GRAYLING FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 003 ENTRY YEAR: 2014

GIS Compartment Acreage: 1854 County: Oscoda

Revision Date: August 23, 2012

Stand Examiners: Joan Charlebois & Patrick Mohney (Section 19, NW & SE)

Legal Description: T27N R02E Sections 19, 28, 29, 30, 31, 32
T26N R02E Sections 05, 06
Greenwood Township – south part
Big Creek Township – northwest part

Management Goals: To maintain riparian & forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while providing for multiple use and visual management.

Soils and Topography: Upland soils are predominantly Graycalm-Grayling sands and Millersburg-Klacking-Graycalm complexes on shallowly rolling to steep terrain. The lower ground surrounding wetlands and stream corridors have poorly-drained complexes such as Deford-AuGres-Croswell and Wakeley-Allendale. The lowest ground is characterized by saturated organic soils in the Tawas muck series.

Ownership Patterns, Development, and Land Use in and Around the Compartment: There is a mix of state and private land interface along the compartment boundary, as well as one private inholding. Adjacent land use includes a mix of year-round and seasonal residences. Several parcels along the AuSable River were acquired from Consumers Power Company. One cabin on a former CPC lease parcel needs to be disposed of.

Unique, Natural Features: The mainstream of the AuSable is part of a designated Natural River system. There is the potential for rare wetland plants and reptiles to occur along the riparian corridors. There is also the potential for rare dry prairie plants and insects to occur in upland grassy openings.

Archeological, Historical, and Cultural: There is a deep history of human use along the AuSable River corridor, as well as turn-of-the century homesteading on the uplands.

Special Management Designations or Considerations: The AuSable River is a High Conservation Value Area (HCVA).

Watershed and Fisheries Considerations: The mainstream of the AuSable is a quality trout stream. Several small drainages within the compartment empty into the AuSable. Section 19 has a small pond at its center, with inflow from the north.

Wildlife Habitat Considerations: The compartment's wide range of cover types – ranging from mixed pine, aspen and oak, to conifer swamp, lowland brush and super-canopy stature pine -- provide habitat for a variety of game and non-game wildlife species.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of ice-contact outwash sand and gravel. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale that does not have a current economic use. The nearest gravel pit is within one mile to the north and south, and gravel potential is thought to be good. There are no oil and gas leases in the compartment. This area may be too far south to be productive from the Antrim Shale.

Vehicle Access: The compartment is well covered by county roads, including Miller, Townline, Youngs, Kneeland, Kittle, Franks, and Cherry Creek Roads. Open two-track roads provide adequate access to the compartment's upland interior. Several short two-track segments south of Kittle Road in section 29 are currently being used to access adjacent private residences in section 32.

Survey Needs: Additional work is needed to define the boundary of the private parcel in section 19.

Recreational Facilities and Opportunities: The AuSable River experiences heavy seasonal use, primarily canoeing and fishing. Hunting is the main form of dispersed use. The Mio to Meadows MCCCT trail crosses through two sections of the compartment. The Whirlpool Boating Access Site, managed by Parks and Recreation Division, is on the AuSable River and receives a high volume of canoe and kayak traffic.

Fire Protection: County roads and open two-tracks provide good access to the compartment's dry upland types. The Whirlpool Access Site is a good water point.

- **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: 003
T26N R02E Sec. 05, 06
T27N R02E Sec. 19, 28, 29, 30, 31, 32
County: Oscoda
Unit: Grayling
YOE: 2014
Acres: 1,854 GIS Calculated
Examiner: Joan Charlebois, Patrick Mohney (Sec. 19NW&SE)
Map Revised: 09/05/2012
Map Phase: Pre-Review

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

19 | 30 | 29 | 28 | 31 | 32 | 6 | 5

N

DEPARTMENT OF NATURAL RESOURCES · MICHIGAN · DNR

Legend

- Remonumented Section Corners
- PLSS Corner
- 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
- Boat Access Sites
- Gate
- MCCCT Trail
- Motorcycle (SOS License)
- Motorcycle Trails (SOS License)
- MCCCT Trails
- Lakes and Rivers
- State Forest Land

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Other Treatment - See Comments

Forest Stands

Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

1 | 0.5 | 0 | 1 Miles

Cedar Lake
Au Sable River
Mio Dam Pond

Stand Boundary Map

Compartment: 003
T26N R02E Sec. 05, 06
T27N R02E Sec. 19, 28, 29, 30, 31, 32
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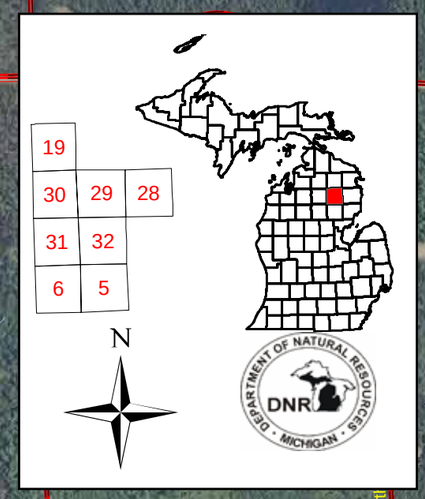
Stand # 23
Stocking Density
(412)0) - A7
Level 3 OI Code
Level 4
Cover Type Code



Legend

- PLSS Corner
- Remonumented Section Corners
- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
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- Closed Roads
- Boat Access Sites
- Gate
- Stream
- Intermittent Stream
- Powerline
- Motorcycle (SOS License)
- MCCCT Trail
- Motorcycle Trails (SOS License)
- MCCCT Trails
- Stand Boundaries

Forest Stands

Level 3

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1 0.5 0 1 Miles

Dedicated & Proposed Special Conservation Area Map

Compartment: 003
T26N R02E Sec. 05, 06
T27N R02E Sec. 19, 28, 29, 30, 31, 32
County: Oscoda
Unit: Grayling
YOE: 2014
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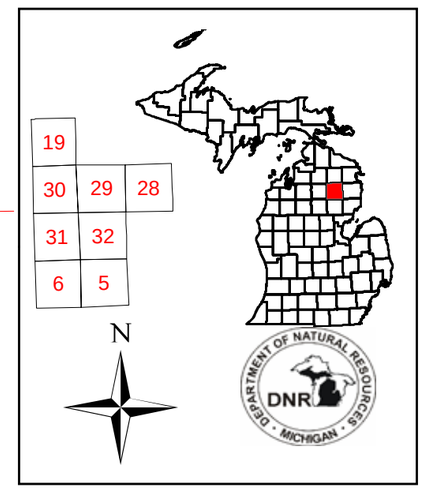
Map Revised: 09/05/2012
Map Phase: Pre-Review

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
- Kirtland Warbler Habitat
- Boat Access Sites
- Wild & Scenic Rivers (USFS Lands)

Forest Stands
Level 3
- 412 - Oak Types
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1 0.5 0 1 Miles

