



Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61010

Entry Year 2018

Acreage: 1,966

County Benzie

Management Area: Benzie Outwash

Revision Date: 2016-05-03

Stand Examiner: Tim Webb

Legal Description:

T27N R13W Sections 19, 28-31, 33

Identified Planning Goals:

Compartment 10 is part of the Benzie Outwash management area (MA). Vegetation management in this MA will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character and threatened, endangered and special concern species, and provide for forest-based recreational uses and Native American non-commercial uses of forest products. Timber management for the next 10 years includes improving the age-class distribution of aspen and red pine. Northern hardwoods management includes continued selective or regeneration harvesting of northern hardwoods to achieve an uneven age-class structure or improve timber quality. Wildlife management objectives include increasing the structural complexity of northern hardwood communities for interior forest species and perpetuating early-successional communities for species adapted to young forests. Expected trends in this 10-year planning period are increased recreational pressure on recreational trails and introduced insect and disease concerns, especially emerald ash borer and beech bark disease.

There are several small to medium sized aspen regeneration harvests proposed throughout the compartment, including a couple of small patches within stands currently typed as northern hardwoods. In contrast, some stands typed as aspen will be allowed to succeed naturally to hardwoods, having poor quality mature quaking aspen over well-stocked maple saplings.

Soil and topography:

The compartment contains primarily Kaleva, Grattan, Benzonia and Shavenaugh sand soil types, with occasional inclusions of muck soils in wetlands. Most of the compartment is within a pitted outwash plain landscape, with rolling terrain and numerous, often steep-sided kettle depressions. State owned parcels in the southeast part of the compartment are on outwash plain, and are flat to gently rolling, with some lowland forest along the Platte River floodplain and adjacent small lakes.

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

There is fairly solid state forest ownership to the southwest, west, and northwest of the compartment. There is also substantial state land to the east in the vicinity of Lake Ann having concentrated recreational use. Lands north of the compartment are mainly private. Large blocks of private land separate state lands within the compartment, and consist of active and idle farmlands, rural residential parcels, private timberlands, gravel pits, and a small airport. To the south are more state lands along the Platte River and some private land blocks. Development is relatively light along the river and lakeshores.

Unique Natural Features:

A short stretch of the Platte River runs through the east side of the compartment. There are also several small lakes in that area, with some state land frontage on Upper Woodcock Lake. Numerous kettle depressions are present, some of which have wetlands. Eliza Lake is the most prominent of these. Red-shouldered hawk habitat is present in forest cover around these lakes and wetlands.

Archeological, Historical, and Cultural Features:

No significant features.

Special Management Designations or Considerations:

Scattered small patches/stands of older white pines and hemlocks can be retained to enhance local wildlife cover and biodiversity. Active management should be avoided on the floodplain and bluffs along the Platte River.

Watershed and Fisheries Considerations:

The Platte River and numerous small lakes are found within this compartment. The Platte River is a designated trout

stream with naturally reproducing populations of both brown trout and rainbow trout. Reasonable buffers (as outlined in Water Quality Management Practices on Forest Land) should be adhered to around all the lakes and ponds in this compartment. Existing buffers along Upper Woodcock Lake and the Platte River appear to be appropriate for the proposed treatments.

Wildlife Habitat Considerations:

Sandy soils predominate in compartment 10 and support large areas of aspen and mixed hardwoods. Natural disturbances on this landscape were wildfire and wind throws predominately. However, this compartment occupies a part of the landscape which may have been shielded from fire, to a degree. Some management for successional advanced hardwood/white pine stands is therefore fitting to this compartment. Hardwood treatments are typically designed to incorporate the preservation of within-stand tree species diversity, the retention of mature mast producing trees, and the protection of den, cavity, and downed trees. Beech bark disease and oak wilt issues are serious concerns for mast production. Steps should be taken to promote disease resistant species as well as to diversify the types of mast. Species benefiting from hardwood forests include northern goshawks, wild turkeys, gray squirrels, and eastern box turtles. Beech is particularly important to wildlife in these drier hardwood types. Rare woodland hawks have been known to nest in this area; proposed timber sales in the vicinity of active nests should be adjusted to comply with the established DNR hawk nest guidelines.

