GRAYLING FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 296 ENTRY YEAR: 2014

GIS Compartment Acreage: 1982 County: Crawford

Revision Date: 8/27/2012

Stand Examiner: Craig Farrer

Legal Description: T25N R02W sections 8, 17, 18, 19, 20, 29
South Branch Township

Management Goals: To manage and maintain species and structural diversity, health, productivity, and sustainability throughout the compartment. To incorporate visual management with any prescribed cutting along major county roads. Provide multiple uses of the land, for the public.

Soils and Topography: Soils consist of well-drained Grayling and Graycalm sand with one small area of very poorly drained Lupton muck.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment contains broken ownership with private residences along Stephan Bridge road. The majority of the land on the borders of this compartment is private. The NWSW and SESW of section 19 should be considered for acquisition. The NENW of section 29 was disposed of since last inventory.

Unique, Natural Features: The south half of sections 19 and 20 have been burned in 1968 and 1990 by wildfire. There is a potential for dry Prairie plants in grassy openings. They include Hill's thistle, Rough fescue, Prunus alleghaniensis, and pale agoseris. Dusted skipper, Grizzled skipper and Red legged spittlebug potential in grassy openings.

Archeological, Historical, and Cultural Features: Possibility of old logging camps in section 17.

Special Management Designations or Considerations: None.

Watershed and Fisheries Considerations: The South Branch a part of the AuSable Natural River designation flows within a half mile of the south side of this compartment.

Wildlife Habitat Considerations: To maintain existing cover types and promote age class diversity where possible with commercial timber cuttings. The openings will be maintained to improve the grass types that various species of wildlife would benefit

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Michigan Formation which is quarried for gypsum elsewhere in the State. Gravel pits are located approximately one mile away and potential appears to be good on the upland areas. This area has been sparsely drilled and several oil and gas leases are located in the

compartment. The nearest production is Hickeys Creek Field, located three miles to the southeast, producing oil from the Richfield and gas from the Prairie du Chien.

Vehicle Access: Stephan Bridge Rd runs through the center of the compartment. The public land in sections 17 and 20 are best accessed from Chase Bridge Rd then west on W. Maplehurst trail. No new access roads are needed. An undesignated ATV trail is located in the S1/2 of section 19 and should be blocked and posted. All new roads created for timber management should be closed upon completion of the management activities.

Survey Needs: To prepare for future cutting in section 19 the corners of private in the NE1/4NW1/4 and SE1/4SW1/4 should established.

Recreational Facilities and Opportunities: A designated cycle trail goes through the middle of section 19. It appears part of the trail is still on private land. That area also has several undesignated ATV trails. Deer hunting pressure is high in this compartment.

Fire Protection: There is very little pine type. There are enough trails to get within 3/8 mile of any area in the compartment. The AuSable River is a half mile south of the compartment.

Additional Compartment Information: A portion of the Beaver Creek MCCCT Cycle trail is on private land at the center section of 19. Trail should be relocated to correct this issue.

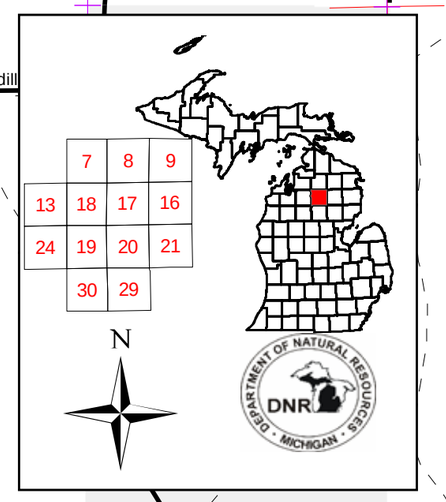
- **The following reports are available:**
  - **Total Acres by Cover Type and Age Class**
  - **Proposed Treatment Summaries**
  - **Dedicated Conservation Area Details**
  - **Listing of Forested Stands**
  - **Listing of Non-Forested Stands**
  - **Proposed Treatments with No Limiting Factor**
  - **Proposed Treatments with Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
  - **Base feature information, stand numbers, cover types, recreation trails and facilities**
  - **Proposed treatments**
  - **Dedicated & Proposed Special Conservation Areas**

