



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72014

Entry Year 2018

Acreage: 2,189

County Oscoda

Management Area: Avery Hills

Revision Date: 2016-03-31

Stand Examiner: Kevin Ehlert

Legal Description:

T28N R03E, Sections 29, 30, 31, & 32. Oscoda Co. Clinton Twp. T28N R02E, Section 36, Oscoda Co. Elmer Twp.

Identified Planning Goals:

To maintain species and structural diversity while managing for health, productivity, and sustainability throughout the compartment. To provide multiple use opportunities and incorporate any visual management needed to optimize these uses.

Soil and topography:

Topography within the compartment is gently rolling to hilly, with the exception of a deep ravine running east and west through the northern half of the compartment. Soil types within the compartment, primarily consists of Emmet and Roselawn sands and sandy loam.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

The compartment is largely state owned. In T28N R02E, there is a 40 acre ownership and residence which was previously 160 acres until the State of Michigan acquired 120 acres from the owner. There is a private 80 in section 31. Several smaller seasonal parcels, border the compartment in the west half of section 30. The private 80 in section 31 and the several seasonal parcels in section 30 are used primarily for hunting. There is a private 40 in Section 36 of T28N R02E.

Unique Natural Features:

The Southwest corner of the Compartment is adjacent to the Frost Pocket.

Archeological, Historical, and Cultural Features:

None

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

None

Wildlife Habitat Considerations:

To manage and maintain existing cover types within the compartment and to improve habitat conditions for a wide variety of non-game and game wildlife.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale. There is not a current economic use for the Coldwater Shale. Gravel pits are located just to the NW and SE and potential appears to be good. This compartment is completely leased and half-developed for Antrim Shale.

Vehicle Access:

Access to the compartment can be obtained from Mt Tom, Bailey and Cedar Run County Roads. Several two tracks lead into the compartment from these county roads. However, some of these two tracks lead to private land before reaching state land and are blocked by gates.

Survey Needs:

None

Recreational Facilities and Opportunities:

The Mio ORV Loop traverses through a portion of every section in the compartment and a small portion of ORV Route traverses through the south west corner of section of 31. Recreational opportunities within this compartment other than

ORV include hunting, hiking, mushrooming, camping, bird watching and berry picking.

Fire Protection:

Fire suppression, within this compartment falls under the jurisdiction of the Comins/Fairview Volunteer Fire Departments and the Michigan Department of Natural Resources. Cover types within the compartment consists of most Aspen, Hardwoods, and Oak stands that pose little or no major fire concerns. Topography and Oil/Gas operations within the north portion of the compartment may be of some concern in fire suppression efforts. No close water sources within the compartment. There are a few small lakes south east of the compartment that would be the closest source of water for firefighting efforts.

Additional Compartment Information:

The far west portion of Section 30, that is state land, was removed from this compartment and placed in Compartment 29 (Frost Pocket) the west.

Some of this transferred land included maintained wildlife openings. 120 acres of land was acquired from the Frundel property in sections 29 and 32. A BMP form has been written and file on the ORV damage to the powerline and hill in Section 29.

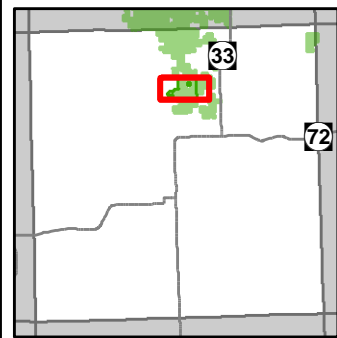
The following reports from the Inventory are attached:

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

The following information is displayed, where pertinent, on the attached compartment maps:

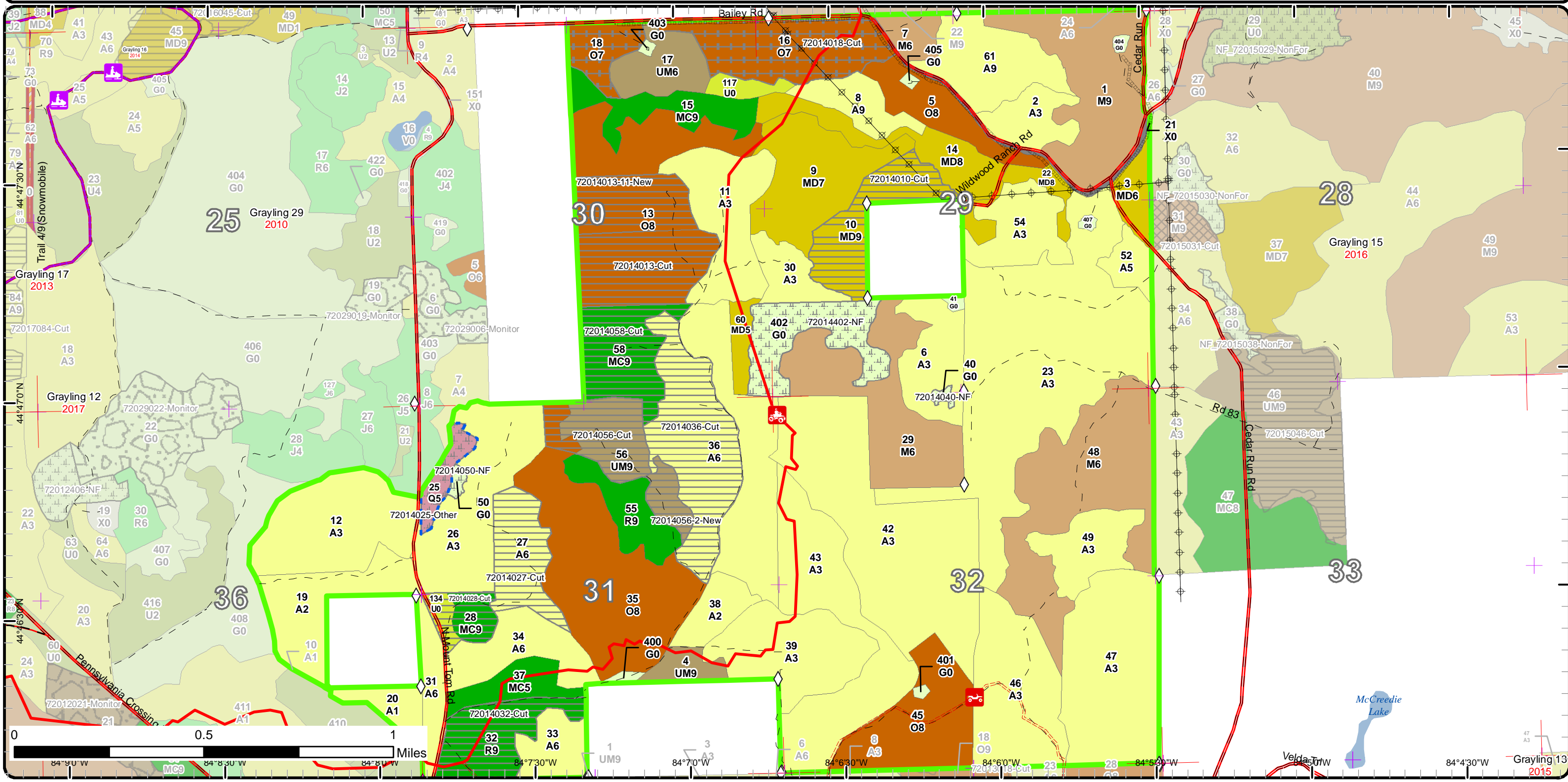
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

