



Compartment Review Presentation

Atlanta Forest Management Unit

Compartment 54017

Entry Year 2026

Acreage: 1,056

County Montmorency

Management Area: Avery Hills

Stand Examiner: Darrick Coy

Legal Description:

T29N, R02E, Section 36; T29N, R03E, Section 31 & 32

Identified Planning Goals:

To provide for the protection, integrated management and responsible use of a healthy, productive, and undiminished forest resource base for the social, recreational, environmental, and economic benefit of the State of Michigan. Prescribed harvests will help balance aspen age classes and increase vigor in other cover types, sustainably produce various timber products, enhance game and non-game wildlife habitat, and provide for forest-based recreational uses.

Soil and topography:

Soils are mostly loamy sand complexes. Overall, the topography is rolling to flat. The dominant cover types are northern hardwood, aspen, and oak. The compartment forest habitat types are mostly PArVVb and AFO.

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

Ownership is mostly state to the north and south and private to the east and west. There are some private hunting lands at the east end and the Hunt Creek Research Area lies to the west of the compartment. Active oil and gas wells are scattered throughout the compartment.

Unique Natural Features:

Features exist and have been reported by MNFI within this compartment:
Potential Occurrences- prairie or pale agoseris and red shouldered hawk

Contact Michigan Natural Features Inventory for more information or reporting. All proposed management activities have taken these concerns into consideration.

Archeological, Historical, and Cultural Features:

Sites exist. Contact the State Historical Preservation Office for more information or reporting of new sites. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

This compartment contains forest management areas dedicated to on-going MSU northern hardwood research.

Watershed and Fisheries Considerations:

Hunt Creek is a half mile away from section 6, but it is not a significant influence on this compartment.

Wildlife Habitat Considerations:

The following have been identified as featured species for this management area and are found in this compartment: Ruffed grouse, Wild turkey, White-tailed deer, and to a lesser extent black bear and pileated woodpecker. Based on the selected featured species, some of the most significant wildlife management issues in the management area are the maintenance of young forest; extensive mature forest and large open grassland complexes; the retention of large, over-mature trees and snags and the maintenance and expansion of hard mast and mesic conifer components.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial production of metallic minerals in this part of the state. The nearest active sand/gravel pit is more than three miles away. There is potential for sand & gravel in the compartment, but it might be too far from populated areas (markets) to have much economic potential beyond use by the county road commission or DNR for local road maintenance. In addition, any sand & gravel development would need to avoid oil & gas facilities. This area has been developed for and is producing gas from the Antrim Shale. All State-owned mineral rights in the compartment are currently leased and held by production. Potential for any additional Antrim development in the compartment in the future is considered low. No known potential exists for oil & gas from other known producing formations.

Vehicle Access:

Hunt Creek and Eberly are the main county roads. State forest roads intersecting with these roads are mainly used by

natural gas/oil companies.

View the status of state forest roads open to use within the Michigan DNR interactive roads viewer website.

Survey Needs:

None known.

Recreational Facilities and Opportunities:

Hunt Creek Motorcycle Trail

View the status of state forest roads and trails open to motorized and non-motorized use within the Michigan DNR interactive road and trail viewer websites.

Fire Protection:

Fire response is provided by the Atlanta Field Office and Lewiston VFD. Response time is adequate and cover types are primarily deciduous with a less severe fire threat. Some state forest roads are in poor condition and steep slopes may create access problems.

Additional Compartment Information:

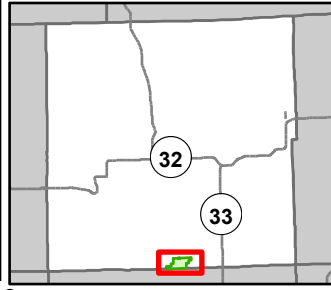
The following reports from the Inventory are attached:

- 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**

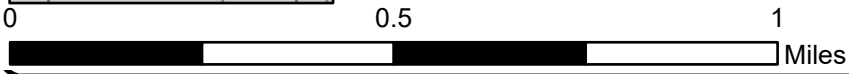
The following information is displayed, where pertinent, on the attached compartment maps:

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

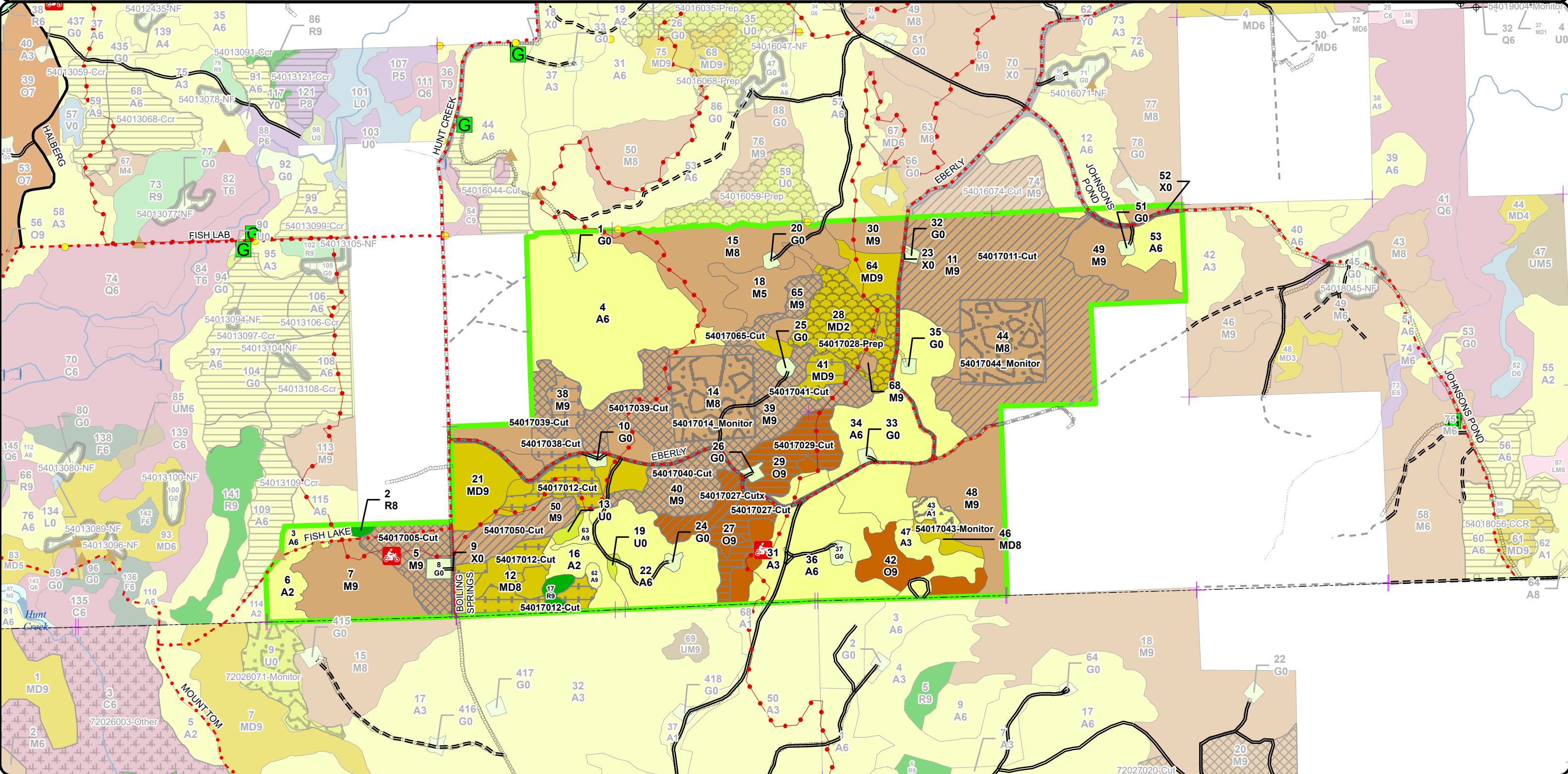
Cover Type & Treatments Map



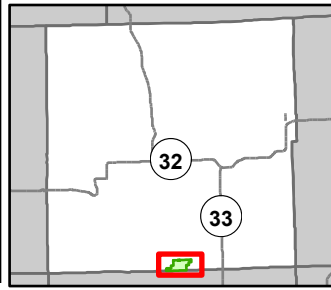
Compartment: 54017
 T29N, R3E, Sec: 31, 32
 County: Montmorency
 Unit: Atlanta
 Mgmt Area: Avery Hills
 YOE: 2026
 Acres: 1055.9 GIS Calculated
 Examiner: Darrick Coy
 Map Revised: 09/04/2024
 Map Phase: Web Post