84°15'0"W 84°14'0"W 84°13'0"W 84°12'0"W 84°11'0"W
44°44'0"N 44°43'0"N 44°42'0"N 44°41'0"N

Table 1 – Total Acres by Cover Type and Age Class

Grayling Mgt. Unit **Compartment 003 Year of Entry 2014**

Joan Charlebois : 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	209	128	110	0	328	56	0	0	0	0	0	0	0	0	**831**
Bog	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Cedar	0	0	0	0	0	0	0	0	0	0	0	8	0	0	**8**
Herbaceous Openland	35	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
Jack Pine	0	59	0	0	28	41	0	0	0	0	0	0	0	0	**128**
Lowland Aspen/Balsam Poplar	0	0	0	0	0	80	0	0	0	0	0	0	0	0	**80**
Lowland Conifers	0	0	0	6	9	0	0	0	0	0	0	4	0	0	**19**
Lowland Deciduous	0	0	0	0	0	2	0	0	0	0	0	16	0	0	**17**
Lowland Mixed Forest	0	0	13	0	0	9	0	0	0	0	0	0	0	0	**22**
Lowland Shrub	56	0	0	0	0	0	0	0	0	0	0	0	0	0	**56**
Lowland Spruce/Fir	0	0	0	0	6	0	0	0	1	0	0	0	0	0	**7**
Marsh	24	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
Mixed Upland Deciduous	0	7	0	0	16	0	0	0	5	0	16	0	0	0	**44**
Natural Mixed Pines	0	0	0	0	54	151	0	0	0	0	0	0	0	0	**205**
Oak	0	0	0	0	0	0	0	0	0	92	111	14	0	0	**216**
Red Pine	0	0	0	0	16	0	0	32	0	26	0	0	0	0	**74**
Upland Mixed Forest	0	7	0	0	25	0	0	0	0	0	0	0	0	0	**32**
Upland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Upland Spruce/Fir	0	0	0	0	12	0	0	0	0	0	0	0	0	0	**12**
Urban	28	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
White Pine	0	0	0	0	0	5	0	0	0	0	0	0	0	0	**5**
Total	**361**	**202**	**123**	**6**	**494**	**344**	**0**	**32**	**6**	**118**	**127**	**41**	**0**	**0**	**1854**

Table 2 – Proposed Treatment Summaries

Grayling Mgt. Unit
Year of Entry 2014

Compartment 003
Total Compartment Acres: 1854

Acres by Treatment Type

Commercial Harvest - 446	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 5	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	157	0	0	0	0	0	**157**
Jack Pine	14	0	0	0	0	0	**14**
Lowland Aspen/Balsam Poplar	68	0	0	0	0	0	**68**
Lowland Deciduous	13	0	0	0	0	0	**13**
Mixed Upland Deciduous	16	0	0	0	0	0	**16**
Oak	126	0	0	0	0	0	**126**
Red Pine	0	0	28	0	15	0	**43**
Upland Spruce/Fir	0	0	0	0	10	0	**10**
Total	**393**	**0**	**28**	**0**	**25**	**0**	**446**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
8	72003008-ccr	13.1	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	110	51-80	Harvest	Clearcut with Reserves	6117 - Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up, except leave: the supercanopy RP & WP, buffer the stream headwaters at the north end by boundary-excluding the pocket of NWC, exclude the 1996 buffer strip at the south end that was left to protect the stream and pond, and exclude the OFS wetland on the border with stand 10. Proposed treatment boundary approximates those exclusions.

Other Comments:

Next Steps: Natural regen check. Acceptable regen includes components of the current mix of lowland deciduous and conifer species.

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	72003025-ccr	17.4	4130 - Aspen	High Density Pole	47	81-110	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up, except leave: the xlog NPO (noticed one), xlog RP & WP, and boundary exclude the corner near the county road intersection and the perimeter OFS wetlands. Proposed treatment boundary approximates those exclusions.

Other Comments: Do not site a landing in the adjacent maintained wildlife opening stand 27, and leave some mature trees along the interface with that opening (ie: leave red-painted line trees).

Next Steps: Natural regen check. Acceptable regen includes aspen with mixed conifer and deciduous components.

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	72003026-cc	13.8	42220 - Natural Jack Pine	Medium Density Pole	52	51-80	Harvest	Clearcut	42121 - Planted Jack Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up, with no reserves due to small stand size and planned next steps.

Other Comments:

Next Steps: Trench and plant JP around established oak and aspen regen. Regen check. Acceptable regen includes planted JP along with naturally established oak and aspen.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
28	72003028-shwd	28.5	42210 - Natural Red Pine	Medium Density Log	99	81-110	Harvest	Seed Tree with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Remove most of the mature to overmature RP, leaving the younger vigorous stems, as well 10 BA of xlog saw for age class diversity. Cut the JP, leave the WP. Extend the SW boundary to include roughly 3 acres of stand 30's JP type while buffering its OFS wetlands and excluding the OFS grassy opening. Proposed treatment boundary approximates the inclusion.

Other Comments: The treatment objective is to release the existing understory and secure additional regen through natural seeding. Harvesting snow-off would achieve more scarification.

Next Steps: Natural regen check. Acceptable regen includes overall moderate stocking in WP, RP, oak and JP. A longer timeframe for meeting stocking standards across the stand is also accepted. Open portions of the stand where there is little residual overstory or established regen being released may be planted to JP concurrent with stand 26; evaluate stocking and potential for in-growth after harvest completion.

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	72003038-ccr	84.7	4139 - Aspen, Mixed Deciduous	Medium Density Pole	45	51-80	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up except leave: the large sapling/small pole oak, xlog pine, and retention islands around the OFS wetlands. Extend the NE treatment boundary to include the south polygon of stand 30's JP type and the narrow peninsula of stand 42's RP/WP type. Don't chase aspen into stand 44. Cut the operable transition ground edge of the swamp stand 36. Stay at the top edge of the kettlehole that the wetland stand 39 sits in. Proposed treatment boundary approximates the inclusions/exclusions.

Other Comments: Do not site a landing in the adjacent maintained wildlife opening stand 47, and leave some mature trees along the interface with that opening (ie: leave red-painted line trees).

Next Steps: Natural regen check. Acceptable regen includes aspen with RM, oak and mixed conifers. Lower stocking between dense pockets of regen is expected and accepted.

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
56	72003056-ccr	47.0	6112 - Lowland Aspen	High Density Log	53	81-110	Harvest	Clearcut with Reserves	6112 - Lowland Aspen	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up, except leave: the xlog RP & WP, the oak, boundary-exclude a buffer along the drainage in the SE, and exclude the isolated E polygon. Proposed treatment boundary approximates the exclusions. Note that the entire length of the intermittent stream in the SE was not GPS'd; it crosses onto private property and then back onto state land. It's location on private was approximated from the aerial imagery. More of the stand's SE may need to be excluded, depending on how close the stream is on the private property.

Other Comments: Portions of the stand on the lowest ground may need to be harvested during dry summer or frozen winter conditions. The isolated NE polygon may need crane mats for crossing the lowland brush swale.

Next Steps: Natural regen check. Acceptable regen includes aspen and red maple with some mixed conifers.

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
59	72003059-ccr	27.5	4123 - Red Oak	High Density Log	106	81-110	Harvest	Clearcut with Reserves	4123 - Red Oak	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up, except leave: the pine, two roughly 1-acre interior retention islands, and boundary exclude the dense pocket of large-sapling BTA in the NW. Avoid placing the retention islands where the older aspen occurs. Proposed treatment boundary approximates those exclusions.

Other Comments:

Next Steps: Natural regen check. Acceptable regen includes oak, RM, aspen and WP. If regen is found to be inadequate, supplemental plant RP.

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
74	72003074-ccr	59.0	4123 - Red Oak	High Density Log	98	111-140	Harvest	Clearcut with Reserves	4123 - Red Oak	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up except leave: the RP & WP, boundary exclude the narrow north peninsula along the CPC ROW (and potentially the steep hill at the south end of the peninsula also), and leave three roughly 1-acre interior retention islands -- locating two of them to buffer the two OFS wetlands. Proposed treatment boundary approximates those exclusions.

Other Comments: Use slash from harvest operations to close off truck and ORV access to the east OFS wetland.

Next Steps: Natural regen check. Acceptable regen includes oak, RM, aspen, and pine. If regen is found to be inadequalte, supplemental plant RP.

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
76	72003076-ccr	24.7	4123 - Red Oak	High Density Log	97	81-110	Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up except leave: the pine and two roughly half-acre interior retention islands. Proposed treatment boundary approximates the exclusions. May also need to boundary-exclude for operability reasons the steep hill in the SW by the CPC ROW.

Other Comments: Note that at time of inventory the CPC ROW was not cleared to the property line along the stand's edge.