This compartment also has a history of aspen cutting toward increased age class diversity to benefit grouse, woodcock, golden-winged warbler, deer, and other species. Such early successional management will be continued in this area, with additional aspen harvests scheduled this period. Incorporating snags, leave trees, and downed material in these cuts will help to increase wildlife use and to replicate a wildfire-altered forest.

Pine plantations can also be found here and where possible, hardwoods should be encouraged within these plantations for within stand diversity. Management of pine stands here should consider incorporating small (2-5 acre) islands that are left relatively un-thinned within mature stands to provide winter roosting cover for turkeys.

Non-forested areas (openings) are an important community type on these typically fire driven landscapes. Several opening maintenance projects are proposed in the compartment to benefit openland species such as cedar waxwings, wild turkey, deer, blue racers, mourning doves, meadow voles, or red fox.

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 400 and 800 feet. Beneath the glacial drift are the Devonian Ellsworth and Antrim Shales. These shales are quarried for cement products. The nearest gravel pit is located just to the north and potential should be good on the uplands. This area is located northwest of the current Antrim Shale gas play. All State minerals are leased in this Compartment. The Antrim Shale appears to be pinching out in this area, but may have some potential.

Vehicle Access:

Access is reasonably good throughout the compartment for management and recreational use, except that the SENE of section 33 has no road frontage. Any new trails built for treatments should be closed off when no longer needed.

Survey Needs:

A survey is pending for the SENE of section 33.

Recreational Facilities and Opportunities:

A short stretch of the Platte River and a tributary are accessible from state land for walk-in fishing. The Shore-to-Shore equestrian & hiking trail traverses the compartment via Hooker and Burnt Mill roads. The Platte River Snowmobile Trail follows the south edge of section 31 along Oakley Road. Other recreational uses include hunting, berry picking, and mushrooming.

Fire Protection:

This area is protected by the Platte River DNR field office as well as by Almira Township Fire and Rescue. Access is not a real problem in this area. Fuel types here are primarily hardwood, and while there are some homes in the private land, urban interface is not too much of a problem. Close proximity to both the local VFD as well as the Platte River Field Office provide rapid response.

Additional Compartment Information:

There may be some minor trespass issues, particularly where private homes abut state property in section 33. The SWSE of section 33 is disjunct from other state lands and should be considered for disposal.

The following reports from the Inventory are attached:

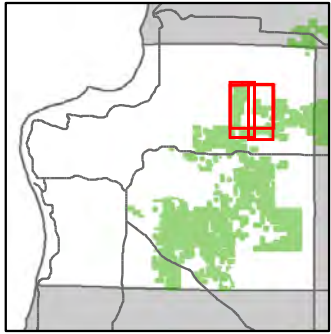
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