Cover Type & Treatment Map

Compartment: 296
T25N R02W Sec. 7-9, 16-21, 29, 30
T25N R03W Sec. 13, 24
County: Crawford
Unit: Grayling
YOE: 2014
Acres: 1,982 GIS Calculated
Examiner: Craig Farrer
Map Revised: 09/06/2012
Map Phase: Pre-Review

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



Legend

- Remonumented Section Corners
- PLSS Corner
- GPS Point
- 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
- Berms
- Stream
- Intermittent Stream
- Pipeline
- Motorcycle (DNR Sticker)
- MCCCT Trail
- MCCCT Trails
- Lakes and Rivers
- State Forest Land

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)

Forest Stands

Level 3

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

Non-Forest Stands

Level 3

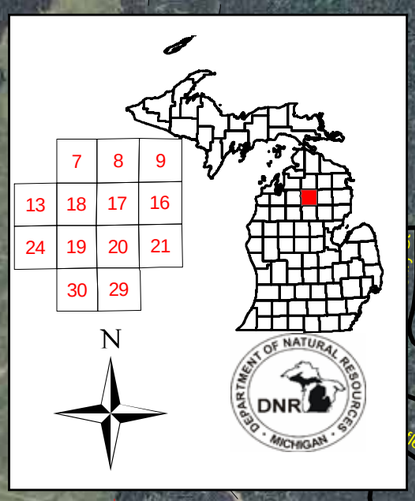
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 710 - Sand, Soil

1 Miles

Stand Boundary Map

Compartment: 296
T25N R02W Sec. 7-9, 16-21, 29, 30
T25N R03W Sec. 13, 24
County: Crawford
Unit: Grayling
YOE: 2014
Acres: 1,982 GIS Calculated
Examiner: Craig Farrer
Map Revised: 09/06/2012
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
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Berms
- Stream
- Intermittent Stream
- Pipeline
- Motorcycle (DNR Sticker)
- MCCCT Trail
- MCCCT Trails
- Stand Boundaries

Forest Stands

Level 3

411 - Northern Hardwood
412 - Oak Types
413 - Aspen Types
419 - Mixed Upland Deciduous
421 - Planted Pines
422 - Natural Pines
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Non-Forest Stands

Level 3

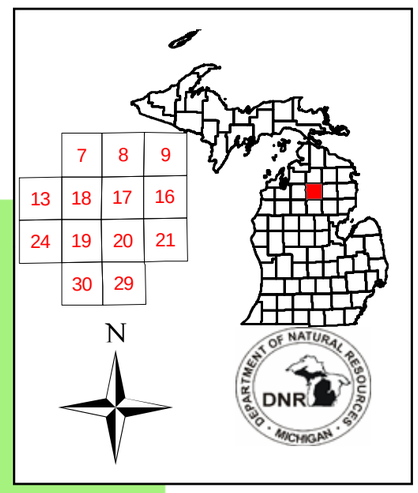
110 - Low Intensity Urban
310 - Herbaceous Openland
710 - Sand, Soil

1 0 0 1 Miles

Dedicated & Proposed Special Conservation Area Map

Compartment: 296
T25N R02W Sec. 7-9, 16-21, 29, 30
T25N R03W Sec. 13, 24
County: Crawford
Unit: Grayling
YOE: 2014
Acres: 1,982 GIS Calculated
Examiner: Craig Farrer
Map Revised: 09/06/2012
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

Dedicated Special Conservation Areas
- Cold Water Streams
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District

Dedicated Management Areas
- Dedicated Management Areas
- Boat Access Sites
- Non_Dedicated Natural Areas and National Natural Landmarks

Forest Stands

Level 3
411 - Northern Hardwood
412 - Oak Types
413 - Aspen Types
419 - Mixed Upland Deciduous
421 - Planted Pines
422 - Natural Pines
431 - Upland Mixed Forest
611 - Lowland Deciduous Forest
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613 - Lowland Mixed Forest

