TRAVERSE CITY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 107 ENTRY YEAR: 2013

Compartment Acreage: 2631 County: Kalkaska

Stand Examiner: Steve Crigier

Legal Description: T28N R5W: Sec 25-27, 35 & 36.

Management Goals: The goals in this compartment are to increase the quality of timber and improve wildlife habitat. The harvests in the aspen timber type will regerate with thick stump sprouts providing food and cover for grouse and deer. The select cuts with in the pine timber types will be removing high risk trees and provide more resources for crop trees to grow. Buffers will be used along all water features to minize and sedimentation and to maintain the an overstory to keep water temperatures down.

Soil and Topography: Soils consist of well drained loamy sands such as Kalkaska and Blue Lake, and well drained Rubicon and Kalkaska sands. Terrain is flat to gently rolling.

Ownership Patterns, Development, and Land Use in and Around the Compartment:
The compartment is a solid block of state ownership with the exception of Section 27 where we have some private land interface. The majority of the area is forestland with scattered seasonal dwellings. An exception to this is near Bass Lake on the north edge of the compartment where a concentration of cabins and residences are along the waterfront.

Unique, Natural Features (include only non-site specific and non-sensitive information):
Bald Eagle nesting in the area of the compartment. Eastern Massasauga, Hill's Pondweed and Secretive Locust are known to exist in adjacent compartments and they could be found here since their preferred habitats do exist.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): No known or registered sites. Several old railroad grades from the late 1800's and early 1900's bisect the area. The CCC planted a mixture of pines that covered the entirety of Sections 25 and 36 in the early 1930's.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations: Goose Creek, and an unnamed tributary to the Manistee River flow through Compartment 107. Both are Designated Trout Streams. Goose Creek has a naturally reproducing population of brook trout, while the unnamed tributary supports both brook and brown trout. Because the Manistee River is Designated as a Natural River, there is a 75' natural vegetation buffer for all tributaries. No cutting should take place within that buffers. Goose Creek has a long history of being dammed and degraded by beavers. As Goose Creek is an important cold water tributary to the Manistee River, we recommend not managing for young aspen along the stream. All BMPs should be followed in wet areas around either stream.

Wildlife Habitat Considerations:

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 600 and 800 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. The Coldwater does not have an economic use. The nearest gravel pit is just over one mile to the east. Gravel potential is considered good on the uplands. This area is located along the south edge of the Niagaran reef trend and south of the Antrim Shale gas play. All of the State land is currently leased for oil and gas development and could have potential for additional Guelph (Niagaran) reefs.

Vehicle Access: There is good access through out the compartment. Cameron Bridge Road is the main access into the north part of the compartment. County Road 612 provide paved access into the south end of 107 and Deward Rd is along the east edge of the compartment.

Survey Needs: Might need some survey work done in section 27 for the aspen cuts on the 40 acres parcels off Blue Lake Road.

Recreational Facilities and Opportunities: A boat launch has been carved out at the South end of Bass Lake upon state forest land. There is no other boat launch site, public or private, on this lake and it appears that this one developed simply after years and years of historical use. The site is not maintained. The Blue Bear Snowmobile Trail and the Kalkaska ORV Trail are pass through the compartment.

Fire Protection: Fire protection in this area is provided by the MDNR Kalkaska Field Office with assistance being available from the Grayling DNR Field Office as well as local Volunteer Fire Departments. Road access is fair with a good water source nearby to be utilized for fire suppression. (Comments by Rod Rader, Fire Supervisor, Traverse City Field Office.)

Additional Compartment Information:

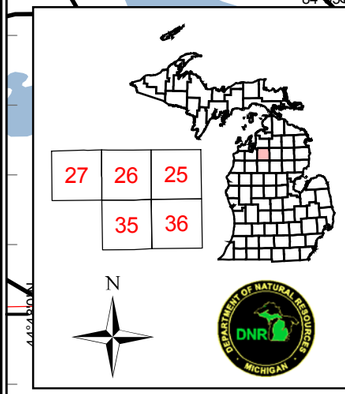
****** Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

- **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 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



Stand # 23

Stocking Density

(412)0) - A7

Level 3 Level 4 OI Code

Cover Type Code

Compartment 107
T28N, R05W, Sec. 25-27, 35-36
County: Kalkaska
Unit: Traverse City
YOE: 2013
Acres: 2,631 GIS Calculated
Stand Examiner: Steve Crigier
Map Revised: 6/6/2011
Map Phase: Pre-Review

Legend

- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Pipe
- Power
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- ORV Routes
- ORV Trails
- Snowmobile Trails
- ORV Route
- ORV Trail
- Snowmobile Trail

Treatments

- Thinning (Crown, Low, Systematic)
- Shelter Wood (w/Reserves)
- Selection (Group, Single Tree)
- Seed Tree (w/Reserves)
- Planting (tree species)
- Clearcut (w/Reserves, Patch/Strip)