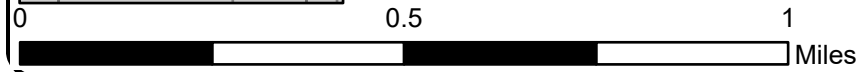
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|---------------------------------|---------------------------------------|-----------------------------------|------------------------------|
| Berms | DNR - Forest Access Route | Pipeline | 411 - Northern Hardwood |
| Gate | Federal / State / County - Paved Road | Powerline | 412 - Oak Types |
| Culvert | County - Gravel Road | Compartment Boundary | 413 - Aspen Types |
| Survey Grade Corners | County - Dirt Road (Seasonal) | Selection (Group, Single Tree) | 419 - Mixed Upland Deciduous |
| Remonumented Section Corners | Private - Dirt / Gravel Road | Clearcut (w/Reserves) | 422 - Natural Pines |
| Motorcycle Trails (DNR License) | Intermittent Stream | Harvest, Overstory Removal | 122 - Roads/Parking Lot |
| Designated Motorcycle Trails | Lake/Pond | Thinning (Crown, Low, Systematic) | 310 - Herbaceous Openland |
| DNR - Secondary Forest Road | Perennial River | Regeneration Survey | 330 - Low Density Trees |
| | Lakes and Rivers | Site Prep | |



Stand Boundary Map



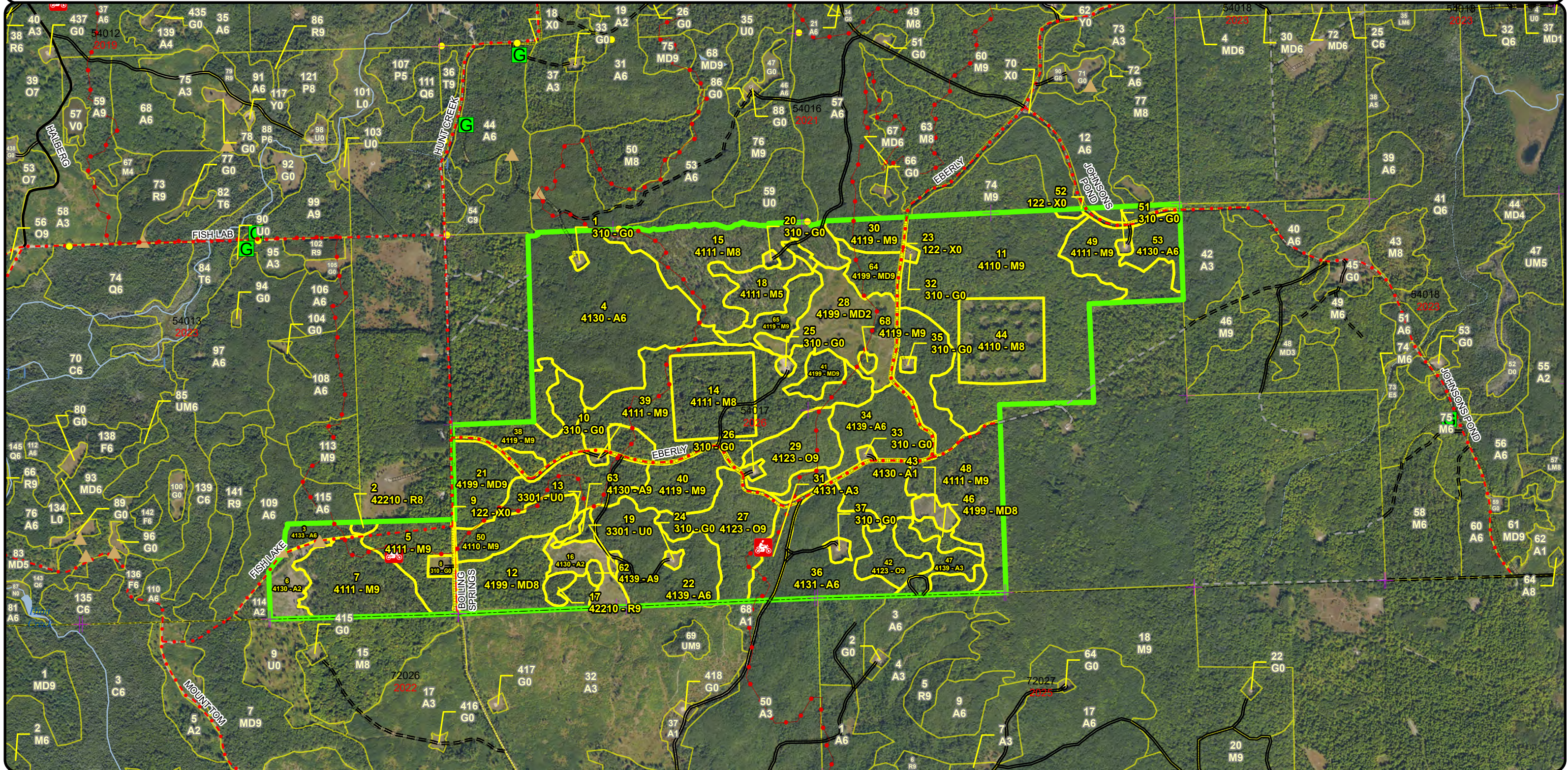
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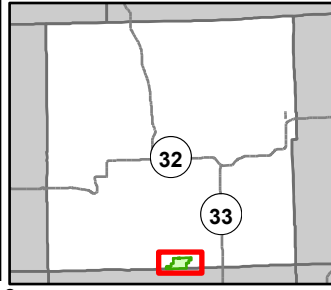
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- Gate
- Culvert
- Survey Grade Corners
- Remonumented Section Corners
- Motorcycle Trails (DNR License)
- Designated Motorcycle Trails

- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Intermittent Stream
- Lake/Pond

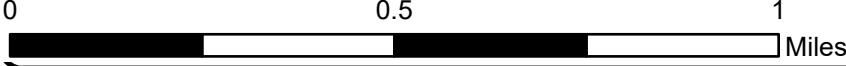
- Perennial River
- Lakes and Rivers
- Pipeline
- Powerline
- Compartment Boundary
- Stand Boundaries
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 411 - Northern Hardwood
- 412 - Oak Types