Next Steps: Natural regen check. Acceptable regen includes oak, aspen and RM. If regeneration is found to be inadequate, supplemental plant RP.

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
77	72003077-ccr	54.3	4130 - Aspen	High Density Log	53	111-140	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up, except leave: the RP & WP, the young oak and paper birch poles, scattered xlog oak wildlife trees (cavities, wide crowned, heavy limbed, etc.), and two roughly 1-acre interior retention islands that incorporate mainly the younger pole aspen. Proposed treatment boundary approximates those exclusions.

Other Comments: Watch the private fence near the N end: it does not accurately represent the property line and is well on private in places. Note also that at time of inventory the CPC ROW was not cleared to the property line along the stand's west edge.

Next Steps: Natural regen check. Acceptable regen includes aspen, oak, RM and pine.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
78	72003078-ccr	15.6	4199 - Other Mixed Upland Deciduous	High Density Log	105	81-110	Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up except leave: the pine, three roughly quarter-acre retention islands, and scattered mature oak. Proposed treatment boundary approximates the exclusions.

Other Comments: Protect witness trees associated with the SE corner of the section. Aspen and marked oak (orange paint) were to be cut under 72-034-04-01 but the contract was not completed. Several two-tracks cross through the stand to adjacent private residences; per general specs, they will be maintained open during harvest operations.

Next Steps: Natural regen check. Acceptable regen includes overall moderate stocking in oak, aspen, RM and pine.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
84	72003084-ccr	14.5	4123 - Red Oak	High Density Log	108	111-140	Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up except leave: the pine, two roughly half-acre interior retenion islands, and scattered mature oak. Avoid putting the retention islands where the aspen is concentrated. Proposed treatment boundary approximates the exclusions.

Other Comments: Was marked for thinning under 72-034-04-01 but the contract was closed incomplete. Protect witness trees associated with the SW corner of the section.

Next Steps: Natural regen check. Acceptable regen includes oak, aspen, RM & pine. If regen is found to be inadequate, supplemental plant RP.

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
89	72003089-thin	14.7	42110 - Planted Red Pine	High Density Log	48	200+	Harvest	Low Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin to 120 BA. Will largely be a low thinning, removing suppressed to intermediate stems first, and getting into the upper crown classes only as needed to reach the target residual. Mark other species for removal only as needed for operability. Clean up heavy leaners along the tornado-impacted edge.

Other Comments: Stand was row-thinned in 1994. The SW edge was hit by a tornado in 2007. Watch low ground inclusions (see stand comments).

Next Steps: Intermediate cut; no follow-up treatment 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
97	72003097-3row	6.3	42310 - Planted Spruce	High Density Log	48	141-170	Harvest	Systematic Thinning	42310 - Planted Spruce	Cmpt. Review Proposal

Prescription Specs: Third-row thin the spruce plantation, staying out of the wetland inclusions and only cutting other species if they occur within designated rows.

Other Comments: Consider incorporating the north two polygons into the adjacent RP harvest. The south polygon is cut off from that block by a six-foot wide stream. That polygon may fit best with the adjacent lowland deciduous harvest.

Next Steps: Intermediate cut; no follow-up treatment necessary.

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
98	72003098-ccr	21.0	6112 - Lowland Aspen	High Density Log	56	51-80	Harvest	Clearcut with Reserves	6112 - Lowland Aspen	Cmpt. Review Proposal

Prescription Specs: Harvest 2" & up except leave: the supercanopy WP & RP, the few NWC and elm, and leave retention through buffering the stream corridor. Treatment boundary approximates that buffer.

Other Comments: Terrain may require low ground pressure harvesting equipment and/or harvesting during dry summer or frozen winter conditions.

Next Steps: Natural regen check. Acceptable regen includes aspen with mixed deciduous and conifer, and non-forested pockets with shrub cover.

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
103	72003103-3row	3.8	42310 - Planted Spruce	High Density Log	48	141-170	Harvest	Systematic Thinning	42310 - Planted Spruce	Cmpt. Review Proposal

Prescription Specs: Third-row thin the spruce plantation, staying out of the wetland inclusions and only cutting other species if they occur within designated rows.

Other Comments: The stand's south end is within 75' of the AuSable, a designated Natural River. Since the harvest involves only a partial removal that will reduce competetive stress in the stand, the entire stand should be treated. Break up the appearance of the cleared rows at the south end by not cutting designated rows out to the stand edge.

Next Steps: Intermediate cut; no follow-up treatment necessary.

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	72003027-WLO	2.2	3102 - Grass				Non-Forest Management	Other - Specify	3102 - Grass	Cmpt. Review Proposal

Prescription Specs: Periodic wildlife opening maintenance, may include mowing, fertilizing, seeding, burning or herbicide treatments, as needed.

Other Comments:

Next Steps: Monitor yearly to assess maintenance needs.

Proposed Start Date: 10/01/2012

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
47	72003047-WLO	2.4	3102 - Grass				Non-Forest Management	Other - Specify	3102 - Grass	Cmpt. Review Proposal

Prescription Specs: Periodic wildlife opening maintenance, may include mowing, fertilizing, seeding, burning or herbicide treatments, as needed.

Other Comments:

Next Steps: Monitor yearly to assess maintenance needs.

Proposed Start Date: 10/01/2012

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:		**450.5**								

Table 4 -- Treatments Prescribed with a Limiting Factor

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

Prescription Specs:

Other Comment:

Next Steps:

Proposed Start Date: #Error

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: **0**

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:
2	42110 - Planted Red Pine	Medium Density Log	31.8	74	1-50	Red pine plantation. Was thinned in 2007 (72-019-04-01, stated cruise RBA of 62) and all aspen, JP and oak were removed. The harvest excluded a buffer of aspen, RM, birch and pine around the pair of non-forested wetlands (one a stand, one an OFS point). Oak regen is doing well. Some patches of aspen throughout. Road closure is effective. Minimal response to the thinning.
3	42220 - Natural Jack Pine	Medium Density Pole	8.2	50	51-80	Marginal mixed JP-NPO-WP stand with small components of BTA, RP & balsam fir. The JP poles are around 50 years old, with scattered top-dying overmature saw 80+ years old. The oak is poor quality, the WP is limby. The subcanopy has some WP & oak, but cover is low overall.
4	42200 - Natural White Pine	High Density Log	4.9	53	81-110	Two-aged mixed pine stand with wide divergence in age classes. The main canopy is large pole/small saw WP (with RP) in its early 50's, and above that is a significant supercanopy layer of xlog WP & RP 120+ years old. Some of the WP are in excess of 3 foot DBH. Mixed in is a low-density, >< cull deciduous component. The stand is upland overall, but grades down onto PArVCo to the east, where most of the supercanopy pine is located.
5	4133 - Aspen, Mixed Pine	High Density Pole	24.7	42	111-140	Aspen stand with a significant WP component and poor-quality mixed oak. Cover between the clones is almost exclusively WP with NPO. BTA is mostly at the north end; QA elsewhere. Aspen is generally in its early 40's, but the regen event was not uniform; there are older saw-sized aspen occuring in small pockets and widely scattered stems. WP tends to be limby, poor form.
6	4133 - Aspen, Mixed Pine	High Density Pole	20.0	41	81-110	Aspen clones with significant RP/WP components mixed in and concentrated between clones. Minor poor-quality NPO, JP & RM associates. Black spruce and balsam fir are concentrated around the two wetland swale inclusions (OFS points). RP SI 56.
7	42290 - Natural Mixed Pine	Medium Density Log	9.4	55	81-110	Dry mixed pine valley stand dividing an aspen stand. Canopy is two-layered, with RP & WP saw/poles over JP poles. Mixed in are poor-quality oak, occasional xlog RP and JP saw, and traces of RM, aspen and balsam fir. The cover is patchy, with open-grown form in the JP & WP where the stocking is lower. There is some overmature JP, but most of it is immature.
8	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	15.5	110	51-80	On transition ground sideslope between the uplands and lowlands; PArVCo overall. Generally large cull RM with WP and minor lowland deciduous/conifer components. Scattered above are supercanopy WP & RP. The subcanopy is balsam fir-dominated. The stand boundary includes pockets heavy to large pole/small saw WP and also incorporates a sub-acre pocket of NWC at the stream headwaters. The stand's south peninsula was a narrow strip excluded from the adjacent 1996 harvest as a buffer along the stream and pond. SW OFS point is a small intermittent wetland.
10	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	59.3	16		Stand was seeded in 1996 (C72-385) after being cut 2" & up (010-94), Has achieved full stocking. JP is growing well. A fair amount of oak growing up alongside the JP. Some super canopy red pine left when cut. Some dense pockets of aspen, fairly small in size.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	6130 - Fir, Aspen, Maple	High Density Pole	13.0	27	1-50	Was cut 4" & up in 1985 (097-84). That spec left a fair amount of residual across all species. Varying levels of residual competition made for variable aspen clone development, with a good portion of the aspen regen from the cut still sapling-sized, but some more fully transitioned into the pole class. OFS in the NW is a tree bog inclusion where most of the black spruce occurs. Other OFS is a tag alder inclusion. The stand has bands of dry ground, particularly to the south, but it was typed as lowland overall due to its significant lowland brush stand interface, wetland inclusions and predominantly PArVCo site. A seasonal drainage cuts through the stand's east center.
15	42290 - Natural Mixed Pine	High Density Log	7.6	53	111-140	Two-aged mixed pine stand with wide divergence in age classes. The main canopy is large pole/small saw WP (with RP) in its early 50's, and above that is a significant supercanopy layer of xlog WP & RP 110+ years old. Poor quality oak and aspen are mixed in at low densities, and RM and a trace of American elm occur in the floodplain of a seasonal drain that cuts through the stand. The stand is upland overall, but grades down onto PArVCo to the west along the drainage, where most of the supercanopy pine is located. There is little understory shrub development except for hawthorn along the drainage corridor.
16	42290 - Natural Mixed Pine	High Density Log	39.7	43	81-110	Mixed pine stand, heavy to large pole/small saw WP & RP, both running 40-60 years old, with a trace of older xlog stems. Aspen occurs in two sub-acre pockets and at low densities elsewhere. Poor quality mixed oak is scattered throughout, along with small amounts of RM, balsam fir and JP. Second stand age is also on the WP. WP SI 58.
17	6123 - Lowland Fir	Medium Density Pole	6.2	37	51-80	Balsam fir and spruce growing on lowlands and drier transition ground to the uplands. There had been more aspen, but it was mostly taken out by beaver in the past (slash accumulation from that activity). There is a small pocket of NWC by the private line, rimmed with old beaver dams and with a seasonal drain. Aside from the cedar, the stand is relatively young.
18	4131 - Aspen, Oak	High Density Pole	12.6	45	81-110	BTA with a significant poor-quality NPO component, and mixed pine & RM associates. Cover between the clones is primarily oak, RP, WP & RM. Clone development is variable; most are pole-sized, but there are some small saw and some sapling-sized.
19	42260 - Natural Pine, Mixed Deciduous	High Density Pole	44.4	52	81-110	Mixed pine stand with significant aspen components. Variable disturbance history: marked RP & WP saw were removed in three small patches in the mid 1980's (086-84), and old fire plow lines criss-cross through the stand. The cover changes every couple of chains; is an alternating mosaic of either dense pine or aspen pockets with more mixed species distribution in between. Roughly two-thirds of the cover is WP-RP-JP and one-third is QA-BTA. There are minor amounts of poor quality oak, RM, balsam fir & black cherry, and a trace of black spruce along the lowland brush stand edge. Most of the aspen, RP & WP cover is around 50 years old, with minor overmature components. Most of the JP is in its early 40's, but there is also an overmature component 80+ years old. The stand is near the low end of 75-100% cover after averaging in the poorer-stocked matrix in between dense pockets. Tag alder wetland inclusion in the NE (OFS point). QA SI 68.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4191 - Mixed Upland Deciduous with Conifer	Medium Density	6.9	16		Was cut 2" & up in 1996 (010-94). Stand is regenerating nicely. Has some areas that are somewhat open. Aspen is coming in around stand edges. Oak is growing very well. Lots of decent jack pine mixed throughout.
21	42220 - Natural Jack Pine	Medium Density Pole	20.5	41	51-80	Drier pine site than the WP-RP stand to the north. Cover is predominantly JP with a RP component. The stand is patchier, including alot of small openings with black cherry and oak regen, and three sub-acre QA clones. Poor quality mixed oak and balsam fir are scattered throughout. There is a minor component of overmature JP (mostly near Youngs Road) but the JP is generally in its early 40's. JP SI 49.
22	4136 - Aspen, Mixed Conifer	High Density Pole	44.3	40	51-80	Aspen is approximately 40 years old, fair quality. Oak is small and suppressed. Small balsam component. Not much in the understory. Aspen seems to be concentrated in clumps.
23	42220 - Natural Jack Pine	Medium Density Pole	7.4	46	51-80	Patchy JP stand that's been filling in an upland opening. Dense pockets have decent form, but the rest is open grown and limby. Occasional RP, NPO, WP & malus. Good oak recruitment in the subcanopy. Three sub-acre grassy opening inclusions.
25	4130 - Aspen	High Density Pole	21.3	47	81-110	QA & BTA with a deep list of minor mixed conifer and deciduous associates. The aspen is generally pole-sized and in the mid-40's, with a minority of stems either large sapling or overmature saw in size. The JP is very overmature. Large cull RM and a trace of black spruce occur near the L-type stand. OFS points along the county road are small wetlands. The xlog RP is concentrated in the SW near the county road intersection. The stand is upland overall, but has some PArVCo inclusions adjacent to the lowland brush stand and wetland inclusions.
26	42220 - Natural Jack Pine	Medium Density Pole	13.8	52	51-80	JP pole cover in its late 40's to mid 50's, with minor overmature saw. RP & WP mixed in at low densities along with scattered NPO and two sub-acre QA clones. Traces of BTA along the north edge. The mixed oak is poor quality, but it has established nice 5 to 20-foot tall saplings in the subcanopy. JP SI 57.
28	42210 - Natural Red Pine	Medium Density Log	26.0	99	81-110	RP-dominated stand with WP and a minor JP component. Variable disturbance history: marked sawtimber (mostly RP, some WP) were removed in the mid 1980's (086-84), and old fire plow lines cross through through the stand. Overstory cover is variable, averaging 50-75%. The stand may be approaching multi-storied status. RP saw cored ranged from 60-88-110-122 years; the middle two being averaged and stated as the stand's first age. The younger RP (60 years) and WP (59 years) were listed as the second age. The later core (122 years) was on the xlog RP and was not averaged into either age. The 80+ year old RP, even though it does not have heavy competition, has entered its slow growth phase, with a portion of that cohort barely maintaining (crowns taking on a thin, tufted appearance). The up-and-coming components are the younger canopy WP & RP and the subcanopy WP, NPO and RP. Light lower branch flagging in the WP. RP SI 60.
29	4130 - Aspen	High Density Sapling	49.6	6		Fully stocked stand of aspen regen. ORV trail passes through. Seems to be growing very well. Oak regen is keeping up with aspen very easily. Was cut 2" & up in 2006 (ost. 72-032-04-01).