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
- 612 - Lowland Coniferous Forest

Non-Forest Stands
Level 3

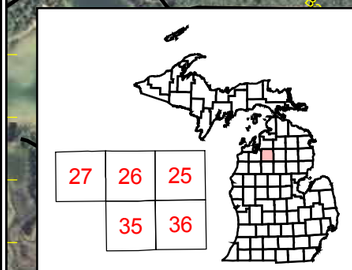
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

1 0.5 0 1 Miles

84°55'0"W 84°54'0"W 84°53'0"W 84°52'0"W 84°51'0"W

44°47'0"N

Stand Boundary Map



Stand # 23

Stocking Density

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Cover Type Code

Compartment 107
T28N, R05W, Sec. 25-27, 35-36
County: Kalkaska
Unit: Traverse City
YOE: 2013
Acres: 2,631 GIS Calculated
Stand Examiner: Steve Crigier
Map Revised: 5/24/2011
Map Phase: Pre-Review

Legend

- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Pipe
- Power
- Intermittent Stream/Drain
- Stream
- ORV Routes
- ORV Trails
- Snowmobile Trails
- ORV Route
- ORV Trail
- Snowmobile Trail
- Stand Boundaries

Forest Stands

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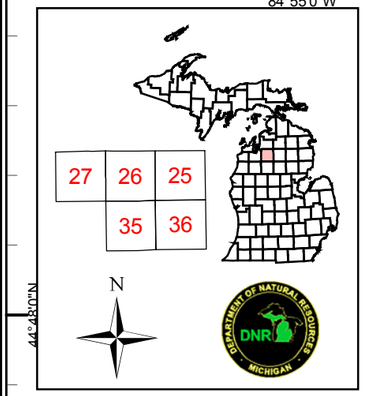
1 0.5 0 1 Miles

84°55'0"W 84°54'0"W 84°53'0"W 84°52'0"W

44°47'0"N

Dedicated & Proposed Special Conservation Area Map



Stand # 23 — Stocking Density

(412)0) - A7

Level 3 / Level 4 / OI Code

Cover Type Code

Compartment 107
T28N, R05W, Sec. 25-27, 35-36
County: Kalkaska
Unit: Traverse City
YOE: 2013
Acres: 2,631 GIS Calculated
Stand Examiner: Steve Crigier
Map Revised: 5/24/2011
Map Phase: Pre-Review

Legend

- Miris Corners

Special Conservation Areas

- Cold Water Streams
- Cold Water Lakes
- Dedicated Management Areas
- Boat Access Sites

High Conservation Value Areas

- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Kirtland Warbler Habitat
- Stand Boundaries

Forest Stands

Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
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- 421 - Planted Pines
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Non-Forest Stands

Level 3

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1 0.5 0 1 Miles

84°55'0"W 84°54'0"W 84°53'0"W 84°52'0"W 84°51'0"W

44°48'0"N 44°47'0"N

Table 1 – Total Acres by Cover Type and Age Class

Traverse City Mgt. Unit **Compartment 107 Year of Entry 2013**

Steven Crigier : Examiner

Age Class

	Non-Forested	1-9	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	81	0	335	16	128	68	0	0	0	0	0	0	0	0	**629**
Cedar	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	**2**
Herbaceous Openland	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
Jack Pine	0	115	0	0	0	0	116	45	0	0	0	0	0	0	0	**276**
Low-Density Trees	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**79**
Lowland Conifers	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	**10**
Lowland Shrub	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**106**
Lowland Spruce/Fir	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	**39**
Marsh	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**129**
Mixed Upland Deciduous	0	0	0	0	40	130	0	0	0	0	0	0	0	0	0	**171**
Natural Mixed Pines	0	0	0	0	99	59	49	33	74	18	0	0	0	0	0	**331**
Northern Hardwood	0	45	0	46	49	0	42	0	0	0	0	0	0	0	0	**182**
Oak	0	0	0	0	0	0	28	0	0	29	0	0	0	0	0	**56**
Red Pine	0	0	0	0	0	87	26	43	51	120	61	0	0	0	0	**388**
Upland Mixed Forest	0	0	0	0	0	31	0	20	0	0	0	0	0	0	0	**51**
Urban	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
White Pine	0	0	0	0	0	0	21	0	78	0	0	0	0	0	0	**99**
Total	**398**	**241**	**0**	**381**	**204**	**436**	**390**	**141**	**213**	**169**	**61**	**0**	**0**	**0**	**0**	**2631**

Table 2 – Proposed Treatment Summaries

Traverse City Mgt. Unit
Year of Entry 2013

Compartment 107
Total Compartment Acres: 2631

Acres by Treatment Type

Commercial Harvest - 759	Site Prep - 0	Tree Planting - 40	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	116	0	0	0	0	0	**116**
Jack Pine	129	0	0	0	0	0	**129**
Natural Mixed Pines	25	63	0	22	9	0	**119**
Northern Hardwood	0	42	0	0	0	0	**42**
Oak	0	0	29	0	13	0	**42**
Red Pine	62	222	0	0	27	0	**311**
Total	**332**	**327**	**29**	**22**	**49**	**0**	**759**