Special Conservation Areas & Site Conditions Map



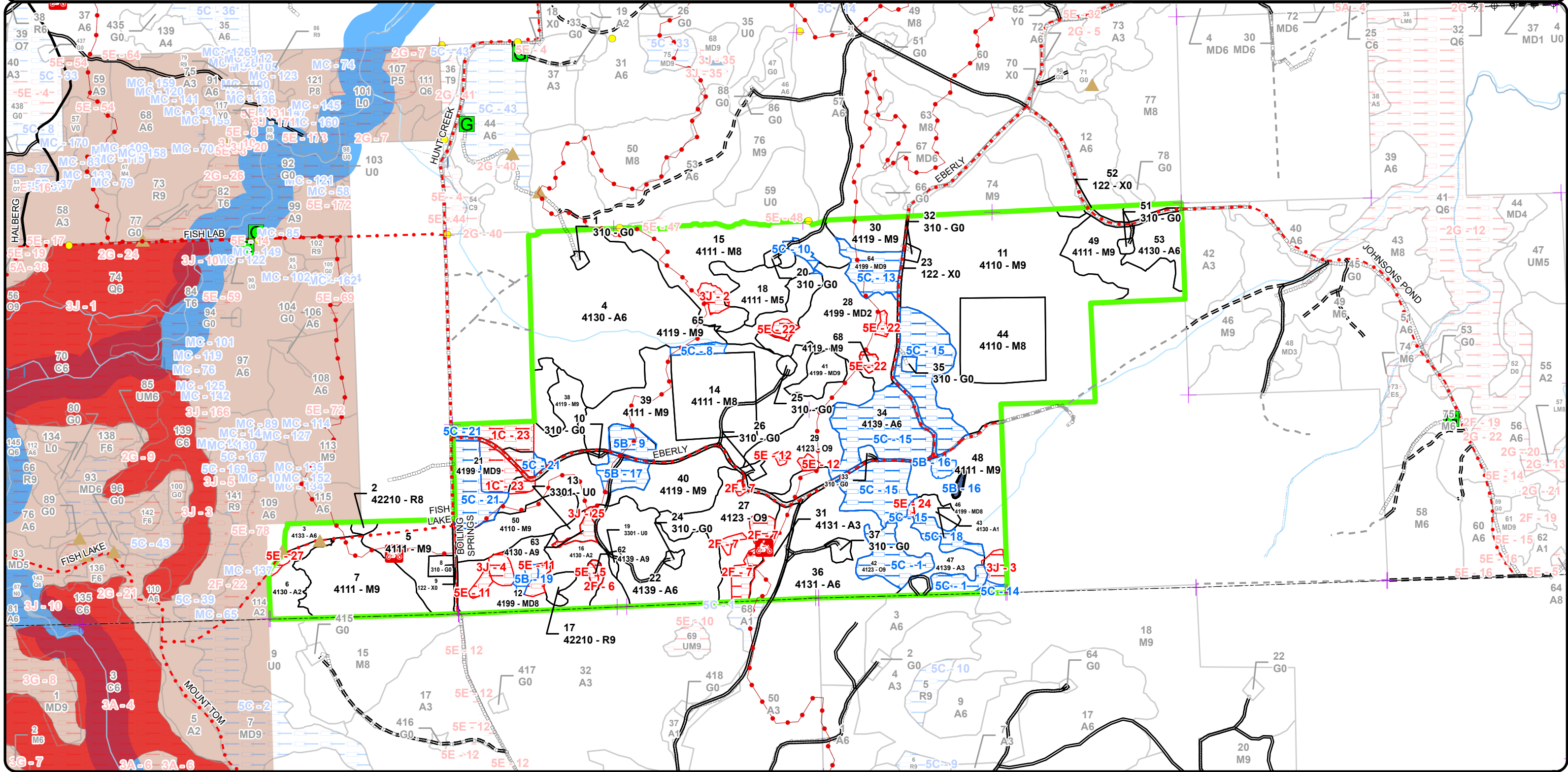
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- Berms
- Gate
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- Survey Grade Corners
- Remonumented Section Corners
- Motorcycle Trails (DNR License)
- Designated Motorcycle Trails
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)

- Private - Dirt / Gravel Road
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Pipeline
- Powerline
- Compartment Boundary
- SCA
- Available w/ Constraints
- Unavailable
- 5B: Maintain for regeneration purposes

- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 1C: Other dept or div proc/practices
- 2F: Too steep
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- High Priority Trout Stream Buffer
- Research, Development, and Military Lands
- Spring Seep



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	27	12	14	181	6	63	0	0	0	4	0	0	0	0	0	0	0	306
Herbaceous Openland	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Mixed Upland Deciduous	0	35	0	0	0	0	0	0	0	0	0	93	0	0	0	0	0	0	127
Northern Hardwood	0	0	0	0	0	0	0	0	0	170	200	144	0	0	0	0	0	0	514
Oak	0	0	0	0	0	0	0	0	0	0	21	48	0	0	0	0	0	0	69
Red Pine	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	4
Urban	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Total	33	62	12	14	181	6	63	0	3	170	225	286	0	0	0	0	0	0	1053



Report 2 – Treatment Summary

Atlanta Mgt. Unit

Compartment 17

Year of Entry: 2026

Acres of Harvest

Total Compartment Acres: 1,056

Commercial Harvest - 337
 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
Mixed Upland Deciduous	0	0	0	0	0	41	0	0	0	41
Northern Hardwood	0	112	0	0	0	130	12	0	0	254
Oak	33	0	0	0	0	10	0	0	0	42
Total	33	112	0	0	0	140	53	0	0	337

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Pruning	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	337	31	0	0	0	65	0	0	0	434
Next Step	0	112	143	0	0	174	739	224	0	1392
Total	337	143	143	0	0	174	804	224	0	1826



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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Proposed Treatments:

74	54016074-Cut	23.8	4111 - S.Maple, Hard Mast Association	Sawtimber Well	95	81-110	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
<p><u>Prescription</u> -thin to 70 BA residual <u>Specs:</u> -cut all ironwood and beech -do not cut all aspen in sale specs -mark 1 healthy beech and/or ironwood to leave every 2-3 acres -do not mark trees to cut alongside slopes greater than 35% -no tree-length skidding to protect slopes and residual trees</p> <p><u>Next Step</u> <u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u> -include adjacent compartment 17 thinning treatment in the same timber sale</p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2025</p>											

5	54017005-Cut	21.3	4111 - S.Maple, Hard Mast Association	Sawtimber Well	97	81-110	Harvest	Group Selection	4111 - S.Maple, Hard Mast Association	Uneven-Aged	No
<p><u>Prescription</u> -group selection cut <u>Specs:</u> -in areas concentrated with mature timber (16+ inches DBH (mostly oak)), decline, or severely poor form trees, mark to cut 135ft (tolerant and mid-tolerant average) diameter regeneration gaps from bole to bole of outer trees -regeneration gaps should be painted every 3 acres and be separated by a minimum of 75ft of intact forest -require placing of tops and other heavy slash outside cut gaps to allow future cultivation work -after gaps are designated, using a different paint color, mark to cut remaining area outside of regeneration gaps to 80 residual BA -cut all ironwood and beech -do not cut all aspen in sale specs -mark 1 healthy beech and/or ironwood to leave every 2-3 acres -require 6-inch gap stump heights or less in sale specs -do not mark trees to cut alongside slopes greater than 35% -no tree-length skidding to protect slopes and residual trees -protect Hunt Creek Motorcycle trail in timber sale specifications</p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory); Other, Pre-Commercial Thinning - Hand; Pesticide, Skidder - Site Prep; SitePrep, <u>Treatments:</u> Scarification; Planting, Hardwood - Seedling; Monitoring, Natural Regen (Re-Inventory); Monitoring, Artificial Regen(1yr)</p> <p><u>Acceptable Regen:</u> -a combination maple, basswood, oak, aspen, and pine of medium to high stocking with minor associates of beech, ash, and ironwood is acceptable</p> <p>-survey regeneration gaps 2-3 growing seasons after cut is complete</p> <p>Suggested Management Follow-up (pending natural regeneration fails and is dominated by ironwood, beech, or ash):</p> <p>-establish a department approved medium to high stocking mix of more desirable northern hardwood (oak, sugar maple, ash, and basswood) and/or white pine using herbicide, scarification, and planting as necessary for gaps</p> <p>-if planting gaps is delayed, and less desirable regeneration competition has been reduced, allow for a longer regeneration period</p> <p>-Northern Hardwood regeneration research gaps in stands 14 and 44 received herbicide and scarification cultivation work to promote natural regeneration. Reference the Walters project gap regeneration results to assist in determining appropriate cultivation follow-up work.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2025</p>											



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Treatment ID	Treatment Name	Acres	Stand	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
11	54017011-Cut	111.8	4110 - Sugar Maple Association	Sawtimber	Well	85	111-140	Harvest	Crown Thinning	4111 - S.Maple, Hard Mast Association	Even-Aged	No
<p><u>Prescription</u> -thin to 80 BA residual</p> <p><u>Specs:</u></p> <ul style="list-style-type: none"> -cut all ironwood and beech -do not cut all aspen in sale specs -mark 1 healthy beech and/or ironwood to leave every 2-3 acres -do not mark trees to cut alongside slopes greater than 35% -keep sale boundary away from interior hardwood research area (per MSU research staff consultation, thin up to outer edge of the 40-acre block but do not enter the interior) -no tree-length skidding to protect slopes and residual trees <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2025</p>												
12	54017012-Cut	33.6	4199 - Other Mixed Upland Deciduous	Sawtimber	Medium	101	51-80	Harvest	Overstory Removal	4116 - Mixed N. Hardwood - Aspen	Even-Aged	No
<p><u>Prescription</u> -overstory removal</p> <p><u>Specs:</u></p> <ul style="list-style-type: none"> -leave 10 residual BA mix of healthy mast trees -favor leaving sugar maple and pine where present -leave 3-10% in area retention (already excluded- see site conditions layer) -mark during leaf-off -no tree-length skidding to protect occurrences of more desirable northern hardwood regeneration -cut all ironwood and protect all other species under 4 inches dbh in sale specs -protect Hunt Creek Motorcycle trail in timber sale specifications <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> -a combination maple, basswood, oak, aspen, pine, beech, ash, and ironwood of medium to high stocking is acceptable</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2025</p>												
27	54017027-Cut	13.0	4123 - Red Oak	Sawtimber	Well	105	111-140	Harvest	Clearcut with Retention	4116 - Mixed N. Hardwood - Aspen	Even-Aged	No
<p><u>Prescription</u> -clearcut</p> <p><u>Specs:</u></p> <ul style="list-style-type: none"> -leave area retention for areas of steep terrain (already excluded- see site conditions layer) -protect Hunt Creek Motorcycle trail in timber sale specifications -no tree-length skidding to protect slopes <p><u>Next Step</u> Monitoring, Natural Regen (Intermediate)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> -a combination of maple, basswood, oak, aspen, beech, ash, and ironwood, and pine of low to high stocking</p> <ul style="list-style-type: none"> -survey regeneration early (2-3 growing seasons after cut is complete) -mixed upland deciduous or aspen cover types are also acceptable <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2025</p>												