Non-Forest Stands

Level 3
110 - Low Intensity Urban
310 - Herbaceous Openland
710 - Sand, Soil

1 Miles

Table 1 – Total Acres by Cover Type and Age Class

Grayling Mgt. Unit **Compartment 296 Year of Entry 2014**

Craig Farrer : 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	193	103	81	0	48	74	43	0	0	0	0	0	0	0	**542**
Herbaceous Openland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Jack Pine	0	43	79	0	0	0	0	0	0	0	0	0	0	0	**123**
Lowland Aspen/Balsam Poplar	0	0	0	0	0	52	0	0	0	0	0	0	0	0	**52**
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	6	0	0	0	0	**6**
Lowland Spruce/Fir	0	0	0	0	0	8	0	0	0	0	0	0	0	0	**8**
Mixed Upland Deciduous	0	26	0	0	0	0	0	11	0	50	0	0	0	0	**88**
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	10	0	**10**
Northern Hardwood	0	7	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Oak	0	43	15	0	16	30	0	394	524	0	46	0	0	0	**1068**
Red Pine	0	0	0	0	0	15	0	0	0	0	0	0	0	0	**15**
Sand, Soil	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Upland Mixed Forest	0	0	0	0	0	0	0	51	0	0	0	0	0	0	**51**
Urban	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**204**	**223**	**176**	**0**	**63**	**180**	**43**	**456**	**524**	**57**	**46**	**0**	**10**	**0**	**1982**

Table 2 – Proposed Treatment Summaries

Grayling Mgt. Unit
Year of Entry 2014

Compartment 296
Total Compartment Acres: 1982

Acres by Treatment Type

Commercial Harvest - 851	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	124	0	0	0	0	0	**124**
Lowland Aspen/Balsam Poplar	52	0	0	0	0	0	**52**
Mixed Upland Deciduous	62	0	0	0	0	0	**62**
Oak	583	0	0	0	0	0	**583**
Red Pine	0	0	0	0	15	0	**15**
Upland Mixed Forest	15	0	0	0	0	0	**15**
Total	**836**	**0**	**0**	**0**	**15**	**0**	**851**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	72296001-Cut	52.4	6112 - Lowland Aspen	High Density Log	53	81-110	Harvest	Clearcut with Reserves	6112 - Lowland Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest with 2 or 3 1acre retention patches scattered within the stand. North side of stand borders private and will need private line. This private line will be interupted by a lowland marsh.

Other Comments:

Next Steps: Expect to get Aspen back with a mix of other species. Regen survey needed.

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
2	72296002-Cut	38.1	4124 - Red with White Oak	High Density Log	70	81-110	Harvest	Clearcut with Reserves	4124 - Red with White Oak	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves(overstory removal). Leave a patch within the stand to meet retention guidelines. Protect regen already established. (Cut unmerchatable regen to get to the larger trees and establish designated skid trails).

Other Comments:

Next Steps:

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
7	72296007-Cut	14.6	4310 - Pine, Oak Mix	Medium Density Log	70	81-110	Harvest	Clearcut	4310 - Pine, Oak Mix	Cmpt. Review Proposal

Prescription Specs: Final harvest with no retention.

Other Comments:

Next Steps: Should get a mix of Aspen, Oak and Red maple back. Regen survey needed

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	72296010-Cut	15.5	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	57	141-170	Harvest	Crown Thinning	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Thin Red Pine to120 BA Remove all other species. Protect Oak bearing trees as well as non forested opening within the stand area. Thinning because of visual concerns as well as close to a old homestead site. Due not use open areas for landings

Other Comments:

Next Steps:

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
11	72296011-Cut	11.3	4191 - Mixed Upland Deciduous with Conifer	High Density Log	79	111-140	Harvest	Clearcut	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Final harvest with no retention.

Other Comments:

Next Steps: Should regenerate to a mix stand of Aspen, Oak and Red maple with possible pine mixed within. Reg survey needed.

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
12	72296012-Cut	43.3	4130 - Aspen	High Density Log	64	111-140	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave 1 or 2 1 acre patches of retention.

Other Comments:

Next Steps: Should regenerate to Aspen with a mix of other species. Regen survey needed.

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	72296018-Cut	107.6	4124 - Red with White Oak	High Density Log	80	111-140	Harvest	Clearcut with Reserves	4124 - Red with White Oak	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves. Two cuts with an herbicide treatment between them. Remove aspen, red maple and some Oak in first cut and in second cut after herbicide remove the remaining Oak. Leave standard retention along with a chain wide buffer around Old growth White Pine stand(20) Stand 20 may vary in size (plus or minus).

Other Comments:

Next Steps: Observe the affect of an herbicide treatment. Follow up with a regen survey. Will accept a mix of upland deciduous spieces with a mix of conifer.