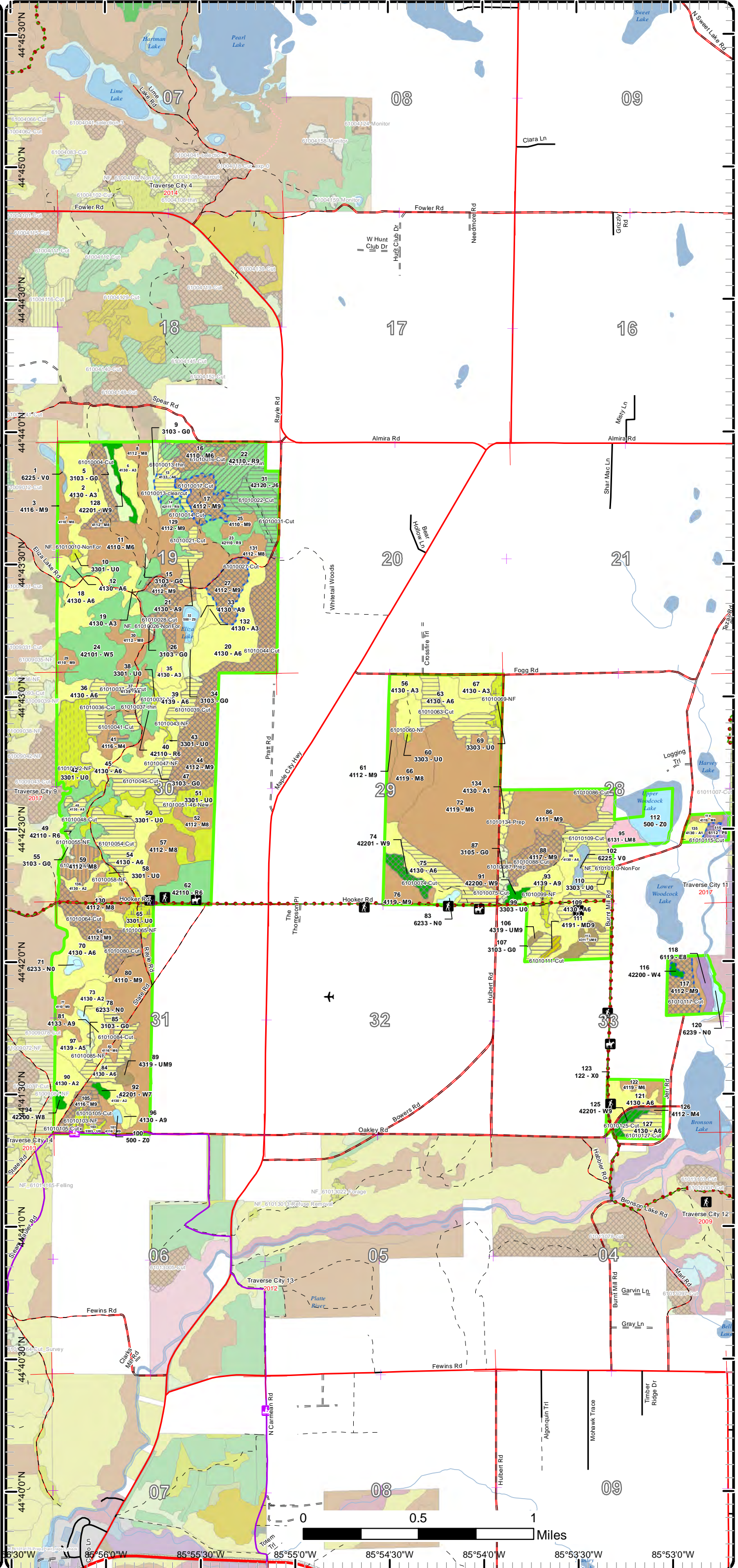
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 10
 T27N R13W 19, 28-31, 33
 County: Benzie
 Unit: Traverse City
 Mgmt Area: Benzie Outwash
 YOE: 2018
 Acres: 1966 GIS Calculated
 Examiner: Tim Webb
 Map Revised: 5/25/2016
 Map Phase: Web-Post

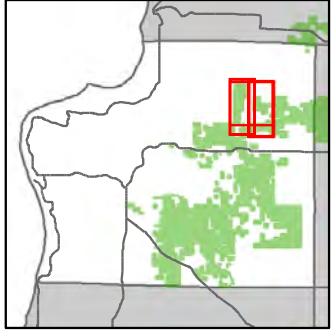


- Miris Corners
- + Remonumented Section Corners
- Airport
- Bike Trails
- Hiking Trails
- Horse Trails
- Ski Trails
- Snowmobile Trails
- Designated Hiking Trails
- Designated Bicycle Trails
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- Gravel Roads
- - Poor Dirt Roads
- - County Poor Dirt Roads
- Rivers
- Compartment Boundary
- Treatments with Site Conditions
- Site Prep
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Other Treatment - See Comments
- Opening Maintenance
- Mowing
- Other Harvest - See Comments
- Thinning (Crown, Low, Systematic)
- Shelter Wood (w/Reserves)
- Seed Tree (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Fores
- 611 - Lowland Deciduous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes

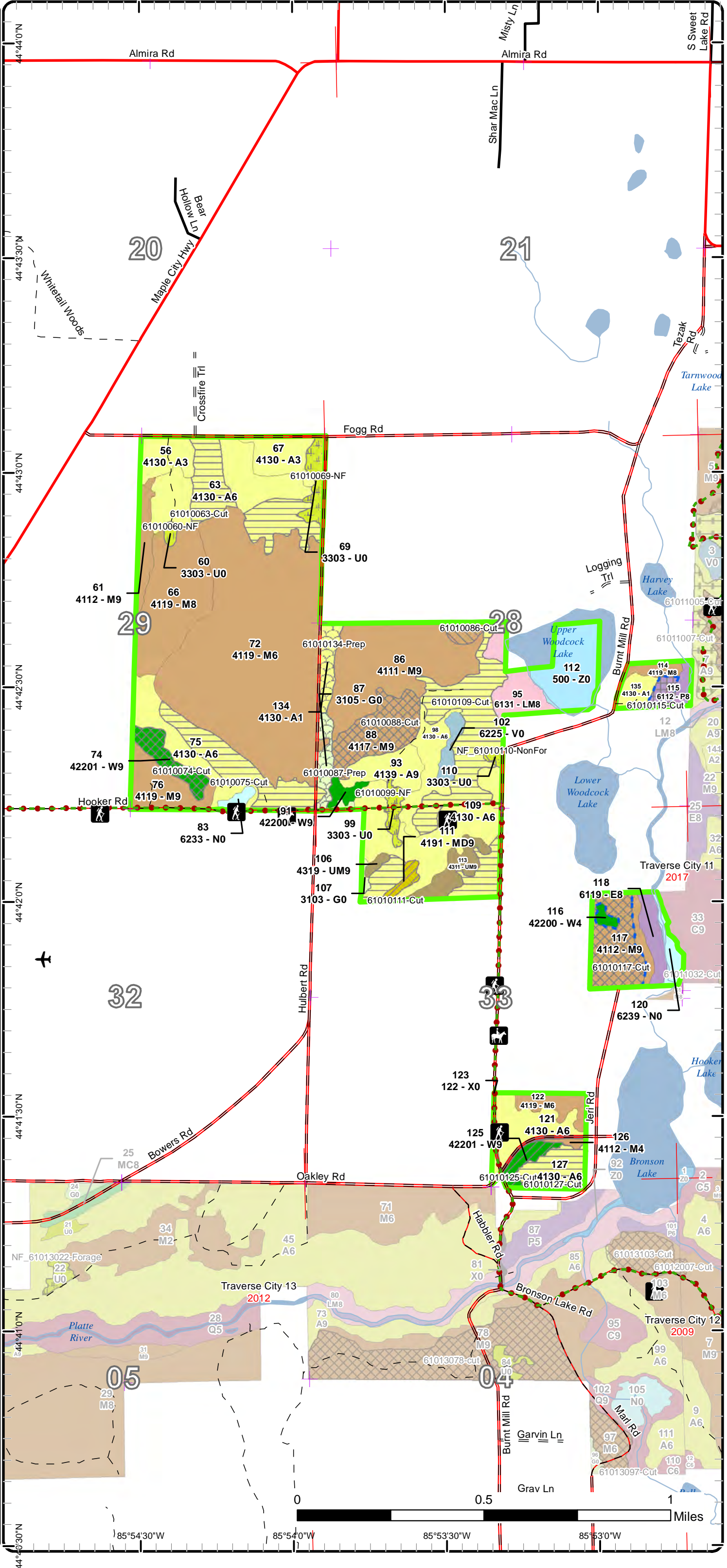


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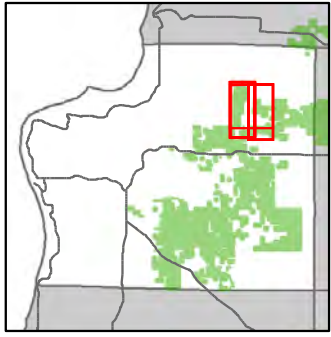