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	61107002-Cut	19.0	4130 - Aspen	High Density Pole	49	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Clearcut stand south of the powerline. Leave some of the smaller birch and any oak. Create some drumming logs

Other Comments: Access will have to come off twin lake road and across the powerline, carefull there is a low cable. Buffer the bog to the south by half a tree lenght. Stand also has a V0 in it so protect that as well.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
10	61107010-Cut	12.8	4130 - Aspen	High Density Pole	48	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Clearcut stand, leave some oak and some of the birch as well. Create some drumming logs. and buffer the bog by 1/2 tree lenght or so.

Other Comments: Will need a temp drive off Blue Lk Rd. Also need to look for corners. Couldn't find any evidence with snow on the ground.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
14	61107014-Cut	42.2	4111 - S.Maple, Hard Mast Association	High Density Pole	59	Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal

Prescription Specs: Thin stand down to 70sqft/ac. Retain some under represented species.

Other Comments: Stand has a large hill running through it. will need to contact Merrit energy about operating near pipeline. Access will be off W. Goose Cr. Rd unless permission from private is granted.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
16	61107016-Cut	10.8	4130 - Aspen	High Density Pole	49	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Leave some oak and some birch. Create some drumming logs.

Other Comments: Cameron Bridge road has a pipeline running on the south end of ROW. Will have to contact Merrit energy. Corners are in.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
17	61107017-Cut	5.3	42120 - Planted Jack Pine	High Density Pole	50	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Leave a few JP.

Other Comments: Will have to cross a pipeline no matter, which way the wood is hauled. Contact Merrit

Next Steps: With the adjacent aspen harvest stand should fill in with popple sprouts.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
19	61107019-Cut	16.2	42110 - Planted Red Pine	High Density Pole	49	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Stand needs to be thinned for the first time. Row thin.

Other Comments: Some hilly terrain and the plantation stocking is more varialble on the east end. Access will be off W. Goose Cr Rd.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
29	61107029-Cut	62.5	42110 - Planted Red Pine	Medium Density Log	49	Harvest	Clearcut with Reserves	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Final harvest stand. Leave a few red and white pine for legacy trees.

Other Comments: Stand has lots of A3 pockets. Stocking is variable.

Next Steps: Some area can hopefully be replanted but areas where advanced aspen and jackpine regen is present will convert .

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
31	61107031-Cut	3.7	42110 - Planted Red Pine	High Density Pole	50	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Row thin stand

Other Comments: Set up with other RP pocket to the east and stand 41

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
32	61107032-Cut	17.6	4130 - Aspen	High Density Pole	58	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Leave some oak and birch. create some drumming logs

Other Comments: Stand has a pipeline on its north boundary. Hilly terrain.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
39	61107039-Cut	1.4	42110 - Planted Red Pine	High Density Pole	49	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin stand down to 90sqft/ac.

Other Comments: Harvest with other small R6 pockets in area.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41	61107041-Cut	5.2	42110 - Planted Red Pine	High Density Pole	55	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin stand down to 90-100sqft/ac. Rows aren't real clear and would recommend marking the stand.

Other Comments: Stand is in a bit of a draw.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
42	61107042-Cut	9.8	4133 - Aspen, Mixed Pine	High Density Pole	50	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Leave some scattered pine. Also create some drumming logs

Other Comments: Try to expand sale line from the stand line to expand sprouting.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
45	61107045-Cut	13.2	4123 - Red Oak	High Density Pole	58	Harvest	Crown Thinning	4123 - Red Oak	Cmpt. Review Proposal

Prescription Specs: Select cut stand down to 80-90sqft/ac. Try not to make too many large openings. This is meant to be an intermediate cut to put some diameter on the oak. Don't want to give the aspen and maple regen a head start on the oak.

Other Comments: There is a pipline in the Cameron Bridge Rd ROW. Contact Merrit Energy. South half of stand is on a decent size hill.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
48	61107048-Cut	28.6	4123 - Red Oak	Medium Density Log	80	Harvest	Seed Tree with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal

Prescription Specs: Seed tree stand. Leave about 10sqft/ac of oak. This is a release type of harvest. If some areas are sparsly stocked you will want to line out those areas.

Other Comments: There is solid aspen regen underneath the oak logs. Protect as much of the regen as possible. Snow trail is the east boundary and the ORV trail runs through the stand.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
54	61107054-Cut	11.4	4130 - Aspen	High Density Pole	51	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Create some drumming logs and leave a few scattered pine.

Other Comments: ORV Tr is on the east side of stand.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
65	61107065-Cut	62.6	42290 - Natural Mixed Pine	High Density Pole	73	Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Select cut stand. Remove the Jack pine and aspen. Thin areas of RP and WP down to 70sqft/ac.