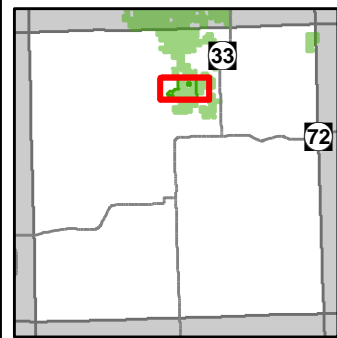


Compartment: 14
 T28N, R03E, Sec: 29-32
 T28N, R02E, Sec: 36
 County: Oscoda
 Unit: Grayling
 Mgmt Area: Avery Hills
 YOE: 2018
 Acres: 2189 GIS Calculated
 Examiner: Kevin Ehler
 Map Revised: 3/9/2017
 Map Phase: Post-Review

- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- 🛵 ORV Trails
- 🛵 ORV Routes
- 🏠 Snowmobile Trails
- Designated ATV Trails
- Designated ORV Route
- Designated Snowmobile Trails
- County Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Pipeline
- ⊕ Powerline
- ▭ Compartment Boundary
- ▭ Treatments with Site Conditions
- ▭ Clearcut (w/Reserves)
- ▭ Other Treatment - See Comments
- ▭ Harvest, Overstory Removal
- ▭ 411 - Northern Hardwood
- ▭ 412 - Oak Types
- ▭ 413 - Aspen Types
- ▭ 419 - Mixed Upland Deciduous
- ▭ 422 - Natural Pines
- ▭ 430 - Upland Mixed Forest
- ▭ 612 - Lowland Coniferous Forest
- ▭ 122 - Roads/Parking Lot
- ▭ 310 - Herbaceous Openland
- ▭ 330 - Low Density Trees
- ▭ Lakes



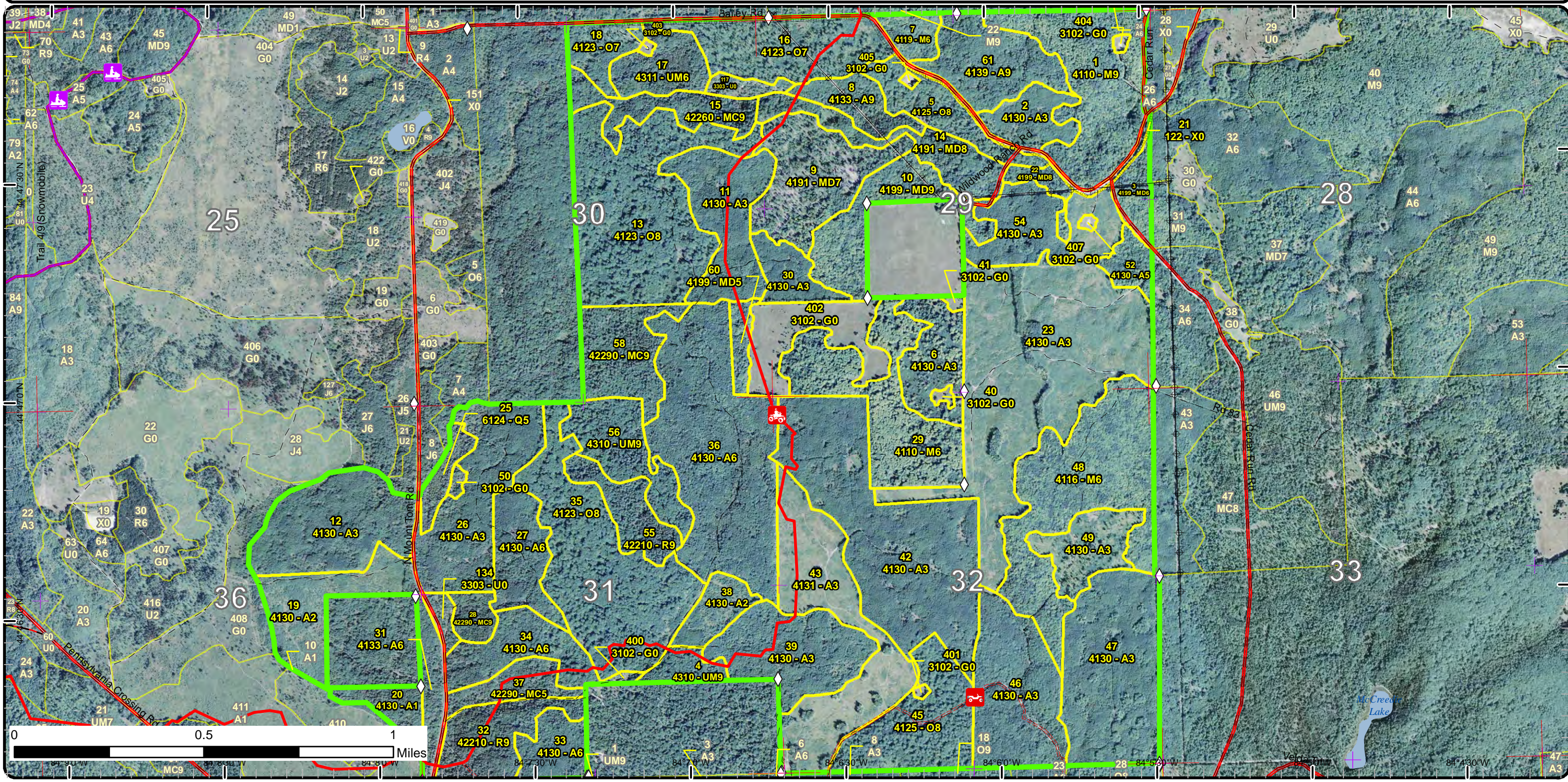
Stand Boundary Map



Compartment: 14
 T28N, R03E, Sec: 29-32
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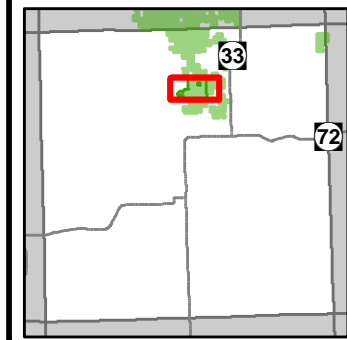
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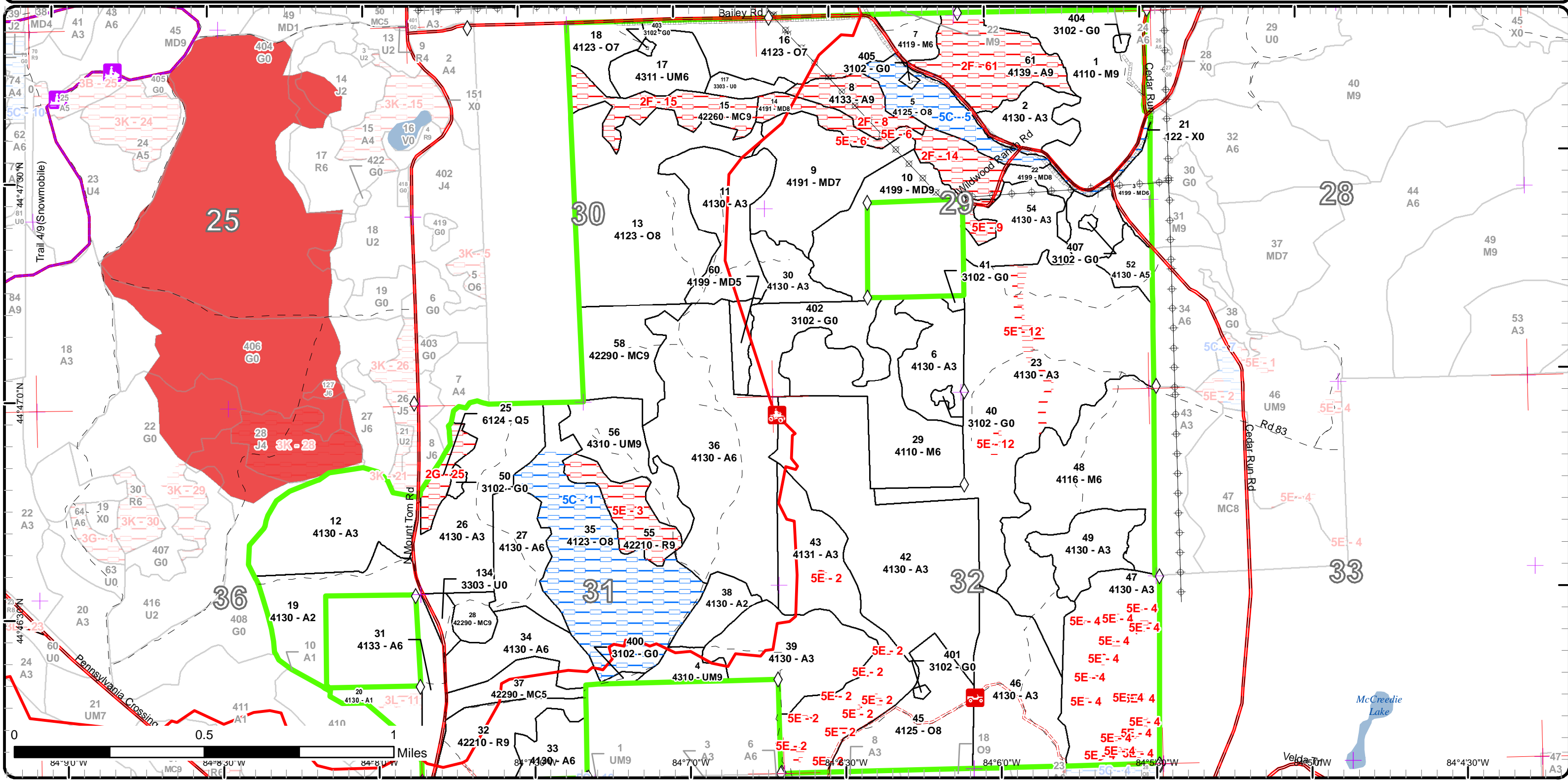