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
27 54017027-Cutx	9.7	4123 - Red Oak	Sawtimber Well	105	111-140	Harvest	Crown Thinning	4123 - Red Oak	Even-Aged	No
<p><u>Prescription</u> -thin to 80 BA residual</p> <p><u>Specs:</u> -cut all ironwood and beech -do not cut all aspen in sale specs -mark 1 healthy beech and/or ironwood to leave every 2-3 acres -do not mark trees to cut alongside slopes greater than 35% -no tree-length skidding to protect slopes and residual trees -protect Hunt Creek Motorcycle trail in timber sale specifications</p> <p><u>Next Step</u> <u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u> Proposed Start Date: 10/1 /2025</p>										
29 54017029-Cut	19.6	4123 - Red Oak	Sawtimber Well	94	141-170	Harvest	Clearcut with Retention	4116 - Mixed N. Hardwood - Aspen	Even-Aged	No
<p><u>Prescription</u> -clearcut</p> <p><u>Specs:</u> -leave area retention for areas of steep terrain (already excluded- see site conditions layer) -protect Hunt Creek Motorcycle trail in timber sale specifications -no tree-length skidding to protect slopes</p> <p><u>Next Step</u> Monitoring, Natural Regen (Intermediate) <u>Treatments:</u></p> <p><u>Acceptable Regen:</u> -a combination of maple, basswood, oak, aspen, beech, ash, and ironwood, and pine of low to high stocking -survey regeneration early (2-3 growing seasons after cut is complete) -mixed upland deciduous or aspen cover types are also acceptable</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u> Proposed Start Date: 10/1 /2025</p>										
38 54017038-Cut	12.4	4119 - Mixed Northern Hardwoods	Sawtimber Well	105	51-80	Harvest	Overstory Removal	4116 - Mixed N. Hardwood - Aspen	Even-Aged	No
<p><u>Prescription</u> -partial stand harvest</p> <p><u>Specs:</u> -overstory removal -leave 10 residual BA mix of healthy mast trees -favor leaving sugar maple and pine where present -leave 3-10% in area retention (already excluded- see site conditions layer) -do not cut 5B or 1C areas of this stand (already excluded- see site conditions layer) -mark during leaf-off -no tree-length skidding to protect occurrences of more desirable northern hardwood regeneration -cut all ironwood, leave none for establishing more desirable regeneration -mark during leaf-off</p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u></p> <p><u>Acceptable Regen:</u> -a combination maple, basswood, oak, aspen, pine, beech, ash, and ironwood of medium to high stocking is acceptable -mixed upland deciduous or aspen cover types are also acceptable</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u> Proposed Start Date: 10/1 /2025</p>										



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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39	54017039-Cut	62.4	4111 - S.Maple, Hard Mast Association	Sawtimber Well	105	81-110	Harvest	Group Selection	4111 - S.Maple, Hard Mast Association	Uneven-Aged	No
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Prescription -group selection cut

Specs:

- in areas concentrated with mature timber (16+ inches DBH (mostly oak)), decline, or severely poor form trees, mark to cut 135ft (tolerant and mid-tolerant average) diameter regeneration gaps from bole to bole of outer trees
- regeneration gaps should be painted every 3 acres and be separated by a minimum of 75ft of intact forest
- require placing of tops and other heavy slash outside cut gaps to allow future cultivation work
- after gaps are designated, using a different paint color, mark to cut remaining area outside of regeneration gaps to 80 residual BA
- cut all ironwood and beech
- do not cut all aspen in sale specs
- mark 1 healthy beech and/or ironwood to leave every 2-3 acres
- require 6-inch gap stump heights or less in sale specs
- do not mark trees to cut alongside slopes greater than 35%
- no tree-length skidding to protect slopes and residual trees
- protect Hunt Creek Motorcycle trail in timber sale specifications
- keep sale boundary away from interior hardwood research area (per MSU research staff consultation, thin up to outer edge of the 40-acre block but do not enter the interior)
- protect Hunt Creek Motorcycle trail in timber sale specifications

Next Step

Monitoring, Natural Regen (Re-Inventory); Other, Pre-Commercial Thinning - Hand; Pesticide, Skidder - Site Prep; SitePrep,

Treatments:

Scarification; Planting, Hardwood - Seedling; Monitoring, Natural Regen (Re-Inventory); Monitoring, Artificial Regen(1yr

Acceptable Regen:

-a combination maple, basswood, oak, aspen, and pine of medium to high stocking with minor associates of beech, ash, and ironwood is acceptable

-survey regeneration gaps 2-3 growing seasons after cut is complete

Suggested Management Follow-up (pending natural regeneration fails and is dominated by ironwood, beech, or ash):

-establish a department approved medium to high stocking mix of more desirable northern hardwood (oak, sugar maple, ash, and basswood) and/or white pine using herbicide, scarification, and planting as necessary for gaps

-if planting gaps is delayed, and less desirable regeneration competition has been reduced, allow for a longer regeneration period

-Northern Hardwood regeneration research gaps in stands 14 and 44 received herbicide and scarification cultivation work to promote natural regeneration. Reference the Walters project gap regeneration results to assist in determining appropriate cultivation follow-up work.

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2025



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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40	54017040-Cut	20.1	4119 - Mixed Northern Hardwoods	Sawtimber Well	103	81-110	Harvest	Group Selection	4119 - Mixed Northern Hardwoods	Uneven-Aged	No
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Prescription -group selection cut

Specs:

- in areas concentrated with mature timber (16+ inches DBH (mostly oak)), decline, or severely poor form trees, mark to cut 135ft (tolerant and mid-tolerant average) diameter regeneration gaps from bole to bole of outer trees
- regeneration gaps should be painted every 3 acres and be separated by a minimum of 75ft of intact forest
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- do not mark trees to cut alongside slopes greater than 35%
- no tree-length skidding to protect slopes and residual trees
- protect Hunt Creek Motorcycle trail in timber sale specifications

Next Step Monitoring, Natural Regen (Re-Inventory); Other, Pre-Commercial Thinning - Hand; Pesticide, Skidder - Site Prep; SitePrep,

Treatments: Scarification; Planting, Hardwood - Seedling; Monitoring, Natural Regen (Intermediate); Monitoring, Artificial Regen(1yr

Acceptable

-a combination maple, basswood, oak, aspen, and pine of medium to high stocking with minor associates of beech, ash, and ironwood is acceptable

Regen:

-survey regeneration gaps 2-3 growing seasons after cut is complete

Suggested Management Follow-up (pending natural regeneration fails and is dominated by ironwood, beech, or ash):

-establish a department approved medium to high stocking mix of more desirable northern hardwood (oak, sugar maple, ash, and basswood) and/or white pine using herbicide, scarification, and planting as necessary for gaps

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Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2025

41	54017041-Cut	7.1	4199 - Other Mixed Upland Deciduous	Sawtimber Well	105	51-80	Harvest	Overstory Removal	4116 - Mixed N. Hardwood - Aspen	Even-Aged	No
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Prescription -overstory removal

Specs:

- leave 10 residual BA mix of healthy mast trees
- favor leaving sugar maple and pine where present
- leave 3-10% in area retention (already excluded- see site conditions layer)
- mark during leaf-off
- no tree-length skidding to protect occurrences of more desirable northern hardwood regeneration
- cut all ironwood, leave none for establishing more desirable regeneration
- mark during leaf-off
- protect Hunt Creek Motorcycle trail in timber sale specifications