Other Comments: Access will be off W. Goose Cr. Rd. down the highline. Will have to cross a narrow L0 on the highline but very doable. Set sale line back from Goose Cr (Natural River).

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
70	61107070-Cut	92.5	42120 - Planted Jack Pine	High Density Pole	58	Harvest	Clearcut	42120 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: Clearcut stand.

Other Comments: Leave some residual oak and RP.

Next Steps: Trench and plant JP.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
72	61107072-Cut	51.4	42210 - Natural Red Pine	High Density Pole	73	Harvest	Single Tree Selection	42210 - Natural Red Pine	Cmpt. Review Proposal

Prescription Specs: Select cut stand. Remove the aspen and jack pine. Thin areas of RP and WP down to 80sqft/ac.

Other Comments: Will need to Buffer Goose Cr. (Natural River).

Next Steps:

73	61107073-Cut	18.4	42250 - Pine, Oak	High Density Log	81	Harvest	Shelterwood	4122 - Oak, Pine	Cmpt. Review Proposal

Prescription Specs: Shelterwood stand. Leave about 30-40sqft/ac of RP, WP and Oak. Don't cut conifers less than 6".

Other Comments: Protect WP advanced regen as much as possible.

Next Steps:

74	61107074-Cut	8.8	42290 - Natural Mixed Pine	High Density Pole	50	Harvest	Crown Thinning	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Remove all the jack pine and aspen and soft maple.

Other Comments: Stand contains a small L0 in the middle of stand. Access will probably be best off Snow tr.

Next Steps:

75	61107075-Cut	5.9	4130 - Aspen	High Density Pole	49	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Leave a few pine for residual.

Other Comments: Try to join both clones together with redline. Access off Old Grade Rd.

Next Steps:

80	61107080-Cut	48.8	42210 - Natural Red Pine	High Density Log	80	Harvest	Single Tree Selection	42210 - Natural Red Pine	Cmpt. Review Proposal

Prescription Specs: Select cut stand. Remove aspen and jackpine. Mark areas of RP and WP down to 80sqft/ac.

Other Comments: Protect advanced regen. Buffer Goose Cr. (natural river).

Next Steps:

82	61107082-Cut	18.7	42220 - Natural Jack Pine	High Density Pole	58	Harvest	Clearcut with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Remove all jack pine and aspen. Leave RP and WP.

Other Comments:

Next Steps: Let stand regenerate naturally.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
86	61107086-Cut	25.1	4133 - Aspen, Mixed Pine	High Density Pole	49	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Create some drumming logs. Leave a few scattered pine and oak.

Other Comments: Run redline in outside the stand line a aways to encourage the sprouts to expand the stand. Access Would be best off the snowtrail.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
94	61107094-Cut	12.3	42220 - Natural Jack Pine	High Density Pole	61	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Leave some RP and oak.

Other Comments: try to leave JP branches on site for cones and regeneration obj.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
95	61107095-Cut	60.5	42110 - Planted Red Pine	High Density Log	90	Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Select cut stand. Cut all JP and aspen. Mark areas of RP and WP down to 80sqft/ac.

Other Comments: Will need to use a buffer along the creek (natural river trib)

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
97	61107097-Cut	25.1	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	51	Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Mark to leave a few RP and WP.

Other Comments: Cut with st 86

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
103	61107103-Cut	3.6	4132 - Aspen, Jack Pine	Medium Density Pole	51	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Clearcut stand. Leave some oak and a few pine.

Other Comments: cut with st 97 and 86.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
105	61107105-Cut	22.6	42110 - Planted Red Pine	High Density Log	81	Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Select cut stand. Remove all jack pine and thin the RP and WP down to 80sqft/ac.

Other Comments: Stand has a intermittent drain running through it. Stand also turns more to JP on the west end of stand.

Next Steps: Should get some pocket to regenerate to J3.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
111	61107111-Cut	38.8	42110 - Planted Red Pine	High Density Log	81	Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Select cut stand. Cut all jack pine and aspen. Target residual in areas of RP and WP is 80sqft/ac.

Other Comments: Stand has an intermittent drain in it as well as the ORV tr.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
112	61107112-Cut_small	3.8	42290 - Natural Mixed Pine	High Density Pole	61	Harvest	Shelterwood	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Manage the stand west of the Drain. Cut all the jack pine out of the stand.

Other Comments: Buffer drain.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
108	61107108-Plant_small	39.8	42260 - Natural Pine, Mixed Deciduous	Low Density Sapling	30	Tree Planting	Hand Plant	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Plant 30-40 acres of stand. Stand is currently not occupied by not a whole lot.

Other Comments: OI said to burn on a 3 yr rotation to manage as a jack pine barrens. Double check prescription with wildlife and TMS.