Special Conservation Areas & Site Conditions Map

Compartment: 14
 T28N, R03E, Sec: 29-32
 T28N, R02E, Sec: 36
 County: Oscoda
 Unit: Grayling
 Mgmt Area: Avery Hills
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- Miris Corners
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- Designated Snowmobile Trails
- County Gravel Roads
- - - County Poor Dirt Roads
- - - Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	326	49	473	146	135	39	0	18	0	0	0	0	0	0	0	0	0	1185
Herbaceous Openland	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Low-Density Trees	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Lowland Conifers	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9
Mixed Upland Deciduous	0	0	0	0	0	0	0	8	19	0	81	0	0	0	0	0	0	39	147
Natural Mixed Pines	0	0	0	0	0	0	17	0	9	35	0	0	0	0	0	0	0	25	85
Northern Hardwood	0	0	0	0	0	65	104	0	67	0	0	0	0	0	0	0	0	0	236
Oak	0	0	0	0	0	0	0	0	0	0	227	116	0	0	0	0	0	0	341
Red Pine	0	0	0	0	0	0	0	0	32	0	0	21	0	0	0	0	0	0	53
Upland Mixed Forest	0	0	0	0	0	23	0	0	10	0	0	34	0	0	0	0	0	0	66
Urban	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Total	64	326	49	473	146	223	160	8	164	35	308	171	0	0	0	0	0	64	2185



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2018

Acres of Harvest

Compartment 14

Total Compartment Acres: 2,189

Commercial Harvest - 381
 Harvests with Site Condition - 0
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	90	0	0	0	0	0	0	0	0	90
Mixed Upland Deciduous	34	0	0	0	0	0	0	0	0	34
Natural Mixed Pines	49	0	0	0	0	0	0	0	0	49
Oak	70	0	0	0	0	67	0	0	0	137
Red Pine	32	0	0	0	0	0	0	0	0	32
Upland Mixed Forest	39	0	0	0	0	0	0	0	0	39
Total	314	0	0	0	0	67	0	0	0	381

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	381	0	0	0	0	0	9	37	0	428
Next Step	0	332	123	0	146	123	649	41	0	1414
Total	381	332	123	0	146	123	649	51	37	1842



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
10	72014010-Cut	34.3	4199 - Other Mixed Upland Deciduous	Sawtimber Well	80	111-140	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Final harvest 2" and up. Leave the few hemlock.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of aspen and northern hardwood species

Regen:

Other Private on two sides. Powerline traverses through a portion of the stand. Retention is the part of the stand South of Powerline and East of PVT property, and is identified in by proposed treatment boundary.

Proposed Start Date: 10/01/2017

13	72014013-11-New	28.9	4123 - Red Oak	Sawtimber Medium	96	51-80	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Final harvest all species 2" and up. Include chipping spec and low stump spec to facilitate roller chopping. Retention will be designated located in the north end of stand 13 which is not being harvested. Include Oak Wilt Spec.

Specs:

Next Step SitePrep, Roller Chopping; Monitoring, Natural Regen (Intermediate); SitePrep, Roller Chopping; Burn, Slash; Monitoring, Natural Regen

Treatments: (Intermediate); SitePrep, Roller Chopping; Burn, Slash; Monitoring, Natural Regen (Intermediate)

Acceptable A combination of red oak, red maple, and other mixed hardwood species with component of red and white pine. Prefer 40%+ red oak.

Regen:

Other Will be roller chopped 1 yr after harvest to set back maple regen. Site will be monitored, and possibly roller chopped or Rx burned as needed on 2-4 year interval to set back red maple regen and promote red oak regen. Photo plots will be established.

Comment:

Red oak regeneration success of various treatment strategies will be compared in this stand and nearby stand 56.

Watch for green up conflict.

Proposed Start Date: 01/01/2017

13	72014013-Cut	41.4	4123 - Red Oak	Sawtimber Medium	96	51-80	Harvest	Clearcut with Retention	42110 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Harvest all species 2" and up. Use standard retention guidelines. Retention will be designated in North end of stand 13. Low stump and chipping specs required. Leave snags along perimeter. Include Oak Wilt Spec.

Specs:

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Pesticide, Aerial; Planting, Replant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial

Treatments: Regen(3yr); Other, Other

Acceptable Plant to a well stocked red pine stand.

Regen:

Other Schedule planting with stand 58. Long term goal is alternating between red pine and red oak each rotation.

Comment: PVT line on west side.

Watch for green up conflict.

Oak wilt confirmed within this treatment. Goal is to have sale completed by April 15, 2018 to reduce risk of oak wilt spread to nearby stands.

Proposed Start Date: 01/01/2017



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
18	72014018-Cut	66.5	4123 - Red Oak	Sawtimber Poor	100	1-50	Harvest	Overstory Removal	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Remove shelterwood seed tree oaks. Protect regeneration. Add rec. trail specs.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A mix of aspen, oak, and maple is acceptable with small component of red and white pine.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

25	72014025-Other	9.4	6124 - Lowland Spruce-Fir	Poletimber Medium	74	1-50	Other	Other	6129 - Mixed Coniferous Lowland Forest	Uneven-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition: Too Wet

Prescription Hinge cut 20+ foot high full trees, 3-4' off ground. Leave portion of cambium layer attached so tree will remain propped on the stump after dropped. Mostly pole-sized trees will be cut but some saw-sized trees will be cut too. Approximately 50 trees will be cut every few years during the winter months so cover is always available for hares .

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other WLD will create horizontal cover for snowshoe hares within this stands by hinge cutting and dropping fir and spruce trees. WLD will focus primarily along the edges and around canopy gaps within these stands.

Comment:

Proposed Start Date: 10/01/2017

27	72014027-Cut	28.7	4130 - Aspen	Poletimber Well	44	Unspecified	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Final harvest all species 2" and up. Follow standard retention guidelines. Include drumming log spec.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen with mixed associated species meeting minimum stocking requirements.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

28	72014028-Cut	14.4	42290 - Natural Mixed Pine	Sawtimber Well	70	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Harvest all trees 2" and up. No retention due to small stand size. Include low stump and chipping specs.