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
23	72296023-Cut	13.3	4130 - Aspen	High Density Pole	58	81-110	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest with no retention. Protect the Hawthorn patches within the stand.

Other Comments:

Next Steps: Should regenerate to Aspen with a mix of other species. Regen survey needed.

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
24	72296024-Cut	184.5	4124 - Red with White Oak	High Density Log	78	111-140	Harvest	Clearcut with Reserves	4124 - Red with White Oak	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave 4 or 5 1 acre patches for retentions scattered throughout the stand.

Other Comments:

Next Steps: Should regenerate to a mixed stand of Oak, Aspen and Red maple. Regen survey needed.

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
25	72296025-Cut	60.4	4130 - Aspen	High Density Log	58	141-170	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest stand with retention patches. Leave 3 or 4 1 acre retention patches. Private line is needed.

Other Comments:

Next Steps: Should regenerate to Aspen naturally with a mix of other species. Regen survey needed.

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	72296027-Cut	51.3	4126 - White, Black, N. Pin Oak	High Density Log	75	81-110	Harvest	Clearcut with Reserves	4126 - White, Black, N. Pin Oak	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Remove everything 5 inches and up. Protect the regeneration as much as possible.

Other Comments: Check with others for recommendation.

Next Steps:

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
28	72296028-Cut	19.3	4129 - Mixed Oak	High Density Log	79	81-110	Harvest	Clearcut with Reserves	4129 - Mixed Oak	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Cut everything except for the Red Pine , White Oak and White pine. Leave as retention.

Other Comments:

Next Steps: Stand will regenerate to a mixed stand of Aspen, Red maple and Oak. Regen survey needed.

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
30	72296030-Cut	7.3	4130 - Aspen	High Density Pole	26	51-80	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest with no retention. Due to size or stand. Treat with adjacent stand 27.

Other Comments:

Next Steps: Should regenerate to Aspen naturally with a mix of other species. Regen survey needed.

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	72296034-Cut	37.2	4126 - White, Black, N. Pin Oak	High Density Log	83	111-140	Harvest	Clearcut with Reserves	4126 - White, Black, N. Pin Oak	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves. Leave a 1 acre retention island within the stand. Pick the wolf or poor quality Oak trees to leave and except the loss of these tree in the future..

Other Comments:

Next Steps: Stand should regenerate to a mixed stand of Red maple, Aspen and Oak. Regen survey needed. Fully stocked.

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
35	72296035-Cut	13.1	4126 - White, Black, N. Pin Oak	High Density Log	77	81-110	Harvest	Clearcut with Reserves	4126 - White, Black, N. Pin Oak	Cmpt. Review Proposal

Prescription Specs: Clear cut with reserves. Leave patches for retention throughout stand. Stand borders private.

Other Comments:

Next Steps: Should get a mix of Oak, Aspen and Red maple regen. Regen Survey needed. Fully stocked

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
38	72296038-Cut	31.0	4121 - Oak, Aspen	Low Density Log	85	1-50	Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: Remove overstory. Cut everything 4 inches and up. Protect the existing regen.

Other Comments:

Next Steps:

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
45	72296045-Cut	54.4	4124 - Red with White Oak	High Density Log	79	81-110	Harvest	Clearcut with Reserves	4124 - Red with White Oak	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave 2-3 1 acre patches throughout stand.

Other Comments:

Next Steps: Shoulld regenerate to a mixed stand of oak, red maple and aspen. Regeneration survey needed.

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
48	72296048-Cut	50.4	4199 - Other Mixed Upland Deciduous	High Density Log	91	111-140	Harvest	Clearcut with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave 1-2 1 acre patches scattered within the stand.

Other Comments:

Next Steps: Stand should regenerate to a mixed stand of Red maple, Aspen and and Oak. Regen survey needed.

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
49	72296049-Cut	28.8	4121 - Oak, Aspen	High Density Log	85	81-110	Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest with reserves. Leave 1 or 2 1 acre retention patches within the stand.

Other Comments:

Next Steps: Should regenerate naturally to a mixed stand of Aspen and Oak. Regen survey needed.