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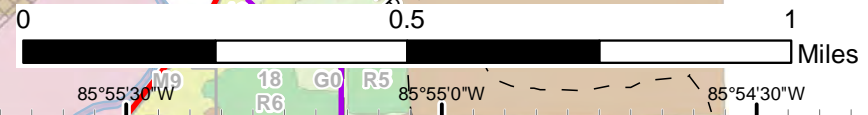
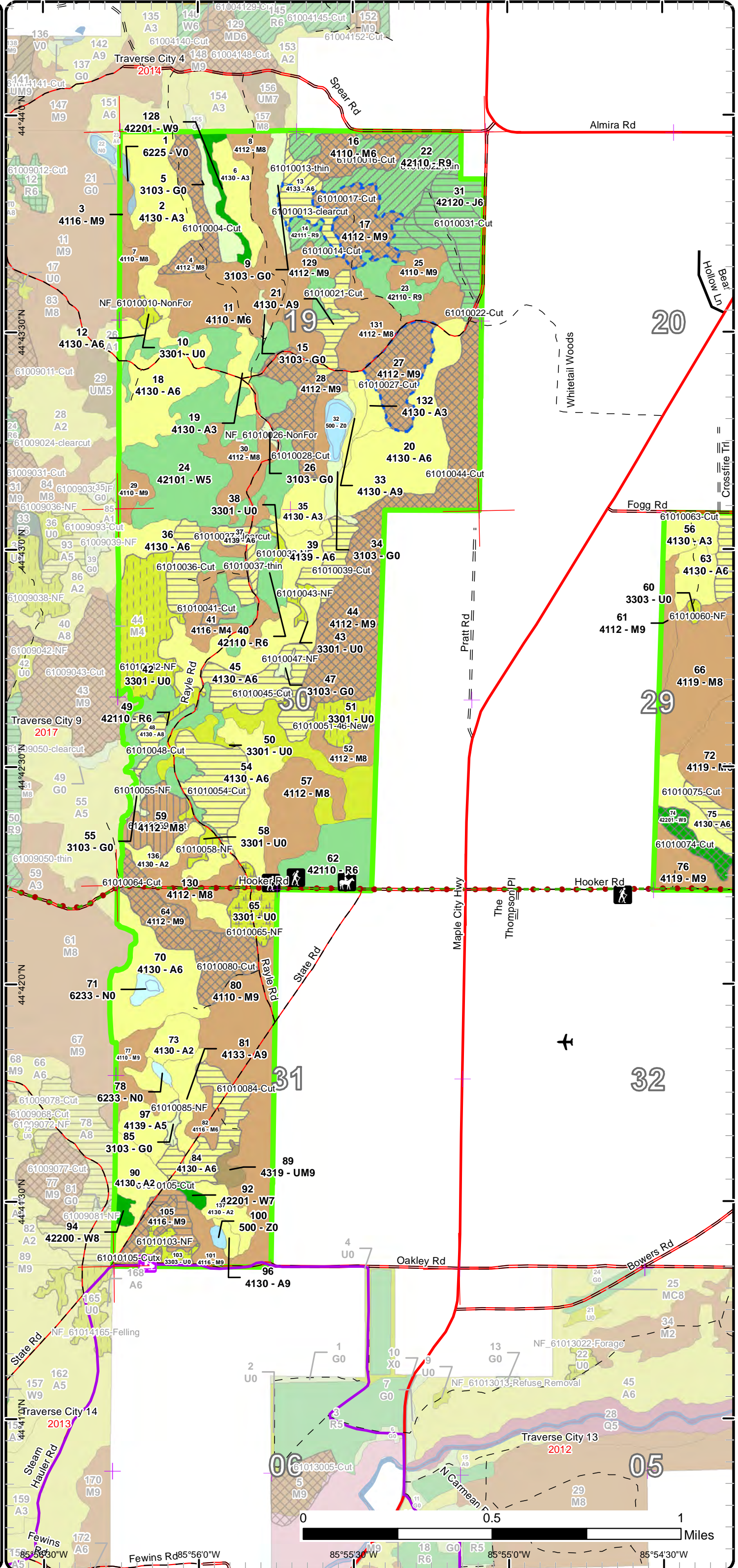


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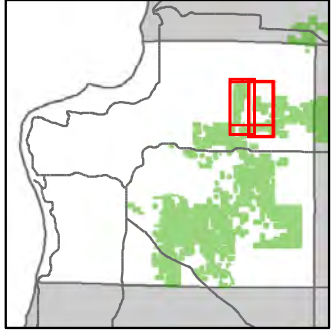


