	32212035-Cut	7.4	4134 - Aspen, Spruce/Fir	High Density Pole	86		Harvest	Clearcut	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Specs: Clearcut with no retention due to small stand size.

Other Comment: Very rugged stand, currently not accessible.

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
36	32212036-Cut	6.8	4134 - Aspen, Spruce/Fir	High Density Pole	86		Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Specs: Clearcut w/reserves leaving any white pine over 18-inches dbh and some wind firm white spruce.

Other Comment: There are scattered oak in this stand. Everyother clump should be cut so that it can be regenerated and still provide hard mast.

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	32212037-Cut	229.3	4139 - Aspen, Mixed Deciduous	High Density Pole	90	111-140	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Clearcut leaving all white and red pine and cut approximately 1/2 of the oak.

Other Comment: Very rugged stand with limited access. Portions of the stand could be harvested during dry summer months. Several steep cliffs are in this stand which is going to limit harvesting in some areas.

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed

There currently aren't any roads to this stand. Two major skid trails do exist, however, it would be a long way to skid the wood from the State land to these trails. There are also very steep areas in this stand that would preclude building a road. See locked comments.

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
38	32212038-Cut	13.8	4319 - Mixed Upland Forest	High Density Pole	82		Harvest	Clearcut with Reserves	4319 - Mixed Upland Forest	Cmpt. Review Proposal

Prescription Specs: Clearcut w/reserves. Cut all trees, leaving scattered spruce-fir for retention and seed source on the south end where they are a heavier component. Leave any white pine over 18-inches dbh.

Other Comment: Very rugged stand with no access.

Next Steps: Regeneration survey as per work instructions.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
43	32212043-Cut	8.6	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	88		Harvest	Clearcut	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Clearcut this stand leaving no retention due to small stand size.

Other Comment: Very difficult to access. Rugged terrain and swamp to east. If stands to west are treated, this stand can be accessed by installing a wood mat across Koop's Creek.

Next Steps: Land survey needed. Regeneration survey as per work instructions if harvested.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason: 2E: Road needed

Currently there isn't a road near this stand. A creek needs to be crossed to access from the northwest if a road is built to adjacent stands. The west hillside is too steep for trucks, may be able to skid down it. Private coming from the east doesn't appear to have any roads that come close to stand before another swamp needs to be crossed.

Total Treatment Acreage Proposed: 589.4

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

Prescription Specs:

Other Comments:

Next Steps:

Proposed Start Date: #Error

Total Treatment Acreage Proposed: **0**

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	6120 - Lowland Cedar	High Density Pole	2.2	100		Listed as SCA=>Potential Old Growth (POG). Stand is along Wolf Lake. SCA should be changed from POG to Riparian corridor. Small stand, mix of black spruce and cedar with some tamarack.
3	4191 - Mixed Upland Deciduous with Conifer	High Density Log	9.1	85	81-110	Access site on Wolf Lake. Listed as SCA=>Potential Old Growth (POG). Remove POG status, change to recreation? South east corner of stand is small patch of very large hemlock (30"+).
4	4115 - Y.Birch, Hemlock NH	High Density Log	53.7	150	141-170	Northern hardwood stand with considerable amount of hemlock, yellow birch, and upland cedar. Scattered very large white pine. Hemlock and cedar are more prominant in the north where it is almost pure hemlock. Stand could be labeled as old growth. It appears that very little harvesting has been done here in the past. Age is estimated as true age is not attainable without cutting down a tree.
5	4112 - Maple, Beech, Cherry Association	High Density Log	8.8	90	111-140	Mixed log-pole stand, predominatly red maple. Large amount of dead and down balsam fir.
6	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	28.2	88		Stand is mixed black spruce, cedar and tamarack. West side of stand is smaller diamter and more open. Aged a 3" black spruce and was 150 years old. Black spruce on the east side are between 6-8" and are 80-90 years old. Cedar in central and northeast part of stand is very thick and has both seedling and saplings. Looks like stand was hit with budworm in the past. Witches broom on the black spruce is quite evident.
7	4112 - Maple, Beech, Cherry Association	High Density Log	12.4	100	111-140	Small stand with somewhat difficult access (tag alder swale to west and private to the north). Small spring creek is on west end of stand. Trace of hemlock, white birch is on south edge of stand on edge of drop off.
9	4113 - R.Maple, Conifer	High Density Pole	16.1	90	81-110	Currently listed as SCA=>Potential Old Growth. Recommend removal from POG. Narrow stand that borders a natural pond. East side is steep down to the pond, south end is rocky.
10	4137 - Aspen, Birch	High Density Sapling	111.2	12		Stand cut via seed tree harvest in 2000, TS #24-94-01. Scattered very large white pine.
11	42200 - Natural White Pine	High Density Log	19.7	350	111-140	Currently listed as SCA=>Potential Old Growth: Large diameter white pine. Age is estimated.
12	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	27.1	93		Currently listed as SCA=>Potential Old Growth. Recommend removing it from POG. Stand is flat on bottom north side with black spruce and then quickly transitions to a fairly steep knob heading south. It is surrounded by Kipple Creek, lowland brush and steep valleys.
13	4115 - Y.Birch, Hemlock NH	High Density Log	63.1	100	111-140	Stand harvested summer of 1997 TS#23-94. Average basal area is 105. Scattered pockets of hemlock and pole size sugar maple bring the average up. Canopy is closed where basal areas are higher where poles are present. White pine regen present in stand.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	6122 - Black Spruce	High Density Pole	26.6	90		Stand was left as a buffer along Kipple's Creek. Mix of black spruce, tamarack and cedar.
16	6124 - Lowland Spruce-Fir	Low Density Pole	14.7	12		Portion of stand harvested in 2000 TS#24-94-01, all trees under 1 stick were left. West side has merchantable timber that wasn't included in the sale.
17	6122 - Black Spruce	High Density Pole	40.3	77		Currently listed as SCA=>Potential Old Growth. Recommend removing it from POG.
18	429 - Mixed Upland Conifers	Medium Density Log	16.9	75	51-80	White pine stand with maple, and spruce-fir. The age is from a 16" white pine. Diameter on the pine ranges from 6" to over 30".
19	42320 - Upland Spruce	High Density Log	7.3	83		Small stand bordered on west by private and east by tag alder lowland. Birch has just about died out of stand and stand has converted to a spruce-fir stand. Creek flows west to east through the upper quarter of stand. Steep hillsides on south and north sides of creek.
20	6122 - Black Spruce	High Density Pole	31.5	100		Stand currently listed as SCA=>Potential Old Growth. Remove from SCA status. Stand is very difficult to access. Rugged, rocky terrain to the south and rough terrain to the north. Currrently there aren't any roads nearby.
21	6124 - Lowland Spruce-Fir	Low Density Pole	9.0	110		Stand currently listed as SCA=>Potential Old Growth. Recommend removal from POG.
22	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	28.3	100		Currently listed as SCA=>Potential Old Growth. Recommend removing it from SCA. Stand is difficult to access from the south as there are no roads. Kipple Creek and steep hillside limit access from the north.
24	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	19.9	85		Stand currently listed as SCA=>Potential Old Growth. Recommend removal from POG. Stand is a mix of black spruce, tamarack and cedar (along creek edge). Difficult access at this point in time.
25	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	129.1	93		Stand is currently on proposal waiting to be re-bid. Sale was setup last entry but was turned back to the State. Very rough terrain and access is severely limited. There currently aren't any roads accessing this stand. Plum Creek is planning on building a road into their property to the east of this stand sometime during the late summer of 2013. If this comes to be, this will be the best way to access this stand.
26	6124 - Lowland Spruce-Fir	High Density Pole	31.6	93		Stand is currently set up as a sale from the last entry. It is currently on proposal waiting to be bid. Stand was hit with budworm in the 1970's.