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
51	72296051-Cut	17.7	4126 - White, Black, N. Pin Oak	Medium Density Log	85	81-110	Harvest	Clearcut	4126 - White, Black, N. Pin Oak	Cmpt. Review Proposal

Prescription Specs: Final harvest with no retention.

Other Comments:

Next Steps: Hope to ge Oak and Aspen back in a higher stocking. Needs regen survey.

Proposed Start Date: 10/01/2013

Table 3 -- Treatments Prescribed with No Limiting Factor

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
Total Treatment Acreage Proposed:		**851.5**								

Grayling Mgt. Unit

Table 4 -- Treatments Prescribed with a Limiting Factor

Compartment: 296
Year of Entry 2014

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**

Data updated before 10:00 AM

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
72269_OYOE_cc	2.0					Harvest	Clearcut	4131 - Aspen, Oak	Cmpt. Review Proposal

Prescription Specs: Final harvest except leave any beech, ash, and conifers. No additional retention specified due to small stand size and the proximity of retention in comp 268 stand 28. Set up concurrent with compt 268 (2014 YOE) stand 28.

Other Comments:

Next Steps: Natural regen survey. Natural regen goal is a mixture of aspen, oak and hardwoods.

Proposed Start Date: 10/01/2013

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
72272_OYOE_ccr	5.6					Harvest	Clearcut	42120 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest except leave the RP & WP. No additional retention due to small stand size. Run the north & west boundary to include the operable transition ground (where the densest black spruce cover is) down to the swamp. Cut all JP & Scotch pine stems regardless of merchantability. Harvest concurrent with the adjacent comp 268 stand 6 (aquired through the same land transaction). When harvesting this stand's planted SP, site a secondary landing immediately adjacent to the plantation so that Scotch pine doesn't get dragged through the general stand area, distributing its weed seed. Add hare habitat improvement spec to fell the red-painted boundary line trees bordering the swamp.

Other Comments: Protect the survey monument and any witness trees associated with the north quarter corner of section 22. Borders the Lovells KW Unit, Management Block 56.

Next Steps: Trench and plant JP to KW specs. May need site prep treatments (that could include burning, herbicide, etc.) to control scotch pine regen before planting. Artificial regen surveys. Acceptable regen is JP at stockings suitable for KW habitat, with minor components of naturally-established mixed deciduous and native conifer species.

Proposed Start Date: 10/01/2013

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
72289_OYOE_cc	6.7					Harvest	Clearcut	42120 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest, leaving any RP, WP and white oak. No additional retention due to small stand size. Treat concurrent with the adjacent comp 290 stand 26.

Other Comments: Protect the survey monument and witness trees associated with the quarter corner common to sections 26 & 27.

Next Steps: Trench and plant JP to KW specs. Artificial regen surveys. Acceptable regen is JP at stockings suitable for KW habitat, along with naturally-established oak and pine.