Specs:

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Pesticide, Aerial; Planting, Replant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial

Treatments: Regen(3yr)

Acceptable Plant red pine to a well stocked stand.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
32	72014032-Cut	32.3	42210 - Natural Red Pine	Sawtimber Well	73	111-140	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Harvest all trees 2" and up. Include specs for low stump heights, chipping, and ORV trail. Follow standard retention guidelines. Place visual management islands along Mt Tom Rd. Place long term retention along stand perimeter.

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Pesticide, Aerial; Planting, Replant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Treatments: Regen(3yr)

Acceptable Plant red pine to a well stocked stand.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

36	72014036-Cut	61.1	4130 - Aspen	Poletimber Well	39	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Final harvest all species 2" and up. Follow standard retention guidelines. Include drumming log spec.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen and mixed associated species meeting minimum stocking requirements.

Regen:

Other

Watch for green up conflict. Treatment will occur at the same time as treatment in stand 56 and 58.

Comment:

Proposed Start Date: 10/01/2017

40	72014040-NF	1.4	3102 - Grass	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, tree and shrub planting, Rx burning and herbicide application.

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

50	72014050-NF	1.8	3102 - Grass	Nonstocked	0	Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, tree and shrub planting, Rx burning and herbicide application.

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
56	72014056-2-New	9.3	4310 - Pine, Oak Mix	Sawtimber Well	105	81-110	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Final harvest all species 2" and up. Follow standard retention guidelines. Low stump spec required. Include Oak Wilt spec.
Specs:

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Regen: Oak with mixed associated species meeting minimum stocking requirements. Prefer 40%+red oak. Will accept Upland Mix.

Other Comment: Treatment will be compared with treatments in stand 13 to determine the best method for regenerating red oak in this area where there is strong competition of red maple. South end of stand will be harvested and not burned in order to serve as a cut control.

Watch for green up conflict.

Proposed Start Date: 10/01/2017

56	72014056-Cut	29.3	4310 - Pine, Oak Mix	Sawtimber Well	105	81-110	Harvest	Clearcut with Retention	4123 - Red Oak	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Final harvest 2" and up. Follow standard retention guidelines. Low stump spec required. Focus retention on edge near private boundary. Leave top wood smaller than 4" diameter. Include Oak Wilt Spec.
Specs: Shortwood harvest only, scatter tops evenly. No chipping.

Next Step Monitoring, Natural Regen (Intermediate); Burn, Slash; Monitoring, Natural Regen (Intermediate); Burn, Slash; Monitoring, Natural Regen
Treatments: (Intermediate); Burn, Slash; Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Oak with mixed associated hardwood species, red and white pine meeting minimum stocking requirements. Prefer 40%+ red oak. If burn not feasible, accept natural regeneration of mixed upland deciduous.

Other Comment: Treatment extends into adjacent stand 35 in order to facilitate future burning operations.

Rx burn to promote natural regeneration of red oak. Extensive monitoring will be used to determine if multiple burns are needed on a 2-4 year schedule in order to meet objective of setting back red maple regeneration to promote red oak regeneration. The treatment will be compared with treatments in stand 13 to determine the best method for regenerating red oak in this area where there is strong competition of red maple.

Watch for green up conflict.

Proposed Start Date: 10/01/2017

58	72014058-Cut	34.7	42290 - Natural Mixed Pine	Sawtimber Well	87	111-140	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Harvest all species 2" and up. Use standard retention guidelines. Focus retention along perimeter of stand in islands near private boundary.
Specs: Low stump and chipping specs required. Leave snags along perimeter.

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Pesticide, Aerial; Planting, Replant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial
Treatments: Regen(3yr)

Acceptable Regen: Plant to a well stocked red pine stand.

Other Comment: Watch for green up conflict.

Proposed Start Date: 10/01/2017



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
402	72014402-NF	34.0	3102 - Grass	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing,
Specs: brushing, tree and shrub planting, Rx burning and herbicide application.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

**Total Treatment
Acreage Proposed: 427.5**

Report 4 – Site Conditions

Grayling Mgt. Unit
Kevin Ehlert : Examiner

Compartment: 14
Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available
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Dominant Site Conditions

	Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available	Dominant Site Condition	Dominant Site Conditions					
						5C	2F	2G	3K	3L	5E
1186	1105	0	81		Aspen		56		0	3	22
44	44	0	0		Herbaceous Openland						
12	12	0	0		Low-Density Trees						
9	0	0	9		Lowland Conifers			9			
147	113	0	34		Mixed Upland Deciduous		27				7
85	60	0	24		Natural Mixed Pines		24				
237	237	0	0		Northern Hardwood		0				
342	225	115	2		Oak	115	2				
54	32	0	21		Red Pine	0			0		21
66	66	0	0		Upland Mixed Forest						
7	0	7	0		Urban	7					
2,189	1,895	122	172		Total Forested Acres	122	109	9	0	3	50
	87%	6%	8%		Relative Percent						

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	91	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	5E: Long-Term Retention	21	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Unique natural red pine stand. Historic raptor nesting site. Hold for diversity.							

Report 4 – Site Conditions

Grayling Mgt. Unit
Kevin Ehlert : Examiner

Compartment: 14
Year of Entry: 2018

4	Unavailable	5E: Long-Term Retention	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	31	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	5E: Long-Term Retention	3	2F: Too steep	Unspecified	Unspecified	Unspecified
Comments: Designated long-term retention for timbersale 72-031-10-01. Also too steep.							
8	Unavailable	2F: Too steep	20	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	5E: Long-Term Retention	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
14	Unavailable	2F: Too steep	27	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Grayling Mgt. Unit
Kevin Ehlert : Examiner

Compartment: 14
Year of Entry: 2018

15	Unavailable	2F: Too steep	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
25	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
61	Unavailable	2F: Too steep	39	2G: Too wet (sensitive soils, does not include access issues)	3G: Other Influence zones - See comments	Unspecified	Unspecified
Comments:							



Report 5 – 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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
	Potential Old Growth		SCA Removal	2
Comments				
This area no longer meets the criteria to be classified as a Special Conservation Area.				
	Potential Old Growth		SCA Removal	3
Comments				
This area no longer meets the criteria to be classified as a Special Conservation Area.				