Next Steps:

Total Treatment Acreage Proposed: 798.5

Traverse City Mgt. Unit

Table 4 -- Treatments Prescribed with a Limiting Factor

Compartment: 107
Year of Entry 2013

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						

Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: **0**

Data updated before 2:00 PM

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	High Density Pole	4.1	51		Stand provides nice thermal cover, on transition ground from A6 to the bog. Some of the spruce is only 4-5"
2	4130 - Aspen	High Density Pole	28.1	49		Nice stand of aspen. Stand has at least 1 small V0 in it.
6	4139 - Aspen, Mixed Deciduous	High Density Pole	10.5	48		Stand is a mix of aspen, birch, white pine and soft maple.
10	4130 - Aspen	High Density Pole	12.8	48		South side of stand is nice aspen. North part is poorer quality and has more of a birch component. Will need to come back and look for private corners.
12	4319 - Mixed Upland Forest	High Density Log	8.7	49	81-110	Nice stand of white pine logs with soft maple and aspen poletimber. Stand has old Railroad grade running through it. Access is limited with private to the north.
14	4111 - S.Maple, Hard Mast Association	High Density Pole	42.2	59	81-110	Stand has a large hill running north and south through it. Mostly pulp wood but would benefit from some TSI. Some pockets of lower stocking (Central part of stand). Sour gas line runs through stand.
16	4130 - Aspen	High Density Pole	10.8	49		4-5 stick aspen. Stand is on south side of Cameron Bridge Rd. and also on the south side of the pipeline in the road ROW.
17	42120 - Planted Jack Pine	High Density Pole	5.3	50		Well stocked stand. Mostly 3-4 stick trees. Might cut with white pine stand to the south.
18	4130 - Aspen	High Density Pole	14.2	49		Stand is along the southwest end of Bass Lake. Stand has unofficial access to lake. Nice 4-5 stick aspen.
19	42110 - Planted Red Pine	High Density Pole	16.2	49	141-170	Hilly terrain. 4-5 stick RP, plantation stocking is more variable on the east side.
20	42260 - Natural Pine, Mixed Deciduous	Medium Density Log	18.7	69	1-50	Stand is a buffer along Goose Cr.
21	42260 - Natural Pine, Mixed Deciduous	High Density Pole	24.4	49	81-110	Stand is next to Goose Cr. Real mixed bag for species. Some white pine logs and poles, with WP regen underneath. Some pockets of A6. Old inventory says there is an eagle nest in the stand!! Stand becomes more heavily stocked to the east.
22	4130 - Aspen	High Density Sapling	39.4	22		Nice stand of aspen regen. Stand starting to convert to a A6
23	4133 - Aspen, Mixed Pine	High Density Sapling	19.7	4		Stand has pipeline and Cameron Bridge road along the north boundary. Regen is thick in the north east. Along old grade road stand has more of a red maple and white pine component.
26	4311 - Pine, Aspen Mix	High Density Pole	3.6	49	51-80	Stand is along Bass Lk.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	High Density Pole	4.1	51		Stand provides nice thermal cover, on transition ground from A6 to the bog. Some of the spruce is only 4-5"
2	4130 - Aspen	High Density Pole	28.1	49		Nice stand of aspen. Stand has at least 1 small V0 in it.
6	4139 - Aspen, Mixed Deciduous	High Density Pole	10.5	48		Stand is a mix of aspen, birch, white pine and soft maple.
10	4130 - Aspen	High Density Pole	12.8	48		South side of stand is nice aspen. North part is poorer quality and has more of a birch component. Will need to come back and look for private corners.
12	4319 - Mixed Upland Forest	High Density Log	8.7	49	81-110	Nice stand of white pine logs with soft maple and aspen poletimber. Stand has old Railroad grade running through it. Access is limited with private to the north.
14	4111 - S.Maple, Hard Mast Association	High Density Pole	42.2	59	81-110	Stand has a large hill running north and south through it. Mostly pulp wood but would benefit from some TSI. Some pockets of lower stocking (Central part of stand). Sour gas line runs through stand.
16	4130 - Aspen	High Density Pole	10.8	49		4-5 stick aspen. Stand is on south side of Cameron Bridge Rd. and also on the south side of the pipeline in the road ROW.
17	42120 - Planted Jack Pine	High Density Pole	5.3	50		Well stocked stand. Mostly 3-4 stick trees. Might cut with white pine stand to the south.
18	4130 - Aspen	High Density Pole	14.2	49		Stand is along the southwest end of Bass Lake. Stand has unofficial access to lake. Nice 4-5 stick aspen.
19	42110 - Planted Red Pine	High Density Pole	16.2	49	141-170	Hilly terrain. 4-5 stick RP, plantation stocking is more variable on the east side.
20	42260 - Natural Pine, Mixed Deciduous	Medium Density Log	18.7	69	1-50	Stand is a buffer along Goose Cr.
21	42260 - Natural Pine, Mixed Deciduous	High Density Pole	24.4	49	81-110	Stand is next to Goose Cr. Real mixed bag for species. Some white pine logs and poles, with WP regen underneath. Some pockets of A6. Old inventory says there is an eagle nest in the stand!! Stand becomes more heavily stocked to the east.
22	4130 - Aspen	High Density Sapling	39.4	22		Nice stand of aspen regen. Stand starting to convert to a A6
23	4133 - Aspen, Mixed Pine	High Density Sapling	19.7	4		Stand has pipeline and Cameron Bridge road along the north boundary. Regen is thick in the north east. Along old grade road stand has more of a red maple and white pine component.
26	4311 - Pine, Aspen Mix	High Density Pole	3.6	49	51-80	Stand is along Bass Lk.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4130 - Aspen	High Density Pole	8.5	58		Nice stand of Bigtooth. Hold for 10 yrs for ageclass diversity.
29	42110 - Planted Red Pine	Medium Density Log	69.8	49	81-110	Nice RP logs, stand looks ready for a final harvest. Stocking is highly variable, lots of A3 pockets. JP is heavy in areas
30	4130 - Aspen	High Density Sapling	12.3	4		Regen is ~ 10' tall. Stand has a small V0 in the middle of it. Some white pine pole timber left from harvest.
31	42110 - Planted Red Pine	High Density Pole	3.7	50	141-170	
32	4130 - Aspen	High Density Pole	17.6	58		Stand has pipeline on its north boundary.