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	42220 - Natural Jack Pine	Medium Density Log	19.3	58	51-80	Fragmented JP stand that wraps around half a dozen wetland inclusions (OFS points) and has been colonizing adjacent upland openings. Most of the older JP (first age) is in dense swaths bordering the wetlands. The younger JP (second age) is adjacent to the upland openings and tends to be open grown and limby. The JP is categorized as log overall due to meeting the 30% canopy benchmark in log-diameter stems, but it is pulpwood overall due to poor form. The stand's south polygon contains no wetland inclusions. Excluding the wetlands in the other two polygons, the JP is on upland -- albeit close to the water table -- ground. The lowland shrub cover recorded in the subcanopy is only found in the OFS wetlands.
31	42290 - Natural Mixed Pine	High Density Log	6.2	48	51-80	Sidehill stand of RP, JP & WP with mixed oak and scattered BTA. The mixed oak includes a nice large sapling/small pole component in addition to the older saw. The pine is running 50 to 60 years old, with the stand's first and second ages both on the RP.
33	4139 - Aspen, Mixed Deciduous	High Density Pole	27.2	41	1-50	Stand is mostly aspen. Looks like large oak was left when cut. Aspen is fair quality, solid in middle. Not much coming up in understory at this point.
36	6122 - Black Spruce	Low Density Pole	6.0	45	1-50	Tall spindly black spruce with some tamarack. Sphagnum covered root lattice over black muck soils. Slash from root-tipping. The densest and younger spruce cover (first age) is on the transition ground to the uplands. The mature spruce (second age) is on the stand's lowest ground, parts of which barely make the forested benchmark and are heavy to tag alder. There are two sub-acre upland inclusions along the private boundary: the east is non-forested and the west has aspen & RM.
38	4139 - Aspen, Mixed Deciduous	Medium Density Pole	81.5	45	51-80	Variable aspen stand with significant mixed oak, RM and conifer components. The cover is a patchwork of dense aspen clones that are separated by poorer-stocked areas with predominantly oak & RM. WP, balsam fir, RP & JP occur throughout as scattered individual stems and in small concentrated pockets. The aspen ranges from 45 to 50 years old. The mature oak is poor quality and has been reduced by age-related break-up and illegal cutting. There is a vigorous large-sapling/small pole oak component that extends into the canopy. The stand has small wetland (OFS points) and grassy opening inclusions. The ground is upland overall, but includes transition ground bordering the lowland brush stands. A wildfire underburned in the stand's SE corner the previous YOE. BTA SI 75.
40	4310 - Pine, Oak Mix	High Density Log	25.3	48	51-80	The stand occupies a sideslope between the hilltop deciduous stand to the east and the drier pine valley stand to the west, and is a transition between the two covertypes. The stand has roughly equal parts WP, mixed oak and RM, lesser amounts of aspen & RP, and traces of beech at the north end. The mixed oak ranges from overmature to immature, with some nice large sap/small pole stems making it into the canopy. WP subcanopy cover is locally high, and there are traces of white ash in the north end.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	42290 - Natural Mixed Pine	Medium Density Log	88.5	54	81-110	Mixed pine stand on alternating ridge-valley-ridge terrain. Marked sawtimber (mostly RP, some WP) were cut by 1987 (052-85, 057-85, 058-85). The canopy has two layers: the main layer is large pole/small saw WP & RP, and above that is a lower-density layer of larger saw RP & WP. Mixed into the main canopy layer are poor-quality deciduous components and a small amount of JP. The subcanopy is well-developed but variable, with locally high cover in oak and WP saplings. Part of the stand's SW underburned in a wildfire during the previous YOE. OFS point is a wetland inclusion. Light branch flagging occurring in the WP.
43	6122 - Black Spruce	Low Density Pole	1.0	82	51-80	Tall spindly black spruce growing on a bog (thick sphagnum groundcover with leatherleaf, labrador tea, etc.).
44	42260 - Natural Pine, Mixed Deciduous	High Density Log	8.1	44	81-110	Relatively young WP stand with a more or less two-aged canopy and a third age band in the subcanopy. Predominantly pole/small saw WP, with aspen, RM, RP et al mixed in. Some branch flagging in the WP. Polygon south of the county road was within the1985 merch & up harvest area (058-84) but the cut left fairly heavy WP residual. North of the road has more saw-sized WP.
45	4130 - Aspen	High Density Pole	29.3	27	81-110	Deciduous was cut merch & up in 1985 (094-84), followed by marked RP saw in 1986 (068-86). The aspen cover is concentrated on the upper terrain and shifts to more RM & oak on the lower slopes. The WP & RP is primarily in the stand's north end, with the largest saw along the county road. The NRO stump sprouts are vigorous and competetive with the aspen.
46	6124 - Lowland Spruce-Fir	Low Density Pole	9.1	47	1-50	Sparse mature black spruce (second age, previous inventory) seeded in the majority middle-aged spruce cover. Balsam fir and RM are significant components, with minor amounts of WP, aspen and birch. Canopy cover is at the high end of 25-50% and is continuing to increase as the subcanopy spruce recruits. The stand is on PArVCo and lower, with some drier transition ground to the uplands. The stand's SE has an acre of spruce bog where most of the older spruce is concentrated.
50	4136 - Aspen, Mixed Conifer	Medium Density Pole	20.5	27	51-80	Was cut merch & up in 1985 (72-058-84-01), leaving slightly older residual mixed in with the majority pole-sapling regen from the cut. QA with significant RM & WP components. The WP saw is short & stocky. The stand is upland overall, but has small wetland inclusions (OFS points) and considerable interface with lowland brush stands. The stand's south polygon was included in the contract area but was inaccessible - - a 6' wide drain and L type separate it from the main stand. That uncut portion has roughly an acre of older pole-saw aspen.
53	4130 - Aspen	Medium Density	25.4	6		Most of the stand was cut by 2006 (72-032-04-01). The stand's far SE is regenerating to a similar species mix following windthrow from the 2007 tornardo. The stand is on hilly terrain, with BTA on the upper slopes and QA in the valleys. Frost pocket depressions within the stand have lower stocking, but the cover averages 50-75% and is continuing to fill in. Aside from the regen, there are scattered overstory stems of pine, RM & oak.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	4130 - Aspen	High Density Pole	29.0	41	81-110	BTA on shallow rolling terrain with mixed pine, RM & oak associates. The majority pole aspen is in its early 40's with a minor overmature saw component around 80 years old. There is a fair amount of RP & WP poles by basal area but, because they are suppressed-intermediate, they have little canopy representation. There is little shrub development and only sparse RM-WP-RP in the subcanopy. Occasional RP & WP log/xlog.
56	6112 - Lowland Aspen	High Density Log	50.4	53	81-110	Aspen-RM stand on ground generally close to the water table. PArVCo with inclusions of year-round wet ground, and narrow bands of upland ground (mostly along the two-track and county roads). The stand's north end is the driest; most of the BTA occurs there. The stand's SE is the wettest; it has a higher proportion of RM and also picks up a trace of balsam poplar along the narrow drain. The green & black ash there are now dead. Aspen cored were in their 40's & 50's, ave 53. The older components of the QA, RM, birch & balsam fir are breaking up. The shrub layer is well-developed where the balsam fir isn't dog-hair thick. The stand has two upland polygons that are cut off by drainage/lowland brush swales.
57	4130 - Aspen	Medium Density	35.7	17		Was cut 2" & up except for some marked birch and RP in 1995 (72-014-94-01). There is a pocket of larger residual RP near where the two-track intersects the private property. The regenerating aspen is largely sapling sized, with the occasional pole around small upland openings. The stand is upland overall but has small wetland inclusions (OFS points) and considerable lowland brush stand interface. The aspen clones are separated by U/G, cherry, oak, balsam fir and WP cover.