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable

-a combination of maple, basswood, oak, aspen, and pine of medium to high stocking with minor associates of beech, ash, and ironwood is acceptable

Regen:

-mixed upland deciduous or aspen cover types are also acceptable

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2025



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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50	54017050-Cut	18.1	4110 - Sugar Maple Association	Sawtimber Well	95	111-140	Harvest	Crown Thinning	4119 - Mixed Northern Hardwoods	Even-Aged	No
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Prescription -thin to 80 BA residual
Specs:
 -cut all ironwood and beech
 -do not cut all aspen in sale specs
 -mark 1 healthy beech and/or ironwood to leave every 2-3 acres
 -do not mark trees to cut alongside slopes greater than 35%
 -no tree-length skidding to protect slopes and residual trees
 -protect Hunt Creek Motorcycle trail in timber sale specifications

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Site Condition

Proposed Start Date: 10/1 /2025

65	54017065-Cut	8.2	4119 - Mixed Northern Hardwoods	Sawtimber Well	97	111-140	Harvest	Group Selection	4119 - Mixed Northern Hardwoods	Uneven-Aged	No
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Prescription -group selection cut
Specs:
 -in areas concentrated with mature timber (16+ inches DBH (mostly oak)), decline, or severely poor form trees, mark to cut 135ft (tolerant and mid-tolerant average) diameter regeneration gaps from bole to bole of outer trees
 -regeneration gaps should be painted every 3 acres and be separated by a minimum of 75ft of intact forest
 -require placing of tops and other heavy slash outside cut gaps to allow future cultivation work
 -after gaps are designated, using a different paint color, mark to cut remaining area outside of regeneration gaps to 80 residual BA
 -cut all ironwood and beech
 -do not cut all aspen in sale specs
 -mark 1 healthy beech and/or ironwood to leave every 2-3 acres
 -require 6-inch gap stump heights or less in sale specs
 -do not mark trees to cut alongside slopes greater than 35%
 -no tree-length skidding to protect slopes and residual trees

Next Step Monitoring, Natural Regen (Re-Inventory); Other, Pre-Commercial Thinning - Hand; Pesticide, Skidder - Site Prep; SitePrep,
Treatments: Scarification; Planting, Hardwood - Seedling; Monitoring, Natural Regen (Re-Inventory); Monitoring, Artificial Regen(1yr)

Acceptable -a combination maple, basswood, oak, aspen, and pine of medium to high stocking with minor associates of beech, ash, and ironwood is
Regen: acceptable

-survey regeneration gaps 2-3 growing seasons after cut is complete

Suggested Management Follow-up (pending natural regeneration fails and is dominated by ironwood, beech, or ash):

-establish a department approved medium to high stocking mix of more desirable northern hardwood (oak, sugar maple, ash, and basswood) and/or white pine using herbicide, scarification, and planting as necessary for gaps

-if planting gaps is delayed, and less desirable regeneration competition has been reduced, allow for a longer regeneration period

-Northern Hardwood regeneration research gaps in stands 14 and 44 received herbicide and scarification cultivation work to promote natural regeneration. Reference the Walters project gap regeneration results to assist in determining appropriate cultivation follow-up work.

Other
Comment:

Site Condition

Proposed Start Date: 10/1 /2025

Approved Treatments:

14	54017014_Monitor	30.2	4111 - S.Maple, Hard Mast Association	Sawtimber Medium	105	81-110	Monitoring	Natural Regen (Intermediate)	411 - Northern Hardwood	Uneven-Aged	No
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Prescription Will be done by MSU staff

Specs:



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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Next Step
Treatments:
Acceptable A diverse mix of northern hardwood species.
Regen:
Other Percent to Treat = 100%
Comment:
Site Condition
Proposed Start Date: 10/1 /2022

28	54017028- Prep	31.1	4199 - Other Mixed Upland Deciduous	Sapling Medium	6	Immature	SitePrep	Trenching	42110 - Planted Red Pine	Even-Aged	No
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Prescription C54-1196; Trench for the planting of red pine.
Specs:
Next Step Pesticide, Skidder - Release; ; Pesticide, Skidder - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring,
Treatments: Herbicide Use; Monitoring, Artificial Regen(3yr)
Acceptable -fully stocked red pine with minor deciduous associates
Regen:
Other Percent to Treat = 100%
Comment:
Site Condition
Proposed Start Date: 10/1 /2023

43	54017043- Monitor	4.5	4130 - Aspen	Sapling Poor	2	Immature	Monitoring	Natural Regen (Re-Inventory)	413 - Aspen	Even-Aged	No
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Prescription -survey regeneration during next inventory
Specs:
Next Step
Treatments:
Acceptable -acceptable regeneration is aspen, maple, basswood, pine, ash, oak, and beech of medium to high stocking
Regen:
Other Percent to Treat = 100%
Comment:
Site Condition
Proposed Start Date: 10/1 /2026

44	54017044_Mo nitor	30.4	4110 - Sugar Maple Association	Sawtimber Medium	85	81-110	Monitoring	Natural Regen (Intermediate)	411 - Northern Hardwood	Uneven- Aged	No
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Prescription MSU staff will do the survey
Specs:
Next Step
Treatments:
Acceptable A diverse mix of northern hardwood species.
Regen:
Other Percent to Treat = 100%
Comment:
Site Condition
Proposed Start Date: 10/1 /2022

Total Treatment 457.3
Acreage Proposed:

Report 4 – Site Conditions

Atlanta Mgt. Unit
Darrick Coy : Examiner

Compartment: 17
Year of Entry: 2026



Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions					
		With Condition	Not Available		5B	5C	1C	2F	3J	5E
308	240	63	5	Aspen		63		1	2	2
15	15	0	0	Herbaceous Openland						
3	3	0	0	Low-Density Trees						
127	76	36	15	Mixed Upland Deciduous	8	28	8		3	4
515	485	16	14	Northern Hardwood	8	7	6		5	3
69	42	17	10	Oak		17		8		2
4	4	0	0	Red Pine						
15	15	0	0	Urban	0	0		0		
1,056	881	131	45	Total Forested Acres	16	114	14	9	11	11
	83%	12%	4%	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	17	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Atlanta Mgt. Unit
Darrick Coy : Examiner

Compartment: 17
Year of Entry: 2026



4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	5E: Long-Term Retention	1	2F: Too steep	Unspecified	Unspecified	Unspecified
Comments: area retention for stand 16							
6	Unavailable	2F: Too steep	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	2F: Too steep	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Available	5B: Maintain for regeneration purposes	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

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Darrick Coy : Examiner

Compartment: 17
Year of Entry: 2026



11	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	5E: Long-Term Retention	2	2F: Too steep	Unspecified	Unspecified	Unspecified
Comments:							
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
14	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	63	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
16	Available	5B: Maintain for regeneration purposes	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Atlanta Mgt. Unit
Darrick Coy : Examiner

Compartment: 17
Year of Entry: 2026



17	Available	5B: Maintain for regeneration purposes	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
19	Available	5B: Maintain for regeneration purposes	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
21	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
22	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: area retention for stand 28							
23	Unavailable	1C: Other dept or div proc/practices	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Atlanta Mgt. Unit
Darrick Coy : Examiner

Compartment: 17
Year of Entry: 2026



24	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: area retention for stand 43</p>							
25	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: vernal pond buffering area</p>							
27	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: area retention for stand 6</p>							

Mgt. Unit

Compartment: #Type!