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

Conservation Area	Type	Description
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4110 - Sugar Maple Association	Sawtimber Well	67.2	78	81-110	<p>Nice northern hardwoods stand. According to old notes below, northern part was marked to thin along with stand to North in C15 where accessible. Rolling/Steep terrain. Variety of species present in sub-canopy, with beech being the most common and some pockets heavy to white ash.</p> <p>OPIC - FMD: 2006 Notes: Uneven aged Northern Hardwood stand. Thick maple and ash in the understory throughout stand. Scattered Oak seedlings/saplings with some very large sawlog size trees throughout stand. Where stand was marked and canopy gaps created, thick regeneration is occurring. Average diameter is actually 16inch/7inches. Rolling terrain. Old notes: TO BE THINNED WITH SALE #72-47-96-1. BOUNDARY FROM TRAVERSE. THINNED IN 98-99 UNDER CONTRACT #047-96-01, FALLEN FORESTER HARDWOODS, INCLUDES COMP. 15.</p>
2	4130 - Aspen	Sapling Well	18.4	17	Immature	<p>Stand meets stocking requirements. Aspen with a mix of other hardwood species. Stand contains some larger oaks along Bailey road which were left in previous harvest.</p> <p>OPIC - FMD: 2006 Notes: Stand borders Bailey Road. Stand is a mix of Aspen and hardwood regeneration, but predominately Aspen. Some White Pine regen also. Old notes: USE VISUAL MANAGEMENT - MAP LINE ARBITRARY. Cut in 2000 under contract 026-99-01 Bailey Road Aspen. Sawlog osk were marked to leave along the county road.</p>
3	4199 - Other Mixed Upland Deciduous	Poletimber Well	11.9	70	81-110	<p>Aspen component along cedar run rd and N of powerline. Stand is approx. 80 sqft BA of mixed hwd including HM, Beech, and oak. HM is pole size, not yet ready for treatment. Monitor next YOY.</p> <p>OPIC - FMD: 2006 Notes: Aspen is growing well. Mix of White Ash/Sugar Maple in understory. Scattered White Birch throughout. Steep terrain. Aspen larger diameter on higher portions of slopes. Scattered Red Oak saplings, mostly near edge of stand. Stand borders Bailey Road and powerline cut east and west through the center of the stand. If harvested in future, gully erosion is possible medium hazard.</p>
4	4310 - Pine, Oak Mix	Sawtimber Well	9.9	78	111-140	<p>Mixed oak/pine stand. Cycle/ORV trail traverses through the stand. Stand was previously part of stand 38 in OI. It was not treated when 38 was harvested.</p>
5	4125 - Black, N. Pin Oak	Sawtimber Medium	25.0	96	51-80	<p>NW end of the stand has higher canopy cover than SE end. Regeneration is heavier in areas with lower canopy cover. Stand has some steep spots, but generally rolling terrain.</p> <p>OPIC - FMD: Selection cut in 2000 and 2001 under contract 026-99-01 Bailey Road Aspen. Aspen, maple and marked oak were cut leaving log size oak. Understory regenerating to Red Maple/Aspen with some Oak. Gas/Oil pipeline borders stand between stand and Bailey Road. Pipeline was layed after the stand was harvested and tree were removed from this stand to create the right-of-way for the pipeline. Visual concerns with this stand because it borders Bailey Road.</p>
6	4130 - Aspen	Sapling Well	28.7	27	Immature	<p>Immature aspen stand. Has a super canopy of sugar maple that was left when aspen was regenerated. Density of sugar maple higher in northern part of stand. Also contains a kettle that was too steep to access and harvest maple. Some scattered mixed pine in pole size category.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
7	4119 - Mixed Northern Hardwoods	Poletimber Well	10.3	58	81-110	<p>OPIC - FMD: 2006 Notes: Braken fern in open areas. Hardwood regeneration in areas with more shade. Nicely formed, large Red Oak with some saplings in understory. Stand was to be treated with stand 11 of comp 15, but was not. Stand is small in acreage and borders Bailey Road. Leave the stand alone for now a maybe treat with stand in compartment to the north next time. Old notes: TO BE THINNED WITH STAND 11, COMP 15 TO NORTH. PART OF 96 SALE.</p>
8	4133 - Aspen, Mixed Pine	Sawtimber Well	17.8	76	111-140	<p>Inaccessible mature aspen stand mixed with RP, WP, RM and Pin oak.</p> <p>OPIC - FMD: 2006: Mixed two age stand. Red and White Pine, Aspen and Oak. Stand is located on steep slopes and narrow valley. Very unlikely to ever be loggable with the very steep slopes. ORV PROBLEMS ON POWERLINE WHICH TRAVERSES TROUGH THE STAND. GULLY EROSION OCCURRING NOW. BMP NEEDS TO BE FILLED OUT ON THIS PROBLEM AS WELL AS SOMETHING DONE ABOUT IT. Recommend, just letting the Aspen mature and fall out of the stand and letting the White Pine and Red Pine take over naturally. May consider this for Old growth.</p>
9	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Poor	51.7	95	1-50	<p>Stand was shelterwood cut (72-031-10-01) in 2013, leaving a BA of approximately 40. Regeneration meets minimum stocking levels. Some areas appear to be hit by deer browse, but still regenerating. Regen is mostly red maple and aspen.</p> <p>OPIC - FMD: 2009 variance comments: variance approved to alter prescription- continue to manage for oak/white pine mix. Mark area carefully concentrating on marking the large 18 inch oak along with the poor quality stems. Leave some aspen to leave for diversity. Only remove pine if it is suppressed and or of poor quality. Keep hardwood component for stand diversity. SJT2006 Notes: Mature Oak stand mixed with hardwoods and scattered large diameter Red and White Pine. (Oak is very large in diameter also.) Unique stand because of the Eastern Hemlock within the stand. M2 Understory. Recommend a selection cut, removing all the Aspen, Red Maple and 20 BA of Oak Sawtimber Leave Hemlock along with scattered Red and White Pine. Stand is somewhat level with valleys sloping downward to the north. The north edge of this stand borders a very steep gully. Residual B.A of 90 and create regeneration gaps.</p>
10	4199 - Other Mixed Upland Deciduous	Sawtimber Well	38.8	80	111-140	<p>Mature northern hardwood stand. Maple quality is average, very few grade 1 logs. Contains pockets of bigtooth aspen. Aspen starting to decline. Also contains some Xlog oak in the Northern half of the stand.</p> <p>OPIC - FMD: 2009 variance was received to drop prescription. It was found there was not enough merchantable volume to effectively thin stand at this time. Cecided to do nothing now and re-evaluate for thinning in ten years. Mature Northern Hardwood stand. Private on two sides. Powerline traverses through a portion of the stand. Recommed thinning stand 80-90 BA. Good hardwood site. Some Ash and Hemlock within the stand. When marking, take out the poorest quality trees of any species within the stand except for the Hemlock. Remove all the Aspen. Consider visual management along road into private.</p>
11	4130 - Aspen	Sapling Well	45.5	27	Immature	<p>Immature aspen stand with mix of associated hardwood species. Also contains some small patches of small pole size red pine that appear to be natural.</p>