59	4123 - Red Oak	High Density Log	30.7	106	81-110	Decent quality NRO with RM and small amounts of BTA & WP. The stand's south edge was salvaged in 2008 (72-001-08-01) after the 2007 tornado; there is 4 year old aspen-RM-oak regen there and some residual windthrown slash. The stand's west half had RM, aspen and a small amount of oak removed in 1995 (72-016-94-01); there is 17 year old RM-aspen regen there, including a solid patch of BTA saplings in the NW. Overstory aspen occurs in a few small clones.
60	4130 - Aspen	High Density Pole	32.5	27	1-50	The deciduous species were cut merch & up by 1985 (72-095-84-01), and marked RP & WP were cut in 1986 (72-065-86-01). The deciduous regen from the harvest is not completely transitioned into the pole class. The BTA and NRO (nice quality) are farthest along, with the RM lagging behind. Terrain is rolling, with the quaking aspen generally on the lower slopes. The residual WP & RP are mostly in the stand's S end. There was some windthrow along the stand's S & E edges, from the 2007 tornado.
64	4130 - Aspen	High Density Sapling	21.7	17	1-50	Cut 2" & up in 1995 (72-014-94-01). Vigorous aspen, RM and oak regen on hilly terrain. The oak stump sprouts are dominant-codominant in the canopy; some reaching pole size already. The RM stump sprouts are intermediate-codominant with smaller diameters and high stem densities.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
65	4131 - Aspen, Oak	Medium Density	25.3	4	1-50	Salvaged in 2008 (72-001-08-01) after the October 2007 tornado. Regen is the featured canopy, with mature oak and RM scattered above and in sub-acre pockets (along the stand's perimeter). Vigorous aspen-RM-oak regen. Intact oak stumps sprouted well. There's also a component of oak sprouts that are not large-stump in origin that are recruiting. The stand is at the high end of the 50-75% canopy category and is continuing to fill in. Well-developed post-salvage shrub layer.
66	4139 - Aspen, Mixed Deciduous	Medium Density	26.4	4		Salvaged in 2008 (72-001-08-01) after being hit by the Oct 2007 tornado. Featured canopy is the aspen-RM-oak regen, with widely scattered residual oak & RM, and WP, RP & aspen pole/saplings. The regen cover is variable, averaging to 50-75% cover and continuing to fill in. The salvaged mature oak (that weren't uprooted) stump-sprouted well and there is a component of <3' oak saps (not large-stump in origin) that have potential to recruit. The salvage also kick-started the shrub layer, with locally high coverage in several species.
67	4130 - Aspen	High Density Sapling	16.3	4		Most of the overstory was laid down by the October 2007 tornado. The stand was not salvaged, so there is heavy slash loading. The A-RM-O regen from the event is the featured canopy; scattered above that are residual overstory stems (mostly RM, a lot of leaners). The two OFS points are wetland inclusions.
68	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	16.0	42	51-80	Stand is variable due to the uneven impact of the 2007 tornado and the varying terrain/sites that the stand boundary encompasses. On the lower terrain, the site is drier with more hybridized oak, and WP. There is a younger age class in the hybridized black/red oak: large pole/small saw in their early 40's (first age). To the north, on the higher ground, the site quality improves and there is mature, better-quality oak (second age) and less pine. In addition to the oak and pine, there are RM and patchy aspen components. Cover ranges from 25 to 100%, averaging at the low end of 50-75%. Regen is the heaviest were the tornado impact was greatest; other areas of the stand were untouched by the wind event. This stand was not salvaged, so there is locally high slash loading.
69	4123 - Red Oak	High Density Log	27.2	106	51-80	West and NW portions of the stand were hit by the 2007 tornado and salvaged in 2008 (72-001-08-01). Those parts of the stand have lower residual (50-75%) and 4-year old aspen-RM regen. The stand is characterized by canopy-dominant NRO saw, with intermediate RM poles and scattered RP & WP (most of the xlog stems in a swath SE of Franks Rd). There's a trace of overstory sugar maple, beech and ash in the stand's NW by a perched wetland (OFS point). WP sapling cover is locally high, but averages to low. The stand also has large RM stump sprout regen from the1995 thinning (72-016-94-01).
70	4130 - Aspen	High Density Sapling	25.7	18		Cut 2" & up in 1994 (72-015-94-01). Vigorous dominant-codominant BTA & NRO saplings with intermediate-codominant RM, white oak and a trace of WP.
71	4130 - Aspen	High Density Sapling	17.6	6		Cut merch & up in 2006 (72-034-04-01). Vigorous sapling aspen-RM-oak regen from the cut. BTA further along than the QA.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
72	4130 - Aspen	Medium Density	30.2	4		Salvaged in 2008 (72-003-08-01) after the October 2007 torndado. It had originally been shelterwood marked for harvest under 72-034-04-01. Regen is the featured canopy, with widely scattered overstory stems of mature oak, pine and a trace of ash. The terrain is shallowly rolling, with BTA on the higher ground and QA on the lower terrain. The stand is upland overall with small wetland inclusions (OFS points).
73	4130 - Aspen	High Density Pole	27.4	27	81-110	Cut merch & up in 1985 (72-059-84-01). The aspen, RM & oak egen from the cut is mostly transitioned into the pole class. Mixed in is older residual from the cut: large pole/small saw RP, WP, NRO & BTA. The oak is vigorous and competetive with the aspen.
74	4123 - Red Oak	High Density Log	66.0	98	111-140	Stand was shelterwood marked for harvest under 72-034-04-01 but the contract was not completed. The canopy is dominated by good quality NRO, along with suppressed-intermediate RM, occasional RP & WP, and scattered BTA. The stand's SW had some wind-snap and -throw from the 2007 tornado. The terrrain is shallow-rolling, ending with a steep north aspect at the north end (where most of the overmature BTA is). Included in the NE is a narrow peninsula of uncut mature oak left along the CPC ROW. Consumers Energy is currently clearing the rest of their ROW along that edge. OFS points are small wetland inclusions. The east wetland is also an RDR (see OFS).
75	4123 - Red Oak	Low Density Log	13.7	111	1-50	Salvaged in 2008 (72-003-08-01) after the October 2007 tornado. Had been shelterwood marked for harvest under 72-034-04-01. The residual overstory of oak (and some WP & RP) is the featured canopy, with a full subcanopy of regen from the salvage. The site and oak are decent quality, but the oak's age is hindering response to the release. Growth doubled, but it's on the order of 2 mm radial increment vs. 1 mm pre-harvest, accompanied by epicormic branching and upper crown defensive dieback.
76	4123 - Red Oak	High Density Log	25.7	97	81-110	Oak stand on a knob, surrounded by aspen stands on the lower terrain. The canopy is dominated by good-quality NRO saw, with codominant NRO large poles and intermediate RM poles. The stand's SW has a steep side-slope down to the CPC ROW; overmature BTA is mixed in with the oak there. The stand's SE boundary was extended out to a two-track and has some younger aspen (early 40's) mixed in with the mature oak. There are a few old fire-scarred RP scattered across the stand. NRO SI 69
77	4130 - Aspen	High Density Log	56.2	53	111-140	Merch aspen, paper birch and marked oak were cut by 1969 (006-68). Partial harvest specs partially applied left significant residual. Stand has three main age classes: 43-year old aspen-RM-birch-oak that regenerated from the cut, and mature-overmature residual from the cut (aspen 50+ years old and oak 100+ years old). There are also scattered large cull RM and super-canopy RP & WP. High-end site for the aspen & oak.
78	4199 - Other Mixed Upland Deciduous	High Density Log	16.3	105	81-110	Quality NRO saw with overmature aspen (second age, previous inventory) and suppressed-intermediate RM and WP. Occasional supercanopy RP & WP. Aspen and marked oak were to be cut under 72-034-04-01 but the contract was not completed. Some feeble sprouting is occuring as the overmature apsen's apical dominance weakens. Subcanopy has a variable but well-developed shrub/sapling layer.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