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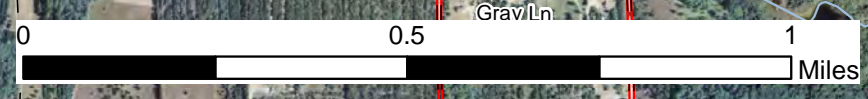
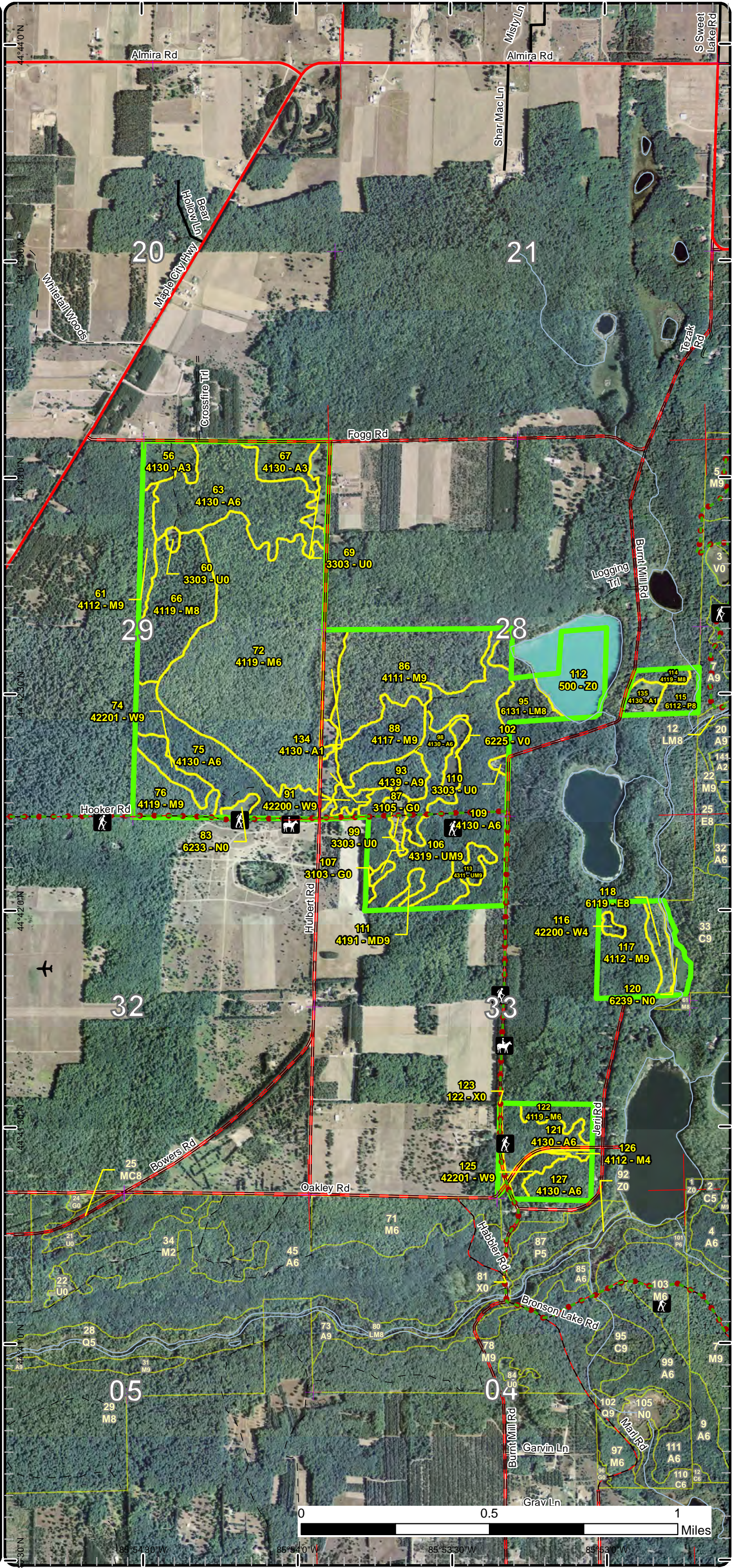