33	4133 - Aspen, Mixed Pine	Medium Density Pole	50.2	22		Stand is converting to an A6. Some scattered red pine pole timber.
35	42110 - Planted Red Pine	High Density Pole	17.6	50	81-110	Stand thinned in 2005. Getting some regen underneath. Tops have plenty of room to grow.
37	4130 - Aspen	High Density Sapling	16.6	4		West stand is regenerating well. East part of stand is up on a hill and has more of a soft maple component and is less dense.
39	42110 - Planted Red Pine	High Density Pole	1.4	49	111-140	small stand never been thinned.
40	42200 - Natural White Pine	High Density Pole	77.5	73	81-110	Natural white pine stand with aspen and softmaple. White pine regen is present. A mix between a log and a pole stand. Stocking become more sparse to the south.
41	42110 - Planted Red Pine	High Density Pole	5.2	55	141-170	Stand is in a bit of a draw, Never been thinned. Previous inventory says not to manage as the stand provides a visual buffer from adjacent aspen cuts, but I think we can thin the stand still maintain the visual buffer
42	4133 - Aspen, Mixed Pine	High Density Pole	9.8	50		Stand is medium quality.
44	4130 - Aspen	High Density Sapling	41.9	27		Regen is 20-30' tall and is well stocked. ORV trail runs through stand. Snow trail is east boundary.
45	4123 - Red Oak	High Density Pole	13.2	58	111-140	Stand is bisected by Cameron Bridge Rd. Stand is mostly oak poletimber with some pockets of aspen and some softmaple mixed in.
47	4119 - Mixed Northern Hardwoods	Low Density Pole	21.2	37	1-50	U0 filling in. Some scattered oak logs.
48	4123 - Red Oak	Medium Density Log	28.6	80	1-50	Stand had the aspen and soft maple cut out of it in 1995. Regen is coming in well. 2 aged stand.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	42200 - Natural White Pine	Medium Density Pole	21.1	50	1-50	2 aged stand. Aspen is 25 yrs old. White pine about 50. ORV Trail runs through stand. Snow trail on the east boundary.
51	4130 - Aspen	High Density Sapling	18.5	4		Stand cut in 2007. nice regen. Stand has ORV trail running through it.
53	4130 - Aspen	High Density Sapling	6.9	4		Stand cut in 2007 and regenerating well.
54	4130 - Aspen	High Density Pole	11.4	51		Decent aspen
56	4130 - Aspen	High Density Pole	15.9	36		Young A6 stand. spots are still converting from saplings.
57	42210 - Natural Red Pine	High Density Pole	5.2	61	51-80	look at in 10 yrs.
58	42260 - Natural Pine, Mixed Deciduous	High Density Pole	14.8	53	1-50	Stand is a buffer to Intermittent drain to the east. There is a decent dropoff down to the bed of the drain.
59	42290 - Natural Mixed Pine	Low Density Pole	4.3	49	1-50	Stand had the aspen and softmaple removed out of it in 1988. Regen is moderately stocked. Some JP left to fall over and rot??
60	4191 - Mixed Upland Deciduous with Conifer	Low Density Sapling	40.4	35		Stand is an old U0. Pockets of pole timber, decent sprouts in areas.
61	4122 - Oak, Pine	Medium Density Log	14.3	58	1-50	
62	4112 - Maple, Beech, Cherry Association	High Density Sapling	27.5	36		M3 stand starting to convert to poletimber
65	42290 - Natural Mixed Pine	High Density Pole	62.6	73	111-140	Lots of size classes. Some areas are heavy to sawtimber but mostly a pole stand.
66	4133 - Aspen, Mixed Pine	High Density Sapling	203.5	23		Scattered RP and Oak logs left in the overstory. Regen mostly QA but is a mix in some areas
67	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	51.8	5		Regen 2-3' tall. Some pockets of aspen and cherry competition.
68	4191 - Mixed Upland Deciduous with Conifer	Low Density Pole	75.1	49		Stand is an opening with red maple filling in.
69	42210 - Natural Red Pine	Medium Density Log	34.2	61	1-50	some nice oak regen under the pine. Stocking is variable. Wait 10-20 to let oak get established before removing overstory.
70	42120 - Planted Jack Pine	High Density Pole	92.5	58		Some areas of very nice JP 4-5 stick. Might be a green-up issue with adjacent cuts.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
72	42210 - Natural Red Pine	High Density Pole	51.4	73	81-110	Natural stand, lots of size classes. Aspen is deteriorating. some RP regen present.
73	42250 - Pine, Oak	High Density Log	18.4	81	81-110	Decent WP understory.
74	42290 - Natural Mixed Pine	High Density Pole	8.8	50	81-110	Stand contain and L0 pocket in the middle. Some sawtimber present.
75	4130 - Aspen	High Density Pole	5.9	49		Nice clones of aspen surrounded by poor quality U0. some JP and RP mixed in
76	42121 - Planted Jack Pine, Mixed Deciduous	Low Density Pole	32.8	61		mixed stand of soft maple and jack pine. Stocking is really clumpy. Some soft maple stump sprouts.
78	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	50.2	5		regen 2-3'tall, some pockets of aspen and cherry competition.
79	4139 - Aspen, Mixed Deciduous	High Density Sapling	7.4	4		Cut in 2007, looks like the left all white pine and red pine. Regen is fairly thick.
80	42210 - Natural Red Pine	High Density Log	48.8	80	81-110	
81	42290 - Natural Mixed Pine	Low Density Pole	11.1	49	1-50	All aspen and soft maple was removed from stand in 2007. WP and RP poles were left. Regen is coming in well.
82	42220 - Natural Jack Pine	High Density Pole	18.7	58		Stand is mostly JP with RP, WP and aspen.
83	6122 - Black Spruce	High Density Pole	34.6	58		Transition ground to the creek. East side of stand isn't stocked as well. Provides good thermal cover.
84	4319 - Mixed Upland Forest	Low Density Pole	20.1	61		Rough looking timber, mixed bag of species. OI notes said that stand was planted with RP and JP by the CCC in the early 30's.. Pine is clumpy and there is a lot of RM sprouts from and old sale??
86	4133 - Aspen, Mixed Pine	High Density Pole	25.1	49		Pockets of decent aspen clones mixed with some soft maple and pine.
87	42110 - Planted Red Pine	High Density Log	9.6	81	81-110	Stand acts as a buffer to the creek. north part of the stand has more of an aspen component.
90	4112 - Maple, Beech, Cherry Association	Low Density Sapling	25.4	24		U0 that is filling in with mostly cherry.
91	4191 - Mixed Upland Deciduous with Conifer	Low Density Pole	4.9	49		