Proposed Start Date: 10/01/2013

Total Treatment Acreage Proposed: 14.3

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6112 - Lowland Aspen	High Density Log	52.4	53	81-110	Lowland Aspen stand (Quaking) with scattered White and Red pine sawlogs. Also Red maple mixed in as well. Some scattered Balsam fir and White pine in understory. Recommend final harvest with patches for retetion (2-3 1 acre in size). Expect to get Aspen back with other species in the mix.
2	4124 - Red with White Oak	High Density Log	38.1	70	81-110	Mixee Oak std that was thinned in 1995-96. A fair amount of Red maple and Oak regen. A portion of the west side may not have been thinned. Red maple regen overtoping Oak regen, but Oak regen is 2 to 6 ft tall. Remove overstory and see what happens.
3	6122 - Black Spruce	Medium Density Pole	7.7	53	51-80	New stand added. Small lowland spruce/fir stand.
4	4130 - Aspen	High Density Sapling	64.8	7		Immatyre Aspen stand mixed with other deciduous spieces and some pine. Stand was last harvested in the spring of 2005, contract 720470401. Some individual Oak was left along Stephan Bridge Rd. No treatment recommended.
5	42120 - Planted Jack Pine	High Density Sapling	6.1	14		Immature Jack pine plantation mixed wiith other deciduous species. Planted in 1998. Recommend no treatment. Small stand.
6	42220 - Natural Jack Pine	High Density Pole	16.2	27	81-110	Young Jack pine pole std.
7	4310 - Pine, Oak Mix	Medium Density Log	14.6	70	81-110	Red pine/Oak std mixed with Red maple and some Aspen. Finger to the north less Red pine. Red maple understory.
9	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	37.4	14		Immature Jack pine plantation mixed with other deciduous spieces. Plaanted 9n 1998. Recommend no treatment.
10	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	15.5	57	141-170	Stand is a planted Red pine with Oak and aspen surrounding it as well as scattered throughout. Opening within stand was part of old homestead. If to harvest, recommend thin the Red pine to 90 BA and the Oak to 20 BA. Remove the aspen and leave the White pine. Protect bearing trees. Stand borders Stephan bridge and Perchanney roads as well as private.
11	4191 - Mixed Upland Deciduous with Conifer	High Density Log	11.3	79	111-140	New stand added.
12	4130 - Aspen	High Density Log	43.3	64	111-140	Pole size Aspen stand mixed with Red maple and Oak. Some White pine in understory, but mostly Red maple. Std borders Pere Cheney and Stephann Bridge Rds. Thinned to 70 ba in Dec 2008 under contract 720480401 FTP72-698 in 2010.
14	4132 - Aspen, Jack Pine	High Density Sapling	18.4	17		Young Aspen/Jack pine stand mixed with Oak and cherry. West side of std borders Stephan Bridge rd.
15	4124 - Red with White Oak	Medium Density Log	45.6	107	51-80	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	4130 - Aspen	High Density Sapling	21.2	14		Immature Aspen stand mixed with other deciduous spieces and some Jack pine in the south west. 2-3" dia 15-20 ft tall. Last cut in 1995. No treatment recommened.
17	4310 - Pine, Oak Mix	High Density Log	36.8	75		
18	4124 - Red with White Oak	High Density Log	107.6	80	111-140	Stand located on north facing slope. Mixed Oak stand with some Red maple miixed in and Aspen mixed in on east side of std along Stephan Bridge road. Heavy White pine understory.
20	42260 - Natural Pine, Mixed Deciduous	High Density Log	10.1	124		
21	4130 - Aspen	High Density Sapling	38.0	7		Young Aspen stand with pockets of Jack pine. Also some stump sprouting Oak. Lots of cherry as well. Jack pine in understory. Final harvested in Dec 2004 under contract 720440401.
22	4124 - Red with White Oak	High Density Sapling	7.2	79	81-110	Small mixed Oak std with Red maple. Located around a privvate corner. Why it was left and not cut with adjacent sale who knows. Private corner cap in. Leave stand as retention.
23	4130 - Aspen	High Density Pole	13.3	58	81-110	stand of Q. Aspen with some Jack pine. Stand on the low end of 75-100% crown closure. Std should be final havested with no retention. Stand is not Oak as previouus inventory. Estimate age based on adjacent Aspen std.
24	4124 - Red with White Oak	High Density Log	184.5	78	111-140	Mixed Oak stand mixed with Aspen and Red maple on south facing slope. Lots of Oak seedlings in understory in north, but less in south. Sourh end of stand involved in the 1968 Billman fire. Recommend final harvest with large retention patches. North east botders private. West borders state that has been harvested. Green up maybe an issue. Cut with adjoining stds to the south. Private corner on north west of private maybe needs established.
25	4130 - Aspen	High Density Log	60.4	58	141-170	Aspen stand mixed with Red maple and White Oak. Some Oak/aspen pockets Saw and pole timber. Can hold another entry yr if need be. Stand borders private. Recommend final harvest with retention patches.
27	4126 - White, Black, N. Pin Oak	High Density Log	51.3	75	81-110	Stand of Oak(dominately W. Oak) mixed with White pine pole timber. Heavey Oak seedling understory along with White pine. 1968 Billman fire went through this stand. Recommend final harvest with patches of retetion.
28	4129 - Mixed Oak	High Density Log	19.3	79	81-110	Oak/aspen std with Red maple. Scattered pine within stand. Final harvest, but leave white oak, red pine and white pine for retention.
29	4130 - Aspen	High Density Sapling	35.6	17		Young Aspen stand. 2-3" in dia. 20-25ft tall