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	4130 - Aspen	Sapling Well	58.1	29	Immature	Regenerating aspen stand. some other species mixed in. this is adjacent to the units of the frost pocket area that are managed. Stand will be fully stocked. Contains some retention islands left during harvest. OPIC - FMD: (A3-O2-MR2. Old comment.) The stand is located along Mt. Tom Road. The stand is adjacent to "The Pine Barrens Frost Pocket." 08/15/2005 mm
13	4123 - Red Oak	Sawtimber Medium	105.5	96	51-80	Treated last compartment entry year. Stand was thinned under Contract #72-###-###-01 Bailey Oak. REMOVE BIRCH, ASPEN AND RED MAPLE. Many species present in sub canopy, but red maple and aspen are dominant. Stand has rolling terrain. North and West sides of the stand have more conifers as it transitions into the adjacent stands. Oak Wilt confirmed in SE corner of stand. Oak wilt will be treated through treatment:72014013-Cut.
14	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Medium	29.3	93	51-80	Mature Oak stand mixed with Aspen, R Maple and P Birch. Also contains some scattered hemlock. Located on steep slopes and narrow valley. ORV trail runs through this stand on a staddle. Stand is not accessible for harvest.
15	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	24.5	85	81-110	Natural red pine stand with a mix of oak, maple, and aspen. Stand is located on steep slopes which would make it inaccessible for logging.
16	4123 - Red Oak	Sawtimber Poor	50.6	100	1-50	Red oak shelterwood stand. Stand borders Bailey Road. ORV trail traverses through a portion of the stand. Gas and Oil Pipeline borders stand between Bailey Road and itself. Stand was cut to approximately 40% crown cover. 2010 Notes: Stand was shelterwood seed cut (40% Crown closure) under contract 72-043-08-01 (Oak Along Bailey) No FTP needed. Regeneration stocking is good. Some spots are slower to regenerate, but appear to be filling in. There is more maple and aspen regen than oak.
17	4311 - Pine, Aspen Mix	Poletimber Well	22.5	45	81-110	Mixed stand containing aspen with pockets of jack pine and other conifers scattered throughout. Rolling terrain with some kettle holes. Gas well site adjacent to the stand. The stand is not yet ready for harvest with much of it being in the lower end of the pole class or upper end of sapling class. Monitor at next YOE.
18	4123 - Red Oak	Sawtimber Poor	15.9	100	1-50	Red oak shelterwood stand. Stand borders Bailey Road. ORV trail traverses through a portion of the stand. Gas and Oil Pipeline borders stand between Bailey Road and itself. Stand was cut to approximately 40% crown cover. Regeneration is good, shelterwood seed trees are stressed. 2010 Notes: Stand was shelterwood seed cut (40% Crown closure) under contract 72-043-08-01 (Oak Along Bailey) No FTP needed. Regeneration stocking is good. Some spots are slower to regenerate, but appear to be filling in. There is more maple and aspen regen than oak.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	4130 - Aspen	Sapling Medium	39.3	9	Immature	Stand is moderately stocked with some patches heavier than others. OPIC - FMD: Final harvest. Red maple and northern pin oak is of very poor quality. Red maple and northern pin oak will regenerate naturally and the aspen should expand into the red maple/northern pin oak areas of the stand. The stand is adjacent to "The Pine Barrens Frost Pocket." The stand is adjacent to private property. 06/06/2005 mm Stand was harvested in 2007 under contract 72-033-07-01 Bovine Aspen.
20	4130 - Aspen	Sapling Poor	12.5	9	Immature	Stand is a little slow to regenerate. Mostly aspen, some red maple and oak. Stand should fill in to be moderate to full stocking levels over time. Stand also contains a small pocket of red pine that was not harvested in 2007. OPIC - FMD: Final harvest. Red maple and northern pin oak is of very poor quality. Red maple and northern pin oak will regenerate naturally and the aspen should expand into the red maple/northern pin oak areas of the stand. The stand is adjacent to "The Pine Barrens Frost Pocket." The stand is adjacent to private property. 06/06/2005 mm Stand was harvested in 2007 under contract 72-033-07-01 Bovine Aspen.
22	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	7.1	70	81-110	Small stand, transition between cover types on steep slope. Part of the stand borders Bailey Road.
23	4130 - Aspen	Sapling Well	171.5	6	Immature	Immature aspen stand. Final harvested in 2011. Retention was left in corridor running N/S through middle of stand, and also an island in the SW end of the stand. Stand passes regen survey. 2006 Notes: Mature Aspen stand (Big Tooth) mixed with other hardwood species (Maple, Basswood, W.Ash, Birch and some Oak). Dense M2 understory (same as overstory). Small pockets of W.Pine pole and sawtimber about 3 acres in size in the southeast corner of the stand and bordering the trail road. Ground cover consists of a wide variety of indicator plant species of a good hardwood. Stand could hold another 10 years. Some rolling terrain. Two track trail traverses through the stand. Final harvest stand (Divide into 3 stands by leaving a north/south corridor for retention in the center of the stand.) Stand was harvested in the summer of 2011 under contract 720320801 Cedar Run Aspen. No FTP was needed.
25	6124 - Lowland Spruce- Fir	Poletimber Medium	9.4	74	1-50	Small mixed conifer swamp. Southwest side borders Mt Tom County Road. Ground is very wet. Edge of stand contains XLog white pine. Very dense sub-canopy. Contains an incomplete WLD treatment, looking into status of that treatment.
26	4130 - Aspen	Sapling Well	59.0	28	Immature	Immature aspen stand with a mix of other hardwood and scattered conifer species. Stand is not ready for harvest during this entry year. OPIC - FMD: Immature Aspen stand with a mixed with other hardwood species.
27	4130 - Aspen	Poletimber Well	28.7	44	Unspecified	Aspen stand with pockets of Red Pine sawtimber scattered throughout it. M2 understory. Two track trail traverses through the stand. Some Oak and Maple mixed within the stand. The majority of aspen is in the lower end of the pole class or upper end of the sapling class. Of all the A6 stands in this Compartment, I would say this one would be most ready for treatment, but can easily hold another 10 years.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	42290 - Natural Mixed Pine	Sawtimber Well	9.0	70	141-170	<p>RP stand mixed with JP, Oak, RM and aspen. Density throughout the stand is quite variable. RP growth has slowed in past 15-20 years looking at cores. Small stand size, recommend harvesting and replanting RP along with other stands being treated to plant RP this entry year, extend planting into adjacent stand 134.</p> <p>OPIC - FMD: A variance was request and granted to not treat this stand. Recheck next YOE. Natural Red Pine stand on Ridge. Recommend selection cut to the stand to 110 BA.</p>
29	4110 - Sugar Maple Association	Poletimber Well	65.1	49	81-110	<p>Part of 120 acres acquired from Glenn and Kathryn Frundel. Nice hardwood stand. Pine components are primarily along edge of stand. The south end of the stand also contains a small pocket of aspen. Beech is the dominant specie in the understory.</p>
30	4130 - Aspen	Sapling Well	15.8	15	Immature	<p>Immature aspen stand with mix of associated species.</p> <p>Timber sale # 72-023-99-01 "Private Access Oak/Aspen." Cut by Chris Muma during the winters of 2001/2002 and 2002/2003. Stand is now an A3. 03/21/2003 mm</p>
31	4133 - Aspen, Mixed Pine	Poletimber Well	16.4	48	51-80	<p>Mixed aspen stand with pockets of oak, red pine and jack pine. Mt Tom Rd is East boundary of stand. Frost pocket is West of the stand. Bigtooth aspen is located in North end of the stand. It is healthy enough to wait until the rest of the stand has matured more before harvest.</p> <p>OPIC - FMD: Mixed stand. Predominately Aspen, but mixed with pockets of Oak, Red Pine and Jack Pine. Stand borders Mt Tom Road on the east side and the Frost pocket on the west side. Three possible senerios for the stand. 1) Make part of the Frost Pocket compartment or 2) manage for the timber with visual considerations along Mt Tom Road and leave for a corridor to provide wildlife cover between Frost Pocket and Mt Tom Road..</p>
32	42210 - Natural Red Pine	Sawtimber Well	32.4	73	111-140	<p>Mixed natural pine stand. Density varies throughout the stand. Some of the red pine is starting to hit economic maturity. Recommend harvesting and replanting to red pine.</p> <p>OPIC - FMD: A variance was request and granted to not treat this stand. Recheck next YOE. Natural Red Pine stand mixeds with Aspen and other hardwoods. Two aged stand. ORV trail traverses through the stand. Scattered Jack Pine on west end or the stand and along two track leading to the private. Recommend a thinning cut, remove Aspen, Red Maple, Jack Pine. Also adjacent to Mt Tom Road. Nots final harvesting Red Pine at this time because of visual and receration. In future, would like to keep as a mixed stand with several age classes. Old notesHODGEPODGE, PATCHES OF RP LOGS</p>
33	4130 - Aspen	Poletimber Well	18.4	35	Immature	<p>Immature Aspen stand which is just reaching pole size. Scattered Red and White Pine throughout the stand. Oak and Red Maple exist as sapling and poles throughout the stand also. Old notes: SCATT RP POLE S</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	4130 - Aspen	Poletimber Well	30.8	47	111-140	<p>Aspen stand mixed with RM/Pin oak and scattered large RP. Much of the aspen is not yet merchantable. It all appears healthy enough to hold for another 10 years.</p> <p>OPIC - FMD: 2006: Mixed stand on ridge with a few valleys. Predominately Aspen with Red and Jack Pine, Red Maple and Oak. A section of the top of the ridge is smaller Aspen with large Red Pine and Oak mixed within it. ORV trail traverses through a portion of this stand. SCATT RP, JP, M & O</p>
35	4123 - Red Oak	Sawtimber Medium	96.4	95	51-80	<p>Partial harvest approx. 2002 (See notes below). Good quality, very healthy red oak. Red maple seems to be dominating the sub-canopy with the exception of some patches where the oak regen has done well. Oak appears very healthy and should have no problem holding until next entry period.</p> <p>OPIC - FMD: 2006 Notes: Mature Oak stand with a heavy M2 Understory. Stand has been treated since last inventory. Cycle trail runs through a portion of this stand in the south. Old Notes: (MAY NEED TO MARK SOME OAK. OTHERWISE, CUT ASPEN, BIRCH, AND MAPLE. OLD COMMENT.) Timber sale #72-023-99-01 "Private Access Oak/Aspen". Cut by Chris Muma during the winters of 2001/2002 and 2002/2003. Stand is now an O8. 03/21/2003 mm.</p>
36	4130 - Aspen	Poletimber Well	117.7	39	51-80	<p>Mixed aspen stand. Aspen size varies throughout the stand, but mainly in the pole/sapling size classes. Not yet ready for treatment.</p> <p>OPIC - FMD: 2006 notes: Large immature Aspen stand with an A2 understory. Also mixed with scattered hardwoods such as White Birch, Maple and Oak. Some scattered White and Red Pine scattered throughout the stand too. Two track traverses North/South through the stand. Cycle trail traverses through portions of the stand. Old notes: SCATT OAK & R PLOGS, 2 ACRE PATCH OF MIXED PINE LOGS IN NORTH PART</p>
37	42290 - Natural Mixed Pine	Poletimber Medium	16.7	53	51-80	<p>Jack pine in the stand appears to be declining. Pockets of the stand are heavy to aspen, but most of the stand is mixed pine.</p> <p>OPIC - FMD: A variance was request and granted to not treat this stand. Recheck next YOE. 2006: A mixed stand of Jack Pine, Aspen, and Red Pine in a valley with a two track traversing through the stand to access private. ORV trail traverses through the stand also. Recommend final harvest, but leave the large Red Pine that is scattered within the stand. Keep two track clear of brush and maintained at all times as well as the ORV trail. Old Notes. SCATT RP, JP, M & O</p>
38	4130 - Aspen	Sapling Medium	15.0	15	Immature	<p>South portion of stand (Approx 3 acres) has higher canopy cover and is more of a pure aspen stand. The North 12 acres is lower canopy cover and more species variability.</p> <p>OPIC - FMD: 2006: South end of stand (this is now stand 4, KE), bordering the private, the Oak islands were left. Did not get plots in this portion this inventory, however stand is actually Oak, Red Pine and Birch. Birch is dying out of stand. Cycle/ORV trail traverses through this portion of the stand. (LEAVE SEVERAL 1/2 ACRE ISLANDS OF OAK. Old commnet.) Timber sale # 72-023-99-01 "Private Access Oak/Aspen". Cut by Chris Muma during the winters of 2001/2002 and 2002/2003. Stand is now as A3. 03/21/2003 mm</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	4130 - Aspen	Sapling Well	49.7	29	Immature	<p>Quaking aspen stand with scattered oak, maple, and pine. Aspen size varies throughout the stand, with most of it in the sapling category. The west end of the stand has a heavier paper birch component.</p> <p>OPIC - FMD: Immatur Aspen stand with other species mixed within the stand. Such as Oak, Red Maple and Paper Birch.A3-O2-U.</p>
42	4130 - Aspen	Sapling Well	123.7	27	Immature	<p>Well stocked stand of immature aspen mixed with associated species. Continue to monitor at next entry year.</p> <p>OPIC - FMD: UNRESOLVED FENCE TRESPASS ON NORTH AND NE. SEE FILES FOR CONDITIONS. Update: Property to North and East purchased, trespass no longer an issue.</p>
43	4131 - Aspen, Oak	Sapling Well	77.1	6	Immature	<p>Combination of aspen, oak, and maple regeneration meeting minimum stocking standards. Stand also contains 10 retention islands totaling approximately 5 acres, mostly in the South half of the stand.</p> <p>OPIC - FMD: 2006 Notes: Classified as a B6 last inventory. Now classifying stand as a M9 stand. Stand is a mix of hardwoods. Birch is starting to die out of the stand. Aspen, Paper Birch, Sugar and Red Maple, Beech, W. Ash, Red Oak and White Pine make up the stand. Medium good hardwood site according to indicator ground cover species. Recommend a final harvest, but leave some small 1/2 patches for diversity and visual along ORV route that passes along south side of stand. Aspen, following the harvest, will probably be the dominant species, but will probably get a mix of hardwood species.LEAVE FOR AGE DIVERSITY. BIRCH IS VERY POOR. 11/4/11 stand treated under 3 Stand Aspen Hardwood 72-012-08-01.</p>
45	4125 - Black, N. Pin Oak	Sawtimber Medium	48.5	104	51-80	<p>Canopy almost entirely oak, with a small amount of white pine left during the last harvest. Sub canopy primarily contains 1-3" diameter aspen and RM, with smaller components of other species mentioned in data. Rejected treatment after looking at stand with TMS. Decided to hold on treatment and re-evaluate in 10 years. This will allow more of the sub canopy to reach merchantable size. Oak in canopy appears to be sound and should easily hold.</p> <p>OPIC - FMD: 2006: Mature Oak stand with a dense M3 Understory 6-10feet tall (Maple, Aspen, Oak, Basswood, Ash and Birch.) Cut 20years ago. Thinned to 70BA Under burn to regenerate Oak was to occur and did not happen. ORV Route traverses thourgh the stand. Old notes: BURN TO ENCOURAGE OAK REGENERATION.</p>
46	4130 - Aspen	Sapling Well	59.1	42	Unspecified	<p>Aspen stand that is not yet ready for harvest. Monitor at next entry year. Contains a mix of other hardwood species. Stand has many stems in the sapling stage, and some in the pole stage.</p> <p>OPIC - FMD: OI Stand Year Origin was 1975</p>
47	4130 - Aspen	Sapling Well	79.4	27	Immature	<p>Fully stocked stand of immature aspen and associated species. Retention islands have been delineated. Monitor at next entry year. OI site index was 70.</p> <p>OPIC - FMD: 8 ACRES OF OAK PATCHES LEFT IN 16 HALF ACRE SPOTS.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	94.1	58	81-110	<p>Nice Mixed northern hardwoods stand. Contains some pockets of aspen throughout. Good hardwood site with rolling terrain. Continue to monitor at next entry year for possible thinning.</p> <p>OPIC - FMD: 2006 Notes: Immature hardwood stand. Scattered pockets of Aspen throughout the stand. (Hardwood species include Sugar Maple, Beech, Basswood, Oak and Aspen.) M2 understory -Beech, Maple and Ironwood. Ground cover consists of plant indicator favorable to a good hardwood site. Level to rolling terrain. Recommend no treatment at this time. Possibly a first thinning next entry year. Two track trail traverses through the stand.</p>
49	4130 - Aspen	Sapling Well	25.4	7	Immature	<p>Approximately 10-20 BA of overstory component made up of red pine and oak. Aspen regen is heaviest where overstory is most sparse. Evidence of red pine seeding in along two track and skid trails. Stand passes regen survey. Stand 49 and 50 were merged.</p> <p>OPIC - FMD: Per variance granted 9/18/08, OI data was not representative. When marking std, found it would be hard to leave 90 BA of hardwood residual, most hardwoods found were poor quality or were aspen. The prescription was changed to a final harvest with no retention. Everything is to be harvested except for red pine over 12 inches in dbh, all hemlock, and any oak found in stand. All white pine, aspen, and N hardwoods should be cut. Stand will regenerate naturally to a mixed stand of aspen, northern hardwoods, oak, and pine. Old Comments: Red Pine stand mixed with White Pine and Northern Hardwoods. M2 Understory. Aspen was cut out of stand in 1971. Recommend a thinning. Thin stand to 90 BA. Remove all hardwood species except for Oak. Remove 20 BA of large diameter Red Pine and 10 BA of White Pine pole timber. Manage for Red Pine/White Pine with a mix of hardwood. Leave stand to regenerate naturally. Stand final harvested in 2009/2010 under contract 72-044-08-01 (White Pine and Hardwoods). Residual Red Pine and Oak were left. No FTP required. 50 to 60 BA of Red Pine Sawtimber and Oak sawtimber left.</p>
52	4130 - Aspen	Poletimber Medium	10.2	38	51-80	<p>Much of the aspen in this stand is still below merchantable size. At this point, stand is not ready for any treatment.</p> <p>OPIC - FMD: 2006 Immature Aspen stand. Pockets of A3 throughout stand. Nice hardwood regeneration (maple saplings). Old two track s bisecting stand. Relatively level ground compared to surrounding area. Stand is slowly converting to hardwoods (Sugar Maple, White Ash and Oak). Stand borders Cedar Run Road. Old site index was 1974 - SI 70</p>
54	4130 - Aspen	Sapling Well	28.2	29	Immature	<p>Successfully regenerated aspen with a mix of other hardwood species. Stand is not yet merchantable.</p> <p>OPIC - FMD: OI Stand Year Origin was 1988</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	42210 - Natural Red Pine	Sawtimber Well	21.4	108	111-140	<p>Stand of red pine that is reaching economic maturity. Much of the stand is between 15 and 20" DBH. Stand appears to be natural. The north end has a larger component of oak, but still primarily red pine. If harvested, some red pine can be added to the east that is mixed in with stand 56. Observed a couple possible raptor nests, but unsure if they are active. Consider leaving for big tree management. Stand is somewhat unique for the area. If left alone stand will potentially convert to mixed hardwoods eventually.</p> <p>OPIC - FMD: 2006 Notes: Mature Red Pine stand mixed with a few Oak. M3 understory. Some Red Pine regeneration - natural. Previous stand history: PRESERVE DEN TREES. ASPEN, JP, AND BIRCH WERE REMOVED IN 1980-81. MARK, THIN FROM BELOW. Stand thinned in 2001 under contract #013-99-01 Private Access Pine sale. Two track trail separates this stand from stand 56. Recommend final harvest and convert to hardwoods. Possible raptor in stand. Need silviculturalist and wildlife people to look at stand to determine if could manage stand differently. Such as old growth, big tree management for examples.</p>
56	4310 - Pine, Oak Mix	Sawtimber Well	33.5	105	81-110	<p>Mature oak stand with scattered pockets of red and white pine. Two track runs through North and South through most of the stand. Raptor observed in the stand June 2016, suspect it is nesting in stand 55. Stand will be part of experimental management to pursue successful regeneration of red oak in an area that has been losing oak cover type to aspen and red maple. Will need to develop monitoring protocol and secure Rx Burn funding.</p> <p>OPIC - FMD: 2006: Mature Oak stand mixed with Red and White Pine. M2 understory (includes some Oak and Pine regeneration - natural). Thinned last entry year. Recommend doing nothing this entry year. Hold for diversity. Possible raptor in the stand. Old notes: PRESERVE DEN TREES.</p>
58	42290 - Natural Mixed Pine	Sawtimber Well	34.7	87	111-140	<p>Red Pine stand with an M2 understory. Two age stand. Red and White Pine was left when stand and surrounding stand was cut previously. Stand is converting to hardwood.</p>
60	4199 - Other Mixed Upland Deciduous	Poletimber Medium	8.2	60	51-80	<p>Small Northern hardwood with pockets of aspen. Pocket of RP/WP present in central part of stand crossing over from stand 36. Monitor at next YOY. Possibly treat at the same time as stand 36 in the future.</p>