27	42330 - Upland Fir	High Density Pole	35.6	35		Currently SCA=>Potential Old Growth. Remove from potential old growth. Very difficult access. Stand is a result of spruce budworm from the 1970's. Fir is small diameter, 2-3 sticks tall. Birch is about 1/2 dead.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	4134 - Aspen, Spruce/Fir	High Density Pole	45.6	90		Stand currently listed as SCA=>Potential Old Growth. Remove from potential old growth.
29	6122 - Black Spruce	Low Density Sapling	10.6	50		Stand borders on being non-forest low density trees. Small diameter black spruce. Looks like an old bog filling in with trees.
46	6121 - Tamarack	High Density Pole	8.5	87		Stand currently SCA=>Potential Old Growth. Recommend removal from this status as it is an even-age timber type.
30	4130 - Aspen	High Density Sapling	56.8	12		Stand cut in 2000 TS#24-94-01. Scattered white and red pine mainly on the west side. Some seeding is occuring along the road and more open areas.
31	42320 - Upland Spruce	High Density Pole	67.1	87		Stand currently listed as SCA=>Potential Old Growth. Remove from potential old growth. Somewhat difficult access to this stand. Nice black spruce, scattered quaking aspen and balsam fir as well. Predominantly an upland stand (bunch berry ground cover), some low pockets w/cedar present. Trace of white pine scattered. Stand is beginning to break up.
33	6120 - Lowland Cedar	Medium Density Pole	21.5	88		
34	6129 - Mixed Coniferous Lowland Forest	High Density Pole	87.6	105		Stand currently listed as SCA=>Potential Old Growth. Remove from potential old growth. Difficult access to the stand. Very large tamarack, (a few are 22-24 inches on the stump) 8-9 sticks tall. Stand is predominantly lowland soils but there are areas of upland mixed in. Topographic position seems to have caused lowland soil formation, ie mucks, but then there are slight elevation changes where it becomes more upland.
35	4134 - Aspen, Spruce/Fir	High Density Pole	7.4	86		Currently no access to the stand. Tag alder swamp to the west and rough terrain to the north. Plum Creek is currently planning on putting a road in to the west to access their property to the north during 2013-2014. If this road is built, this stand can be accessed off of that. Stand is very rough (rock knob).
36	4134 - Aspen, Spruce/Fir	High Density Pole	6.8	86		Currently listed as SCA=>Potential old growth. Remove from potential old growth. Currently no access to the stand. Tag alder swamp to the south/west and rough terrain to the north. Plum Creek is currently planning on putting a road in to the west to access their property to the north during 2013-2014. If this road is built, this stand can be accessed off of that. Stand is steep and rocky. Not all of it will be able to be cut. Heavy to aspen/fir on the south with some maple/oak on the north and east side.
37	4139 - Aspen, Mixed Deciduous	High Density Pole	229.3	90	111-140	Stand currently listed as SCA=>Potential Old Growth. Remove from potential old growth. Difficult access, but cutable. Some black spruce-tamrack patches within the stand. Very steep cliff/hill runs northwest-southeast through the stand which will hamper/prohibit access to some of the stand.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4319 - Mixed Upland Forest	High Density Pole	13.8	82		Currently listed as SCA=>Potential Old Growth. Remove from potential old growth. Very difficult access as there are no roads within 1/2 mile of this stand. Plum Creek is potentially putting a road in to the north of this '40' (2013 to 2014) to access their property. If this comes to be, this stand will have much better access and could be put up at that time.
40	6129 - Mixed Coniferous Lowland Forest	Low Density Pole	11.8	90		Stand barely forested. Mix of tamarack, black spruce, and cedar. Very heavy tag alder understory.
41	4130 - Aspen	High Density Log	5.6	90		Small stand of aspen-fir on edge of lowland. Part of stand was cut as a timber tresspass ~20 years ago.
42	6121 - Tamarack	High Density Log	8.0	100		Almost a pure tamarack stand. Wet with some surface flow.
43	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	8.6	88		Stand currently listed as SCA=>Potential Old Growth. Remove from potential old growth. Stand is very difficult to access. No roads coming to it across private from the east, large tag alder swamp and creek to cross from west and north. Plum Creek is schedule to put a road into their property to the north of this '40' sometime between 2013 and 2014. If this comes to be, a bridge or mat could be put accross Koops creek to cut this stand. West side of stand is fairly steep hillside.
44	4134 - Aspen, Spruce/Fir	High Density Log	6.0	85		High ground surrounded by lowland. Mix of aspen, spruce-fir, and scattered red and white pine.
45	6121 - Tamarack	Medium Density Pole	8.9	85		Scattered black spruce and tamarack. Stand is cutable but wet.

6 – Nonforested Stands

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	50 - Water	52.4	N\A	Unspecified	Wolf Lake
8	6233 - Wet Meadow	14.3	No	Unspecified	About 1/2 this stand is a pond, the remainder is marsh grass.
14	6229 - Mixed lowland shrub	59.0	No	Unspecified	
23	6229 - Mixed lowland shrub	12.9	No	Unspecified	Scattered trees.
32	6229 - Mixed lowland shrub	35.3	No	Unspecified	
39	6220 - Alder/willow	11.0	No	Unspecified	

Data updated before 2:00 PM

7 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

Stand	SCA Type	SCA Name	Acres	Comments
multiple - see	**SCA Removal**	32212_SCA	801.9	SCA Removal. Was POG on previous inventory. Removing from SCA=>POG as this area is all even-age covertypes.
2	**SCA Removal**	32212002	2.2	SCA removal - does not meet POG criteria.
multiple - see	**SCA Removal**	32212003_SCA	8.5	
003	**Unique Site - SCA**	32212003A	0.6	
11	**Unique Site - SCA**	32212011	19.7	
21	**SCA Removal**	32212021	9.0	
multiple - see	**SCA Removal**	32212027_SCA	35.6	

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 Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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.
SCA	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.