79	4130 - Aspen	High Density Sapling	30.5	17		Was cut 2" & up in 1995 (72-015-94-01). Aspen regen (mostly BTA) with RM & oak mixed into the clones. Between clones is predominantly RM & oak. Cover is high except for the former landing area; dumping is occuring there.
80	4130 - Aspen	High Density Pole	14.6	44	111-140	Aspen-RM stand on the flats and including a ridge that grades up to the CPC ROW. The stand has two age classes in the aspen: immature poles in their mid-40's and a lesser component of mature aspen 55+ years old. The stand has a third age class consisting of mature NRO and hybridized black/red oak; with very large stems mixed into the aspen in the south half and smaller oak saw concentrated on the north edge. RDR hill climb runs near the ROW (OFS point).
81	4130 - Aspen	High Density Pole	52.8	43	81-110	Merch aspen, birch & marked oak were cut by 1969 under permit #6-68. Partial harvest specs variably applied left significant residual above the now pole-sized aspen, RM & traces of ash, WP & immature oak. The residual oak (second age) distribution is variable: from widely-scattered stems to small patches. The residual BTA is now log-sized, in small clumps, mostly on the east side. The RP is mostly in the stand's SE, where the site is a little drier. The terrain is hilly, dissected with valleys. Most of the state land in this block bounded by the CPC ROW was treated under permit #6-68, but this stand has less oak residual than the adjacent stand to the west and less aspen residual than the adjacent stand to the north. RP age was on the average saw, not the xlog stems.
82	4199 - Other Mixed Upland Deciduous	Medium Density Log	4.8	82	51-80	Canopy dominant NRO with codominant/intermediate sugar maple, RM, WP, et al. Stand is bisected by a steep drainage valley. The north part is on a steep south aspect, skirted by the stream. The SW part drops steeply down onto the AuSable River valley. Some windthrow and breakage from the 2007 tornado.
83	4130 - Aspen	High Density Sapling	5.5	18		Cut 2" and up in 1994 under 72-019-94-01. Aspen clones (mostly quaking) transitioning into the pole class. Areas between the clones are largely filled in with WP. Stand is mostly on a hill, with a steep drop at the north end down to a stream, and another steep drop in the south half onto the AuSable River valley.
84	4123 - Red Oak	High Density Log	15.5	108	111-140	Was marked for thinning under 72-034-04-01 but the contract was closed incomplete. The stand has good quality NRO, small patches of BTA, suppressed-intermediate RM pole clumps, and widely scattered RP & WP saw. Dominant representative NRO had sub-mm annual increment.
86	4130 - Aspen	Medium Density	18.2	4		The west half was a RP plantation and the east half was mature aspen, laid down by the October 2007 tornado and partially salvaged in 2008 under 72-009-08-01, leaving widely-scattered residual red maple, sugar maple and red pine trees. Regen from the harvest is quaking aspen with small components of bigtooth aspen, and balsam poplar along the narrow (2 to 3 foot wide) drain that flows the length of the stand. Two OFS points are wetland inclusions within the stand. The north OFS point is where the recorded tag alder occurs; a minute drain flows south out of it and feeds into the narrow drain. Aside from the OFS wetlands and the narrow drainage corridor, the stand is upland. The unsalvaged portions (mostly to east) have significant slash loads.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
89	42110 - Planted Red Pine	High Density Log	16.2	48	200+	RP planted when the property was in CPC ownership. Third-row thinned & aspen/JP removed in 1994 under 72-019-94-01. SW edge of the stand was impacted by the 2007 tornado and is lower density. There are still a few heavy leaners and windthrown stems along the edge of the 2008 salvage area. The RP is only partially transitioned into the saw class, but with enough canopy representation in 10" plus DBH stems to call saw overall. The stand has small grassy opening inclusions that are filling in with balsam fir, WP & hawthorn. The recorded aspen is from small inclusions picked up along the stand's margins. There is also a trace of oak & RM along the perimeter. The stand's NW polygon is close to the water table; it has small openings with sensitive & ostrich ferns and wraps around a lowland brush stand. RP SI 70
91	4130 - Aspen	High Density Sapling	9.2	18		Cut 2" and up in 1994 under 72-019-94-01 and regenerated to aspen with small amounts of oak and balsam poplar. On a hill. The east side borders a deep drainage valley. The stand's steep south aspect is a drier site; the cover isn't as dense or well-developed and is heavier to cherry and oak than aspen. The rest of the stand is on a better site (PArVVb) with heaver cover and better growth. There is a fair amount of white ash in the ground cover and subcanopy.
92	4311 - Pine, Aspen Mix	Low Density Sapling	7.0	18	1-50	Five acres were cut in 1994 under 72-019-94-01. Two acres on the west end were salvaged in 2008 under 72-009-08-01 after the 2007 tornado. The stand has a mosaic of aspen regen alternating with balsam fir, cherry brush and WP regen. There was a fair amount of balsam fir residual from the 1994 harvest, now pole-sized. The stand is at the high end of the 25-50% canopy closure and is continuing to fill in. The younger aspen regen from the salvage is filling in nicely.
93	4123 - Red Oak	High Density Log	37.3	105	81-110	Was marked for thinning under 72-034-04-01 and partially cut in 2007 before the contract was closed incomplete. Most of the oak, some of the RM and none of the aspen were cut. The stand is still dominated by oak, with RM & aspen associates, and averages at the low end of 75-100% canopy closure. The aspen ranges from immature pole to overmature saw. The site and oak quality decrease in the E-W two-track valley and on the south-facing hill along the CPC ROW. There is an acre inclusion of xlog RP & WP in the stand's NW (OFS point). A good quality oak saw that had 70 BA circa showed minimal response to the thinning (~1 mm radial increment vs. sub-mm pre-harvest).
95	6129 - Mixed Coniferous Lowland Forest	Low Density Log	4.2	115	1-50	Marginal mixed conifer stand including the transition zone to the uplands on the north side. At the bottom of that steep bank is a backwater swale with duckweed. Root-tipping common; some from the 2007 tornado and some due to the high water level/shallow rooting.
97	42310 - Planted Spruce	High Density Log	6.3	48	141-170	White spruce planted when the property was owned by CPC. The spruce is stocky, with persistent dead branches down to the ground. Barely upland, with small tag alder swale inclusions and extensive lowland interface. The stand picks up scattered RP, WP and aspen stems, mostly on the perimeter.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
98	6112 - Lowland Aspen	High Density Log	29.2	56	51-80	Majority of stand is on PArVCo and lower sites, ranging from a seasonal high water table to outright flooding along the stream corridor. The drier transition ground is primarily in the stand's north end, with a steep grade to the uplands. That grade is steepest in the NE, climbing out of the stream ravine. The stand is primarily aspen, with an E-type inclusion in the SE (paper birch, red maple, basswood, off-site sugar maple and a trace of NWC). There was also black ash and American elm there, but those species have largely died out. The stand is at the low end of the 75-100% canopy closure, due to tornado impact in the SW (Oct 2007), break-up in the overmature aspen & balsam fir components, and non-forested thickets of musclewood, hawthorn and tag alder. The stand is majority pole-sized, but enough of the canopy is in 10"+ stems that it has to be called log overall.
101	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	1.5	55	111-140	Mature quaking aspen with an overmature component, along with balsam fir and balsam poplar. Occasional paper birch and basswood and a trace of NWC. The black ash and American elm have largely died out. Balsam fir-dominated subcanopy. Slash accumulation from breakup in the overmature components and species mortality. Just enough of the canopy is made up of saw-sized stems that it hits the overall saw benchmark.