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	4139 - Aspen, Mixed Deciduous	Sawtimber Well	39.1	59	81-110	<p>Stand consists of aspen and mixed deciduous with scattered red and white pines. Along with the scattered pines, there are several small pockets of pine throughout the stand. The stand contains many slopes which may cause an issue for harvesting. Some lower spots may be too wet to harvest during parts of the year, especially the NW corner, which was previously Stand 6 in OI. Notes for OI Stand 6 below.</p> <p>OPIC - FMD: Large Mature Aspen stand mixed with hardwoods. Pockets of large Aspen (15" +). Areas of low ground - open with some standing water. Scattered Red Pine. Some young, nice Sugar Maple poles in northern 1/2 of stand. More of an M6 near stands 6 and 7. Rolling, hilly terrain with some steep slopes within the stand. Some portions of the stand may or may not be loggable. Also, Bailey Road borders south end of stand. Old Site Index was 1923 and 62. Visual management due to Bailey Road will have to be considered and areas where more hardwood might be present, should probably be left alone. Recommend final harvest for areas that are loggable. Protect kettle holes/small water holes and think about visual management along Bailey Road. Leave pockets or patches of trees, especially on steep slopes. Also, no rutting is to occur within the stand and use BMP for erosion control. Old notes: HOLD FOR AGE DIVERSITY.</p> <p>Notes from Stand 6: NE corner of 61, located in ravine. merged due to small acreage not meeting mapping standards.</p> <p>OPIC - FMD: 2006 notes: Pockets of Aspen in lowland. Steep hills leading to stand. Nice hardwoods on slopes leading down to stand. Stand borders Bailey Road. Some parts of the stand are inoperable due to steep terrain. Erosion hazard is very high/gully erosion. If and when harvested, erosion on slopes is of special concern. Some portions of the stand may not be harvested and the erosion concerns will be minimal. Due not harvest any part of the stand at this time. Old notes: STEEP HOLE. INOPERABLE.</p>