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	4130 - Aspen	High Density Pole	7.3	26	51-80	Small stand of Aspen/Oak Aspen is younger in the crowns and Oak is much older. Recommend final harvest with stand 22. No retention.
31	4124 - Red with White Oak	Medium Density Log	69.4	83	51-80	
32	4122 - Oak, Pine	High Density Sapling	8.8	17		Young Oak stand mixed with Jack pine. Some Red pine logs. Two track traverses north and south through stand. North end borders private.
33	4130 - Aspen	High Density Sapling	90.3	7		Immature Aspen stand nmixed with other deciduous spieces. 1-2" dia 12 ft tall. Stand was cut in mid-Feb/May 20005 under contract 7220300401. No treatment is recoommended.
34	4126 - White, Black, N. Pin Oak	High Density Log	37.2	83	111-140	Dominately a White Oak std with Red oak, BT Aspen and Red maple mixed throughout. Blanket of Oak seedlings. Some kind of treatment should be done to std. Leave all Aspen and Red maple and cut all the Oak. Leave one or two 1 acre patches.
35	4126 - White, Black, N. Pin Oak	High Density Log	13.1	77	81-110	Mixed Oak std. Recommend seed tree cut. Mark to leave 20 BA of Oak. Seed tree because it is bordered by private on two sides and for mast. Could almost final havest the south west part.
36	4125 - Black, N. Pin Oak	Medium Density Pole	7.3	44	51-80	New stand added. Std is a result of the 1968 Billman fire. Young Oak pole/sapling stand.
37	4130 - Aspen	High Density Pole	27.4	17		Young Aspen stand mixed with Oak, Red maple and Jack pine. Some BA exists within the stand.
38	4121 - Oak, Aspen	Low Density Log	31.0	85	1-50	New stand added. Stand is a result of the 1968 Billman fire and the 2005 and 2008 firewood sale. Fire wood sale not completed. Recommend final harvest, but protect advance Oak regen and aspen regen pockets. Cut with stand 60.
39	4131 - Aspen, Oak	High Density Pole	20.2	44	111-140	New stand added. Stand is a result of the 1968 Billman fire. Aspen pole stand inter mixed with pockets of Oak. ORV trail traverses through the std. Should hold another 10 years if need to be.
40	4123 - Red Oak	Medium Density Log	124.4	83	1-50	Large Oak stand. Mostly Red Oak sawtimber with some White Oak. Some Oak stump sprouting in understory, but mostly Red maple and Aspen. Shelterwoodd cut between Aug 2005 and Dec 2008 under contract 720480401. C72-698 Oak wilt treatment 2010.
41	4116 - Mixed N. Hardwood - Aspen	High Density Sapling	7.3	17		Red maple mixed with Aspen. Some Oak and Jack pine. Trail rd traaverses through stand. (3" 25ft tall) Oak wilt treatment C72-698
42	4191 - Mixed Upland Deciduous with Conifer	Medium Density	25.9	17		Young natural Jack pine mixed with Oak and cherry. Some Aspen. Stand borders private to the east.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	4131 - Aspen, Oak	High Density Pole	6.6	44	51-80	Small Aspen stand that as regenerated after 1968 fire(Billman Fire). South side of stand borders private.
44	4124 - Red with White Oak	High Density Sapling	12.0	22		Naural Oak std with a pocket of Aspen in south part of std as a result of 1990 Billman Fire. Aspen pocket is young poles about 4 inches in diameter.
45	4124 - Red with White Oak	High Density Log	54.4	79	81-110	
46	4126 - White, Black, N. Pin Oak	Medium Density Pole	8.3	44	81-110	New stand added. Young Oak pole/sapling std as a result of the 1968 Billman fire.
47	4131 - Aspen, Oak	High Density Pole	21.1	44	81-110	New stand added.
48	4199 - Other Mixed Upland Deciduous	High Density Log	50.4	91	111-140	Stand iis dominantly Red maple saw/pole timber with a fair amount of Oak mixed in in pockets. Pockets of Aspen and pockets of Red maple pole timber. Stand borders private to the east. Recommend an overstory remove. Cut all trees over 10 inches.
49	4121 - Oak, Aspen	High Density Log	28.8	85	81-110	New stand added. Oak/Aspen stand mixed with younger aspen pockets as a result of the 1968 Billman fire. Recommend final harvest with a patch or two left for retention.