103	42310 - Planted Spruce	High Density Log	5.3	48	141-170	White spruce planted when the property was owned by CPC. The spruce is stocky, with persistent dead branches down to the ground. Barely upland, with a vernal pond in the NW (OFS pt) and extensive lowland interface. The NW corner of the stand has a small inclusion of aspen, balsam fir and paper birch around the wetland. The inclusion at the south end is a small grassy opening with a powerline corridor and former CPC lease cabin (OFS pt.) WS SI 64.
104	6132 - Mixed Lowland Forest with Cedar	Medium Density Log	9.3	51	51-80	Stand is lowland overall, with bands of slightly higher ground. It's driest near the county road, with a swath of slightly younger aspen, then grades down to the AuSable River floodplain where there are a couple acres of cedar and balsam fir. In between are old oxbows, former black ash swales, and PArVCo ridges. The predominant cover there is mature quaking aspen with balsam fir and red maple. There was black ash and American elm, but those species are largely gone now. Areas that were heavy to black ash have dropped to 25-50% canopy closure. Slash is accumulating through windthrow and breakage in the overmature components .
105	42290 - Natural Mixed Pine	High Density Log	1.6	58	111-140	Small stand north of county road, bounded by private. A powerline corridor and a drain cut through the stand. Aside from the drainage swale, the stand occupies a steep upland ridge. Mainly WP & RP with mixed deciduous, including a trace of sugar maple & basswood. A few supercanopy RP & WP seeded in the majority cover. East end of the stand underburned in a wildfire the previous year.
106	6120 - Lowland Cedar	Medium Density Log	8.1	115	51-80	After the steep drop by the county road's guardrail edge, the stand is on a shallow gradient down to the AuSable River. PArVCo & lower, with a feeder stream cutting through. The cover is primarily NWC, with balsam fir and minor amounts of lowland deciduous. There was black ash, but it is all dead now. Decadence is weeding down the older components across all species, adding to the slash load. The only thing keeping this stand from dropping down to 25-50% canopy closure is the increasing balsam fir component.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	6225 - Bog	1.8	No	Unspecified	Thick sphagnum floor in stand.
9	6229 - Mixed lowland shrub	6.1	No	Unspecified	Beaver meadow, terraced with old dams. Narrow stream flows through, more or less unimpeded now. NWC snags at the north end. Cover heavy to rubus, with patches of tag alder and salix. WP, BF & PB colonizing from edges.
11	6220 - Alder/willow	1.7	No	Unspecified	Tall tag alder with black spruce, balsam fir, paper birch, etc. scattered along the margins.
12	50 - Water	2.2	No	Unspecified	Open water surrounded by bullrush, marsh grass, small patches of cattail. Prickly ash on perimeter.
13	6220 - Alder/willow	4.7	No	Unspecified	Tall tag alder with salix, some leatherleaf, and occasional aspen, paper birch & balsam fir. An intermittent drain originates in the stand and flows ENE.
24	6220 - Alder/willow	4.6	No	Unspecified	Tall tag alder and salix.
27	3102 - Grass	2.2	N\A	Unspecified	Maintained WL opening. Grass with bracken fern. Perimeter black cherry, balsam fir, JP & WP.
32	11 - Low Intensity Urban	3.3	N\A	Unspecified	Cleared county road corridor.
34	3102 - Grass	18.0	No	Unspecified	Large upland opening that has been filling in from the edges with JP, oak and cherry. There are a few old apple trees and clumps of lilac (see OFS). Stumps were stockpiled within the opening and were also used for berms along the county road to limit ORV access. Some of the illegal trails have re-vegetated but several hot-lap tracks are being maintained open through on-going quad activity.
35	6220 - Alder/willow	3.8	No	Unspecified	Tall tag alder, wild raisin at margins, scattered aspen, PB, etc.
37	6220 - Alder/willow	1.1	No	Unspecified	Tall tag alder with low-density black spruce and aspen cover in the N & E.
39	6233 - Wet Meadow	1.3	No	Unspecified	Marsh grass with woolgrass and patches of leatherleaf.
41	6220 - Alder/willow	2.7	No	Unspecified	Tall tag alder with perimeter willow, wild raisin and aspen.
47	3102 - Grass	2.4	Yes	Unspecified	Maintained wildlife opening. Grass with sweetfern at the margins. A few black cherry, perimeter oak. Spotted knapweed along the two-track.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
48	6220 - Alder/willow	6.1	No	Unspecified	Tag alder with spiraea, salix & sedge.
49	6220 - Alder/willow	1.1	No	Unspecified	Tag alder with leatherleaf, wild raisin, sedge and scattered sap/pole black spruce and WP.
51	6233 - Wet Meadow	23.2	No	Unspecified	Sedge/marsh grass cover with small patches of open water in the middle and spiraea/tag alder at the perimeter.
52	6220 - Alder/willow	6.3	No	Unspecified	Tag alder with salix, wild raisin, spiraea, and scattered sap/pole QA, balsam poplar, black spruce and balsam fir from the 1995 harvest. Opener areas have sedge, cattail.
54	6229 - Mixed lowland shrub	4.4	No	Unspecified	Mix of deep leatherleaf, spiraea, salix, and perimeter tag alder.
58	6220 - Alder/willow	2.9	No	Unspecified	Tag alder with small amounts of salix, wild raisin, spiraea, and scattered balsam poplar, QA and balsam fir saps from the 1995 harvest.
61	6220 - Alder/willow	1.0	No	Unspecified	Tag alder with ilex, wild raisin, and colonizing balsam poplar, RM, black spruce and balsam fir.
62	11 - Low Intensity Urban	16.1	N\A	Unspecified	Cleared county road corridor.
63	6220 - Alder/willow	1.7	No	Unspecified	Tag alder swale. Black & green ash died out. RM, balsam poplar & balsam fir is re-colonizing the swale.
85	6220 - Alder/willow	3.1	No	Unspecified	Tall tag alder with some salix & hawthorn. Relatively dry ground for tag alder. Portions were trenched through but the planting didn't take. Wet meadow inclusion in the SE. Some perimeter balsam poplar, RP & WP.
87	3104 - Degraded	1.9	No	Unspecified	Former gravel pit. Bare ground growing over with grass, spotted knapweed, white sweet clover, etc. There are scattered sapling-pole spruce, RP & WP along with aspen colonizing from the edges. Illegal ORV traffic.
88	3105 - Mixed Upland Herbaceous	9.6	Natural Regen	Unspecified	The center/NE portion was a RP plantation and the NW & S portions were white spruce plantations, laid down by the October 2007 tornado and salvaged in 2008 under 72-009-08-01, leaving scattered residual white spruce & RP trees. Small amounts of regen filled in along the perimeter, mostly aspen and balsam fir. The stand overall is non-forested, with heavy forb/fern cover. The north polygon has deep slash and stump piles, with chest-high rubus.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
90	3205 - Mixed Upland Shrub	5.1	N\A	Unspecified	Salvaged in 2008 under 72-009-08-01. Was a RP plantation, laid down by the October 2007 tornado. Much of the plantation area regenerated to aspen. This portion does not have enough regen to call forested. Aspen is filling in from the edges and there are scattered oak stump sprouts, but the cover is largely upland shrub/herbaceous.
94	6220 - Alder/willow	2.1	No	Unspecified	Tag alder with some salix, spiraea, common elder. Culvert for narrow stream currently dry.
96	3104 - Degraded	1.0	No	Unspecified	Shallow former gravel pit. Sparse cover, mostly spotted knapweed. Sweetfern & balsam poplar filling in from the edges.
99	6220 - Alder/willow	1.0	No	Unspecified	Tag alder and some salix, being colonized by balsam fir and tamarack.
100	11 - Low Intensity Urban	8.2	Yes	Unspecified	Canoe access site & parking lot, county road corridor, couple sub-acre patches of upland brush, aspen regen & scattered trees, and lowland brush along the AuSable River.
102	6220 - Alder/willow	1.8	No	Unspecified	Tall tag alder and salix over colonizing white spruce, white pine and balsam fir saplings. Portions were trenched through but the planting didn't take due to the lower ground.

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.
SCA	Wild and Scenic Rivers	Wild and Scenic Rivers are established under authority of the National Wild and Scenic Rivers Act, Public Law 90-542, as amended. Each Wild and Scenic River has a river specific Federal management plan, and State agencies may enter into written cooperative agreements with the administering Federal agency for the management of Wild and Scenic Rivers that are upon State-owned lands. There are 18 miles of Federal designated Wild and Scenic Rivers that are located within the State Forest.