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
92	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	50.4	41		Stand has more of pine component on the east end of the stand. Mixed bag of species. wait 10-20yrs. MO might be more obvious then. lots of undersized wood.
93	4132 - Aspen, Jack Pine	Medium Density Pole	17.5	58		Poor quality aspen stand. mixed w mixed pine.
94	42220 - Natural Jack Pine	High Density Pole	12.3	61		
95	42110 - Planted Red Pine	High Density Log	60.5	90	111-140	Lots of age-classes. Stand has more white pine mixed in the south part of the stand.
97	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	25.1	51	1-50	Jack pine in stand is starting to deteriorate. Wierd stand.
98	42260 - Natural Pine, Mixed Deciduous	Low Density Pole	19.1	41	1-50	A real hodgepodge of a stand.??
99	4119 - Mixed Northern Hardwoods	Low Density Sapling	20.2	27		Some scattered poletimber mixed in the stand. U0 filling in.
100	4130 - Aspen	High Density Sapling	21.1	43		Regen 20-30' tall. Not the most even stocking. More of a B. cherry component on the east side of the stand.
101	42120 - Planted Jack Pine	High Density Sapling	12.9	5		Stand cut in 2005 and planted to JP in 2006
102	4116 - Mixed N. Hardwood - Aspen	Low Density Sapling	45.0	3		Stand was cut in 2008 and planted to RP in 2010. RP is below the snow line the only thing showing up is some soft maple and aspen sprouts.
103	4132 - Aspen, Jack Pine	Medium Density Pole	3.6	51		Upland mixed stand. Some nice aspen along the edge of the highline. the rest of the stand is pretty poor quality.
104	6120 - Lowland Cedar	Medium Density Pole	1.7	81		Leave for wildlife thermal cover
105	42110 - Planted Red Pine	High Density Log	22.6	81	81-110	Planted in the 30s by the CCC. JP and RP planted together. Stand seems to have lots of age classes. Has a perrenial drain running through it. Some nice pole timber developing underneath saw timber. Stocking becomes less dense, and more of JP mix, on the west end of the stand.
108	42260 - Natural Pine, Mixed Deciduous	Low Density Sapling	98.6	30		Some pockets of J5 with in stand. Other scattered WP and RP poletimber. OI said to burn on a 3 yr rotation to maintain as JP barrens.
109	6124 - Lowland Spruce-Fir	Medium Density Pole	10.2	78		
110	42290 - Natural Mixed Pine	High Density Log	11.2	78	51-80	Nice mixed log stand.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
111	42110 - Planted Red Pine	High Density Log	38.8	81	81-110	Stand contains a perrnial drain. also has ORV trail running through it. Stocking is variable in places
112	42290 - Natural Mixed Pine	High Density Pole	14.0	61	51-80	Stand has Intermittent drain running through it.
114	4319 - Mixed Upland Forest	Low Density Pole	18.5	49		Drainage passes through northeast part of stand. Stand is variable, some pockets of J6 otherwise very sparse stocking.
115	42210 - Natural Red Pine	High Density Pole	3.2	61	51-80	Stand acts as a visual buffer for compressor plant.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	622 - Lowland Shrub	8.2	N\A	Unspecified	
4	622 - Lowland Shrub	1.2	N\A	Unspecified	
5	622 - Lowland Shrub	2.1	N\A	Unspecified	
7	122 - Road/Parking Lot	1.9	N\A	Unspecified	
8	622 - Lowland Shrub	4.7	N\A	Unspecified	
9	622 - Lowland Shrub	2.6	N\A	Unspecified	
11	622 - Lowland Shrub	4.3	N\A	Unspecified	
13	330 - Low-Density Trees	46.9	N\A	Unspecified	
15	622 - Lowland Shrub	26.5	N\A	Unspecified	
24	50 - Water	7.2	N\A	Unspecified	
25	623 - Emergent Wetland	1.6	N\A	Unspecified	
28	623 - Emergent Wetland	2.2	N\A	Unspecified	
34	310 - Herbaceous Openland	1.9	N\A	Unspecified	
36	122 - Road/Parking Lot	11.3	N\A	Unspecified	
38	330 - Low-Density Trees	4.3	N\A	Unspecified	
43	622 - Lowland Shrub	1.0	N\A	Unspecified	
46	623 - Emergent Wetland	74.3	N\A	Unspecified	
49	623 - Emergent Wetland	3.8	N\A	Unspecified	