50	4125 - Black, N. Pin Oak	Low Density Sapling	3.5	22		Stand swapped from Non-Forested to Forested. Oak stump sprouts after several fires. Burned in 1968 and 1990 Billman fires and possibly again. Stand iis somewhat spars in center.
51	4126 - White, Black, N. Pin Oak	Medium Density Log	17.7	85	81-110	White Oak stand with some Aspen and Red Oak. Lots of fire scarring. Stand was part of the 1968 and 1990 Billman fire. Some Oak regen and Red maple regen. Recommend final harvest. If a mixs of Aspen, Oak and Red maple does not succeed naturally, plant to Jack pine.
52	4130 - Aspen	High Density Pole	8.5	22		Small stand of Aspen mixed with other deciduous species. A result of the 1990 Billman fire.
53	4131 - Aspen, Oak	High Density Sapling	23.4	22		Aspen stand mixed with some Oak and some Jack pine. Some Oak in logs. Stand was established as a result of the 1968/1990 Billman fires. Cycle trail traverses through the stand. East side of stand borders Stephan Bridge Rd.
54	42221 - Natural Jack Pine, Mixed Deciduous	Medium Density Pole	37.5	22		Natural Jack pine mixed with pockets of Aspen and Oak as well as scattered throughout the stand. Some areas Oopen as well. Stand established itself after the 1968 and 1990 Billman fiires. Stand just reaching into pole size(1 stick trees). Dessignated cycle trail through stand. Recommend no treatment. Winter 2011/12 lots of tops were broke off in snow storm.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	4130 - Aspen	High Density Pole	35.8	22	1-50	Young Aspen stand mixed with other deciduous spices. Created by the 1968 and 1990 Billman fires. Stand has a designated cycle trail through it and an undesignated ATV trail. No treaatment at this time.
56	4126 - White, Black, N. Pin Oak	High Density Log	30.3	55	81-110	Mature Oak stand with pockets of Aspen and Jack pine. No legal access to stand. Std was in the 1968 Billman fire.
57	42220 - Natural Jack Pine	High Density Sapling	11.8	22		Natural Jack pine std as a result of the 1990 Billman fire. Some Red pine/Jack pine saw and pole timber in the north end of std. Trespass found. Permanent deer blind and signs.
58	4129 - Mixed Oak	Medium Density Log	25.6	79	51-80	Mature Oak std mixed with Aspen pole timber. Std was shelterwood or thinned last entry. Std resulted in two age due to 1990 Billman fire. Std also borders private. Trespass issue as in std 52.
59	42221 - Natural Jack Pine, Mixed Deciduous	High Density Sapling	13.7	22		Natural Jack pine mixed with Aspen and some Oak. Aspen in pockets. Trail traverses through stand in south end. East side of stand borders Stephan Bridge road. Stand established as a result of the 1968/1990 Billman fires. No trreatment needed.
60	4130 - Aspen	High Density Sapling	6.3	22		Immature Aspen std created as a result of the 1990 Billman fire. Mostly Quaking. South side borders private. Narrow trail traverses through std.
61	4124 - Red with White Oak	Medium Density Log	108.1	83	1-50	Mixed Oak std shelterwood cut in winter 2005 thru 2008 under contract 720480401. FTP C72-698 follow up. Heavy regen of Red maple and Aspen, but also a fair amount of Oak regen too. Mostly stump sprout in origin. Rolling terrain.
62	4121 - Oak, Aspen	Medium Density	34.6	14	1-50	New stand added. Oak regen with pockets of Aspen poles. Asspen scattered thruough out std
64	6132 - Mixed Lowland Forest with Cedar	High Density Log	6.3	90		Fisheries access site. 6 acres

6 – Nonforested Stands

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
8	3102 - Grass	1.9	No	Unspecified	
13	3102 - Grass	1.5	No	Unspecified	Old homestead site
19	710 - Sand, Soil	5.5	No	Unspecified	South Stephan Bridge Road.
26	3102 - Grass	1.4	No	Low (NonForested)	New stand added. Stand swapped from Forested to Non-Forested. A square patch of grasses and sedge. Possibly an old oil/gas site.
63	11 - Low Intensity Urban	1.0	Yes	High (NonForested)	Public access site. Small graveled parking lot; boat launch; uni-sex toilet; info board and trash can. Includes a small strip of timber.

Data updated before 10:00 AM

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.
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.