Year of Entry:



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
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Comments



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
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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1	310 - Herbaceous Openland	Nonstocked	1.0		Unspecified	gas well	
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2	42210 - Natural Red Pine	Sawtimber Medium	1.2	101	111-140	N/A	
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	5	Log	14		Sugar Maple	Medium	Variable	Sapling
Basswood	5	Log	13		Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub
Red Pine	90	Log/XLog	17	101	Ironwood	High	Variable	Sapling
					White Ash	Medium	Variable	Sapling

3	4133 - Aspen, Mixed Pine	Poletimber Well	5.8	45	81-110	N/A	-more wp to ne half
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	2	XLog	25		Red Maple	Medium	Variable	Sapling
White Pine	18	Pole/Log	8		Ironwood	Medium	Variable	Sapling
Bigtooth Aspen	70	Pole	7	45	Serviceberry (Juneberry)	Medium	5 - 10 feet	Tall Shrub
Red Pine	5	XLog/Log	19		Red Oak	Low	< 5 feet	Seeding
Red Oak	5	Pole	7		Striped Maple	Medium	5 - 10 feet	Sapling
					Witch Hazel	Medium	5 - 10 feet	Tall Shrub

4	4130 - Aspen	Poletimber Well	91.9	35	1-50	N/A	-clearcut completed 7/8/87 -54-016-86-01 Rainy Day Sale -cut all trees except aspen, beech, and oak with green paint -past proposal volume= 54% aspen, 26% mhwd, 11% oak, 7% bsw, & 2% birch -appears that they left mostly oak and some aspen to NW 1/4 of stand
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	10	Pole	5		Sugar Maple	Medium	Variable	Sapling
White Pine	5	Pole/Sapling	5		White Ash	Medium	Variable	Sapling
Sugar Maple	7	Sapling/Pole	4		Red Maple	Low	Variable	Sapling
Red Oak	2	XLog	19		Red Oak	Low	Variable	Sapling
Quaking Aspen	23	Pole/Sapling	5		Ironwood	Medium	Variable	Sapling
Basswood	3	Pole/Sapling	5					
Bigtooth Aspen	50	Pole/Sapling	5	35				

5	4111 - S.Maple, Hard Mast Association	Sawtimber Well	21.5	97	81-110	N/A	-selection cut completed 9/16/98 -54-031-96-01 Hunt Creek Rd Hwd -cut all trees with orange paint -BA was 103 on 4/24/24 using 11-point average -canopy maturity composition (15+” DBH) is 42% of the basal area: 51% (22 BA) oak, 13% (6 BA) basswood, and 36% (15.5 BA) sugar maple -see attached reports for more specific information
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Ironwood	1	Pole	7		Ironwood	High	10 - 20 feet	Sapling
Bigtooth Aspen	1	XLog	18		Beech	High	10 - 20 feet	Sapling
Red Maple	6	Log/Pole	10		White Ash	Low	10 - 20 feet	Sapling
Basswood	22	Log/Pole	13		Sugar Maple	Medium	>20 feet	Sapling
Sugar Maple	44	Log/Pole	12	97				
Beech	6	Log/Pole	11					
Red Oak	20	XLog	23					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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6	4130 - Aspen	Sapling Medium	10.9	2	Immature	N/A	-clearcut complete 7/28/21
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Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	15	Sapling	1	
Bigtooth Aspen	65	Sapling	1	2
Ironwood	5	Sapling	1	
Red Pine	5	Sapling	1	
Red Oak	2	Log	14	
Beech	5	Sapling	1	
Red Pine	3	XLog/Log	20	

7	4111 - S.Maple, Hard Mast Association	Sawtimber Well	33.5	94	51-80	N/A	-see attached reports for more detailed information -selection cut completed 9/16/98 -group selection (actual was more of a selection or thinning) cut complete 8/19/21
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Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	1	Log	13	
Sugar Maple	50	Log/Pole	11	94
Basswood	14	Log/Pole	12	
Red Oak	30	XLog/Log	22	112
Red Maple	4	Log	15	
Beech	1	XLog	18	

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	< 5 feet	Seeding
Ironwood	Medium	< 5 feet	Seeding
Sugar Maple	Low	< 5 feet	Seeding
Sugar Maple	Low	>20 feet	Sapling
White Ash	Low	< 5 feet	Seeding

-54-031-96-01 Hunt Creek Rd Hwd
-cut all trees with orange paint
-mature oak
-canopy maturity composition (15+” DBH) is 36% of the basal area: 89% oak, 3% basswood, and 7% sugar maple
-higher BA in south half
-overall BA is 69 on 4/24/24

8	310 - Herbaceous Openland	Nonstocked	2.3		Unspecified		
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9	122 - Road/Parking Lot	Nonstocked	1.5		Unspecified	No	
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10	310 - Herbaceous Openland	Nonstocked	1.1		Unspecified		-gas well
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11	4110 - Sugar Maple Association	Sawtimber Well	113.6	85	111-140	N/A	-Thinning completed 1/17/01 -57-006-98-01 Pop Hardwood -cut marked trees only -proposal volume= 8% aspen, 39% mixed hwd, 53% basswood -high in small logs -cored 12 and 14 in sm and 13in bsw, 85 ave age, old inventory was 108 -residual BA was 115 on 4/20/24 -canopy maturity composition (15+” DBH) is 17% of the basal area based off 24-point swings
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Canopy Species	% Cover	Size Class	DBH	Age
Sugar Maple	59	Log/Pole	11	85
Ironwood	2	Pole	5	
Bigtooth Aspen	3	Log	14	
Beech	2	Log/Pole	13	
Basswood	28	Log/Pole	11	
Red Oak	6	XLog/Log	18	

Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	Low	>20 feet	Sapling
White Ash	Low	Variable	Sapling
Ironwood	High	10 - 20 feet	Sapling
Beech	High	10 - 20 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
12	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	51.0	101	51-80	N/A	-merged this area from past thinning and shelterwood cuts due to similar composition and basal area -more open and poorer quality mast timber -south half of this stand was shelterwood prep RX completed 5/12/97 -54-002-96-01 managed hwd -cut all aspen and birch -proposal vol.= 91% aspen & 9% birch BA ranges from 30 to 100. -north half of this stand thinning completed 1/16/03 -54-014-99-01 Pop Two -cut marked trees -proposal volume= 1/3 bsw and 2/3rds mixed hwd -canopy maturity composition (15+” DBH) is 48% of the basal area: 40% (10 BA) oak, 9% (2 BA) basswood, and 51% (13 BA) sugar maple -see attached reports for more specific information			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Pine		2	Log	15		Striped Maple		Medium	5 - 10 feet	Tall Shrub
Black/Red (Hybrid) Oak		1	Log	15		Sugar Maple		Medium	Variable	Sapling
Red Oak		24	Log/XLog/Pole	16	101	Beech		Medium	Variable	Sapling
Bigtooth Aspen		9	Log	13		Red Oak		Low	Variable	Sapling
Beech		11	Log	14		White Ash		Low	Variable	Sapling
Basswood		6	Log/XLog	15		Bigtooth Aspen		Medium	10 - 20 feet	Sapling
White Pine		1	XLog	36		Ironwood		Medium	Variable	Sapling
Red Maple		7	Log/Pole	11						
Quaking Aspen		5	Log	14						
Sugar Maple		33	Log/Pole	12	101					
Ironwood		1	Pole	6						

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
13	3301 - Low Density Deciduous Trees	Nonstocked	2.0		Unspecified	No	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
14	4111 - S.Maple, Hard Mast Association	Sawtimber Medium	31.1	105	81-110	N/A	-west half thinning was heavy and is high to ironwood -thinning completed 1/16/03 -added 20 BA to 2013 field inventory QD and added confidence range -54-014-99-01 Pop Two -cut marked trees -proposal volume= 1/3 basswood and 2/3rds mixed hwd -40-acre area to east was selection harvested within Winter 2017-2018 and tops were removed -this 40-acre area selection harvested is part of a MSU northern hardwood regeneration project -Spraying completed 6/24/20. It had two acres sprayed. Chem used was Rodeo, Element, and Cygnet. Quarts per acre 2, 1.3, 1.3 respectfully. -Scarification completed 8/4/20. It had 1.8 acres done.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Basswood		20	Log/Pole	13		Ironwood		High	10 - 20 feet	Sapling
Bigtooth Aspen		3	XLog	23		Beech		Medium	10 - 20 feet	Sapling
Ironwood		2	Pole	6		Striped Maple		Medium	5 - 10 feet	Tall Shrub
Red Oak		25	Log/XLog	17		White Ash		Medium	10 - 20 feet	Sapling
Paper Birch		2	Pole	8		Sugar Maple		Low	>20 feet	Sapling
Beech		8	Log/Pole	13						
Sugar Maple		40	Log/Pole	11	105					