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	622 - Lowland Shrub	8.2	N\A	Unspecified	
4	622 - Lowland Shrub	1.2	N\A	Unspecified	
5	622 - Lowland Shrub	2.1	N\A	Unspecified	
7	122 - Road/Parking Lot	1.9	N\A	Unspecified	
8	622 - Lowland Shrub	4.7	N\A	Unspecified	
9	622 - Lowland Shrub	2.6	N\A	Unspecified	
11	622 - Lowland Shrub	4.3	N\A	Unspecified	
13	330 - Low-Density Trees	46.9	N\A	Unspecified	
15	622 - Lowland Shrub	26.5	N\A	Unspecified	
24	50 - Water	7.2	N\A	Unspecified	
25	623 - Emergent Wetland	1.6	N\A	Unspecified	
28	623 - Emergent Wetland	2.2	N\A	Unspecified	
34	310 - Herbaceous Openland	1.9	N\A	Unspecified	
36	122 - Road/Parking Lot	11.3	N\A	Unspecified	
38	330 - Low-Density Trees	4.3	N\A	Unspecified	
43	622 - Lowland Shrub	1.0	N\A	Unspecified	
46	623 - Emergent Wetland	74.3	N\A	Unspecified	
49	623 - Emergent Wetland	3.8	N\A	Unspecified	

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
52	330 - Low-Density Trees	17.7	N\A	Unspecified	
55	310 - Herbaceous Openland	0.7	N\A	Unspecified	
63	622 - Lowland Shrub	1.5	N\A	Unspecified	
64	622 - Lowland Shrub	0.6	N\A	Unspecified	
71	623 - Emergent Wetland	40.9	N\A	Unspecified	
77	310 - Herbaceous Openland	18.8	N\A	Unspecified	
85	330 - Low-Density Trees	8.7	N\A	Unspecified	
88	622 - Lowland Shrub	6.3	N\A	Unspecified	
89	622 - Lowland Shrub	43.8	N\A	Unspecified	
96	330 - Low-Density Trees	0.9	N\A	Unspecified	
106	310 - Herbaceous Openland	33.3	N\A	Unspecified	pipeline
107	622 - Lowland Shrub	3.4	N\A	Unspecified	
113	623 - Emergent Wetland	5.8	No	Unspecified	
116	310 - Herbaceous Openland	9.4	N\A	Unspecified	

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	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR.
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.