Stand	Cover Type	Acres	Managed Site	General Comments:
21	122 - Road/Parking Lot	7.0	No	
40	3102 - Grass	1.4	No	
41	3102 - Grass	1.2	No	
50	3102 - Grass	1.8	No	Open area with scattered trees. WLD considering opening maintenance for this stand.
117	3303 - Mixed Low Density Trees	6.5	No	OPIC - FMD: Large seimi open upland brush stand (Frost Pocket). Located in valley, upland brush with some other species mixed in and open grassy areas. Old notes: FROST POCKET
134	3303 - Mixed Low Density Trees	5.5	No	Scattered mix of trees, mostly in the sapling size class, and a few in pole class. OPIC - FMD: Scattered brush mixed with grassy openings. Mostly in Cherry Brush 1-4" dia. Old Notes: CHOP TO MAINTAIN IN BRUSH
400	3102 - Grass	1.6	No	OPIC - FMD: Small grassy stand which extend upon the private land to the south, making it a larger grassy opening. Two track trail traverses through this stand. Actually the two track trail crosses a small portion of the private a first and is gated. Access for timber sale in the past was obtain by private owners and possibly will be able to access in the future. If not, a small portion of road will need to be built around the property corner to obtain access.
401	3102 - Grass	0.7	No	OPIC - FMD: Small grassy opening. When stand 45 was treated 10-20 years ago, this stand was a landing area for the sale. Aspen is starting to encroach within the opening.
402	3102 - Grass	34.0	No	OPIC - FMD: Large grassy opening. Created from farming from the private to the east which is also mostly grassy opening. Fence is a trespass. Unresolved or resolved, don't know. However, some of the property to the east is up for sale and it has been recognize for the state to possibly purchase. Old notes: FENCE TRESPAS S
403	3102 - Grass	0.8	No	Gas Well: Permit #: 53649 State Clinton A3-30 NE NW NE Sec. 30 T28N R03E Oscoda County Emergency #: 1-800-320-7430
404	3102 - Grass	1.1	No	Permit #: 55110 State Clinton A4-29 NE NE NE Sec. 29 T28N R03E Oscoda County Emergency #: 1-800-320-7430



Stand	Cover Type	Acres	Managed Site	General Comments:
405	3102 - Grass	0.9	No	Merritt Energy Company Permit # 48243 State Clinton A2-29 SW NE NW Sec. 29, T28N R03E Emergency #: 1(800)328-7430
407	3102 - Grass	1.0	No	Merritt Energy Company Permit #: 55111 State Clinton C4-29 NW NE SE Sec. 29 T28N R03E Oscoda County Emergency #: 1-800-320-7430