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
15	4111 - S.Maple, Hard Mast Association	Sawtimber Medium	49.5	91	51-80	N/A	-see attached 2013 qd -some steep ridges -vernal pool in south end of stand -selection cut complete 10/28/21			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Sugar Maple		25	Pole/Log	9		White Ash		Low	< 5 feet	Seeding
Basswood		37	Log/Pole	11	91	Ironwood		Medium	< 5 feet	Sapling
Beech		1	Pole/Log	9		Beech		Medium	< 5 feet	Sapling
Bigtooth Aspen		3	Log	15		Sugar Maple		Low	< 5 feet	Seeding
Red Oak		34	Log/Pole	13		Sugar Maple		Medium	>20 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																							
16	4130 - Aspen	Sapling Medium	11.5	2	Immature	N/A	-clearcut complete 7/28/21																																																							
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17	42210 - Natural Red Pine	Sawtimber Well	3.1	75	111-140	N/A	-might be uneven aged -various sizes in rp -steep -burnt stumps everywhere																																																							
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18	4111 - S.Maple, Hard Mast Association	Poletimber Medium	14.1	91	51-80	N/A	-some steep terrain in places, most is workable -heavier to beech to SW -selection cut complete 10/28/21																																																							
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19	3301 - Low Density Deciduous Trees	Nonstocked	1.0		Unspecified	No																																																								
20	310 - Herbaceous Openland	Nonstocked	1.0		Unspecified		gas well																																																							
21	4199 - Other Mixed Upland Deciduous	Sawtimber Well	19.2	103	81-110	N/A	-thinning completed 1/16/03 -54-014-99-01 Pop Two -cut marked trees -proposal volume= 1/3 bsw and 2/3rds mixed hwd -canopy maturity composition (15+ DBH) is 51% of the basal area: 80% (35 BA) oak, 13% (2 BA) basswood, and 18% (7 BA) sugar maple -south 1/3rd of stand was merged with stand 50, so, QD data is slightly inaccurate due to the stand boundary adjustment, and the oak component was increased by 20%																																																							
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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22	4139 - Aspen, Mixed Deciduous	Poletimber Well	39.3	34	1-50	N/A	-clearcut complete 9/9/88-54-006-86-01 Ridge View Sale-Units 1-3-cut all but oak with green paint (east half)-proposal volume= 55% bta, 26% oak, 10% mhwd, 6% birch, 3% pine			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Oak	15	Pole/Sapling	5			Red Oak	Medium	Variable	Sapling	
Quaking Aspen	7	Pole/Sapling	5			Sugar Maple	Low	Variable	Sapling	
Sugar Maple	5	Sapling/Pole	4			Red Maple	Medium	Variable	Sapling	
Red Oak	3	Log/XLog	15			White Ash	Low	Variable	Sapling	
Red Maple	10	Sapling/Pole	4			Serviceberry (Juneberry)	Medium	5 - 10 feet	Tall Shrub	
White Pine	5	Pole/Sapling	5							
Red Pine	5	Pole/Sapling	7							
Bigtooth Aspen	50	Pole/Sapling	5	34						

23	122 - Road/Parking Lot	Nonstocked	11.0		Unspecified	No	
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24	310 - Herbaceous Openland	Nonstocked	1.2				gas well
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25	310 - Herbaceous Openland	Nonstocked	1.3		Unspecified		-gas well -this area was leveled/drug and seeded using DNR mix by Fairview woodyard on 10/05/21
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26	310 - Herbaceous Openland	Nonstocked	1.3		Unspecified		
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27	4123 - Red Oak	Sawtimber Well	31.2	105	111-140	N/A	-some areas are too steep to harvest. Fire scarred oak. -thinned NW 1/3rd/leg of stand along level terrain			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Bigtooth Aspen	15	Log/Pole	13			Striped Maple	Medium	5 - 10 feet	Tall Shrub	
Red Oak	70	Log/Pole	13	105		Beech	Low	Variable	Sapling	
Sugar Maple	5	Log/Pole	10			Sugar Maple	Medium	>20 feet	Sapling	
Basswood	10	Log/Pole	11			Ironwood	High	Variable	Sapling	
						White Ash	Low	Variable	Sapling	

28	4199 - Other Mixed Upland Deciduous	Sapling Medium	35.1	6	Immature	N/A	Roller Chopping was completed on 7/6/23.-QD done in 2014 -poor quality timber except for ne 1/3rd and NW where past thinning occurred-large oak and beech with mast crowns-some pockets of aspen, not quite dead yet-high to ironwood in subcanopy -clearcut complete 7/4/2018			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Oak	5	Sapling	1							
Bigtooth Aspen	8	Sapling	1							
Quaking Aspen	31	Sapling	1	6						
Ironwood	26	Sapling	1							
Beech	4	Sapling	1							
White Ash	26	Sapling	1							



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29	4123 - Red Oak	Sawtimber Well	21.3	94	141-170	N/A	-steep slopes to SE -difficult to manage stand due to slopes -good crown form and past mgmt is sporadic based on slopes																																																																								
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30	4119 - Mixed Northern Hardwoods	Sawtimber Well	10.1	95	81-110	N/A	-Thinning completed 1/17/01 -57-006-98-01 Pop Hardwood -cut marked trees only -treated with stand to adjacent east -proposal volume= 8% aspen, 39% mixed hwd, 53% basswood																																																																								
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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35 310 - Herbaceous Openland Nonstocked 1.0 Unspecified

36 4131 - Aspen, Oak Poletimber Well 35.5 34 1-50 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	5	Sapling/Pole	4		Red Pine	Low	Variable	Sapling
Red Oak	20	Pole/Sapling	5		Black Cherry	Low	5 - 10 feet	Sapling
Paper Birch	5	Pole/Sapling	5		Serviceberry (Juneberry)	Medium	5 - 10 feet	Tall Shrub
Bigtooth Aspen	52	Pole/Sapling	5	34	Ironwood	Low	Variable	Sapling
Red Pine	3	Sapling/Pole	4		Red Maple	Medium	Variable	Sapling
Quaking Aspen	15	Pole/Sapling	5		Red Oak	Medium	Variable	Sapling

-clearcut complete 9/9/88
-54-006-86-01 Ridge View Sale
-Units 4-5
-cut all trees
-proposal volume= 55% bta, 26% oak, 10% mhwd, 6% birch, 3% pine

37 310 - Herbaceous Openland Nonstocked 2.1 Unspecified

38 4119 - Mixed Northern Hardwoods Sawtimber Well 25.5 105 51-80 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	2	Pole	8		Ironwood	High	10 - 20 feet	Sapling
Red Oak	20	XLog/Log	19		Striped Maple	Medium	5 - 10 feet	Tall Shrub
Beech	15	Log/Pole	13		White Ash	Medium	10 - 20 feet	Sapling
Sugar Maple	25	Log/Pole	11	105	Beech	Medium	10 - 20 feet	Sapling
Bigtooth Aspen	15	Log	17		Sugar Maple	Medium	10 - 20 feet	Sapling
Ironwood	2	Pole	6					
Basswood	21	Log/Pole	13					

-thinning completed 1/16/03
-54-014-99-01 Pop Two
-cut marked trees
-proposal volume= 1/3 basswood and 2/3rds mixed hwd
-canopy maturity composition (15+” DBH) is 28% of the basal area: 30% oak, 26% basswood, 17% bch, and 26% sugar maple
-61% of the total basal area is dying or has severe poor form
-see attached reports for more specific information

39 4111 - S.Maple, Hard Mast Association Sawtimber Well 67.6 105 81-110 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	1	Log	17		Striped Maple	Medium	5 - 10 feet	Tall Shrub
Basswood	28	Log/Pole	13		Ironwood	High	10 - 20 feet	Sapling
Red Oak	28	XLog/Log	20		White Ash	Medium	10 - 20 feet	Sapling
Beech	1	Log/Pole	13		Sugar Maple	Low	>20 feet	Sapling
Quaking Aspen	1	Log/Pole	11		Beech	Medium	10 - 20 feet	Sapling
Ironwood	2	Pole	6					
Paper Birch	1	Log/Pole	10					
Sugar Maple	37	Log/Pole	12	105				
Red Maple	1	Pole/Log	9					

-west half thinning was heavy and is high to ironwood-thinning completed 1/16/03-added 20 BA to 2013 field inventory QD and added confidence range-54-014-99-01 Pop Two-cut marked trees - proposal volume= 1/3 basswood and 2/3rds mixed hwd



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
40	4119 - Mixed Northern Hardwoods	Sawtimber Well	20.1	103	81-110	N/A	-thinning completed 1/16/03 -54-014-99-01 Pop Two -cut marked trees -proposal volume= 1/3 bsw and 2/3rds mixed hwd -canopy maturity composition (15+” DBH) is 38% of the basal area: 58% (22 BA) oak, 21% (8 BA) basswood, 4% (2 BA) bch, and 17% (7 BA) sugar maple -see attached reports for more specific information			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Oak		30	XLog/Log	21		White Ash		Low	10 - 20 feet	Sapling
Red Maple		3	XLog/Log	18		Striped Maple		Low	5 - 10 feet	Tall Shrub
Sugar Maple		38	Log/Pole	13	103	Ironwood		High	10 - 20 feet	Sapling
Basswood		20	Log/Pole	13		Beech		Medium	10 - 20 feet	Sapling
Beech		9	Log/Pole	12		Sugar Maple		Low	>20 feet	Sapling
41	4199 - Other Mixed Upland Deciduous	Sawtimber Well	7.1	105	51-80	N/A	-west half thinning was heavy and is high to ironwood -thinning completed 1/16/03 -added 20 BA to 2013 field inventory QD and added confidence range -54-014-99-01 Pop Two -cut marked trees -proposal volume= 1/3 basswood and 2/3rds mixed hwd -trees are dying in this area -subcanopy has a mix of desirable and less desirable species			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Bigtooth Aspen		20	Log	15		Striped Maple		Medium	5 - 10 feet	Tall Shrub
Ironwood		2	Pole	6		Beech		Medium	10 - 20 feet	Sapling
Sugar Maple		26	Log/Pole	11	105	Sugar Maple		Medium	>20 feet	Sapling
Basswood		20	Log/Pole	13		Ironwood		Medium	10 - 20 feet	Sapling
Red Oak		20	Log/XLog	17		White Ash		Low	10 - 20 feet	Sapling
Paper Birch		2	Pole	8						
Beech		10	Log/Pole	13						
42	4123 - Red Oak	Sawtimber Well	16.6	103	81-110	N/A	-shelterwood cut complete 9/16/08 -54-030-06-01 rolling oak -cut all rm, aspen, and orange trees -proposal vol.= 68% aspen, 3% bsw, 29% mhwd -was RX for shelterwood but is a thinning 75-90BA			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Sugar Maple		5	Pole/Log	8		Beech		Low	10 - 20 feet	Sapling
Basswood		10	Log/Pole	11		Red Oak		Low	10 - 20 feet	Sapling
Red Oak		80	Log/Pole/XLog	14	103	Ironwood		High	10 - 20 feet	Sapling
Beech		5	Log	14		Bigtooth Aspen		Low	10 - 20 feet	Sapling
						Striped Maple		Low	10 - 20 feet	Sapling
						Sugar Maple		Low	>20 feet	Sapling
43	4130 - Aspen	Sapling Poor	4.5	2	Immature	N/A	-long slope NE-SW, mostly 20-30% clearcut completion date- 9/14/21			
Canopy Species		% Cover	Size Class	DBH	Age					
Bigtooth Aspen		80	Sapling	1	2					
Ironwood		10	Sapling	1						
Beech		10	Sapling	1						



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44	4110 - Sugar Maple Association	Sawtimber Medium	32.3	85	81-110	N/A	-Thinning completed 1/17/01 -57-006-98-01 Pop Hardwood -cut marked trees only -proposal volume= 8% aspen, 39% mixed hwd, 53% basswood -high in small logs -cored 12 and 14 in sm and 13 in bsw, 85 average age, old inventory was 108 -residual BA was 114 outside of cut gaps on 4/20/24 -canopy maturity composition (15+” DBH) is 10% of the basal area -40-acre area was group selection harvested within Winter 2017-2018 and tops were removed -the 40 area is part of a MSU northern hardwood regeneration project -Spraying completed 6/25/20. It had 12.5 acres sprayed. Chem used was Rodeo, Element, and Cygnet. Quarts per acre 2.2, 1.4, 1.4 respectfully. -Scarification on 8/4/20. Had 12.5 acres completed.																																																												
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49	4111 - S.Maple, Hard Mast Association	Sawtimber Well	24.8	88	81-110	N/A	-fairly poor nhwd timber quality, more variable BAs and was cut heavier in past-variable structure, larger diameters, more oak and aspen in stand vs west hwd-based off 8-point swings, residual BA is 98 with 36% of that BA in trees >15 inches (see attached doc-canopy maturity composition (15+” DBH) is 35% of the basal area: 23% oak, 31% basswood, and 46% sugar maple-see attached report for more specific information																																																								
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50	4110 - Sugar Maple Association	Sawtimber Well	18.3	95	111-140	N/A	-thinning completed 1/16/03-54-014-99-01 Pop Two-cut marked trees																																																								
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51	310 - Herbaceous Openland	Nonstocked	1.0		Unspecified																																																										
52	122 - Road/Parking Lot	Nonstocked	2.3		Unspecified	No																																																									
53	4130 - Aspen	Poletimber Well	14.6	35	1-50	N/A	-south of road clearcut completed 11/05/87-54-018-86-01-cut all trees-prop. vol.= 39% aspen, 34% mhwd, 21% bsw-larger pole hard maple to west, assume was slightly unmerchatable when cut was made-fairly pure aspen stand with thick ironwood in subcanopy -north of road clearcut- completion date- 4/13/92-sale number- 54-054-90-01-leave trees- none-volume (cbs)- 1130 aspen, 2045 mhwd, 475 ro (in part, total for stands 53, 57, 75)																																																								
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62	4139 - Aspen, Mixed Deciduous	Sawtimber Well	1.4	99	81-110	N/A	Stand left for area retention for stand 16 and steep slope.																																																								
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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63	4130 - Aspen	Sawtimber Well	2.3	99	Unspecified	N/A	
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	75	Log	13	99	Ironwood	Medium	Variable	Sapling
White Ash	5	Log/Pole	13		Striped Maple	Medium	5 - 10 feet	Tall Shrub
Red Oak	5	Log/XLog	16		Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub
Basswood	5	Log/Pole	13		White Ash	Medium	Variable	Sapling
Sugar Maple	10	Log/Pole	13		Sugar Maple	Medium	Variable	Sapling

64	4199 - Other Mixed Upland Deciduous	Sawtimber Well	10.2	108	81-110	N/A	-ne 1/3rd and NW were thinning -large oak and beech with mast crowns -some pockets of aspen, not quite dead yet -high to ironwood in subcanopy -was part of stand 28 in last inventory, consider merging with stand 30
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	23	Log/Pole	10	88	Beech	Medium	10 - 20 feet	Sapling
Basswood	19	Log/Pole	12		Ironwood	High	10 - 20 feet	Sapling
Red Oak	25	XLog/Log	19	108	White Ash	Medium	5 - 10 feet	Sapling
Ironwood	3	Pole	5		Red Oak	Low	Variable	Sapling
Beech	10	Log/Pole	10		Sugar Maple	Low	Variable	Sapling
Bigtooth Aspen	20	Log	15					

65	4119 - Mixed Northern Hardwoods	Sawtimber Well	13.4	97	111-140	N/A	-large oak and beech with mast crowns -was part of stand 28 in last inventory, consider merging with stand 18
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	35	Log/Pole	11	97	Sugar Maple	Medium	>20 feet	Sapling
Beech	15	Log/Pole	10		Beech	Medium	10 - 20 feet	Sapling
Red Oak	25	XLog/Log	19	97	Ironwood	Medium	Variable	Sapling
Ironwood	3	Pole	5					
Bigtooth Aspen	3	Log	14					
Basswood	19	Log/Pole	12					

68	4119 - Mixed Northern Hardwoods	Sawtimber Well	1.3	97	81-110	N/A	This stand was left as area retention for the stand 28 clearcut. Smaller pocket to the north left does not meet minimum mapping rules to be a stand.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Basswood	19	Pole/Log	9		Ironwood	High	10 - 20 feet	Sapling
White Ash	6	Log/Pole	14		Sugar Maple	Low	Variable	Sapling
Beech	18	Log/Pole	10		White Ash	Medium	< 5 feet	Seeding
Bigtooth Aspen	3	Log	14		Red Oak	Low	Variable	Sapling
Ironwood	3	Pole	5		Beech	Medium	10 - 20 feet	Sapling
Red Oak	23	Log/XLog/Pole	17	97	Sugar Maple	Low	< 5 feet	Seeding
Sugar Maple	28	Log/Pole	10	97				