Stand Boundary Map

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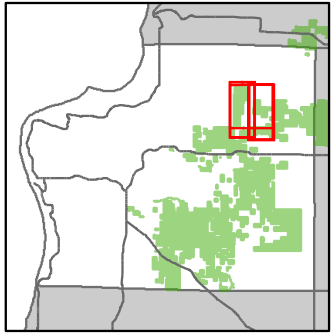
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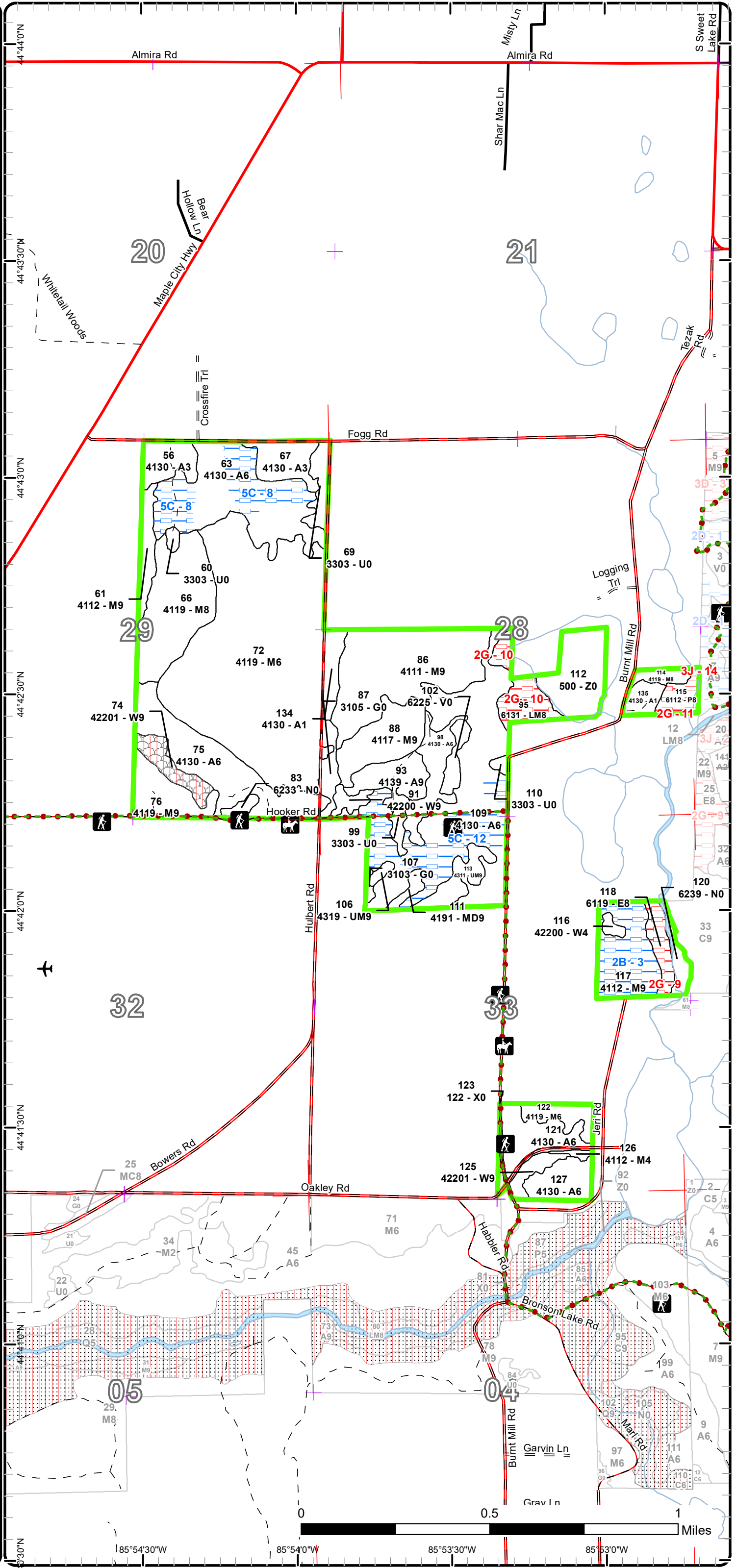
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 185°54'30" W, 185°54'00" W, 185°53'30" W, 185°53'00" W

Special Conservation Areas & Site Conditions Map

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 Map Phase: Pre-Review

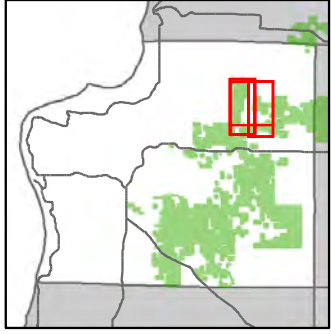


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- ▭ Compartment Boundary
- ▭ SCA Removal
- ▭ Available w/ Constraints
- ▭ Unavailable
- 2B: Unknown if access through adjacent landowner(s) is possible
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Special Conservation Areas
- Cold Water Streams
- Cold Water Lakes
- Other SCA (No Category Assigned)

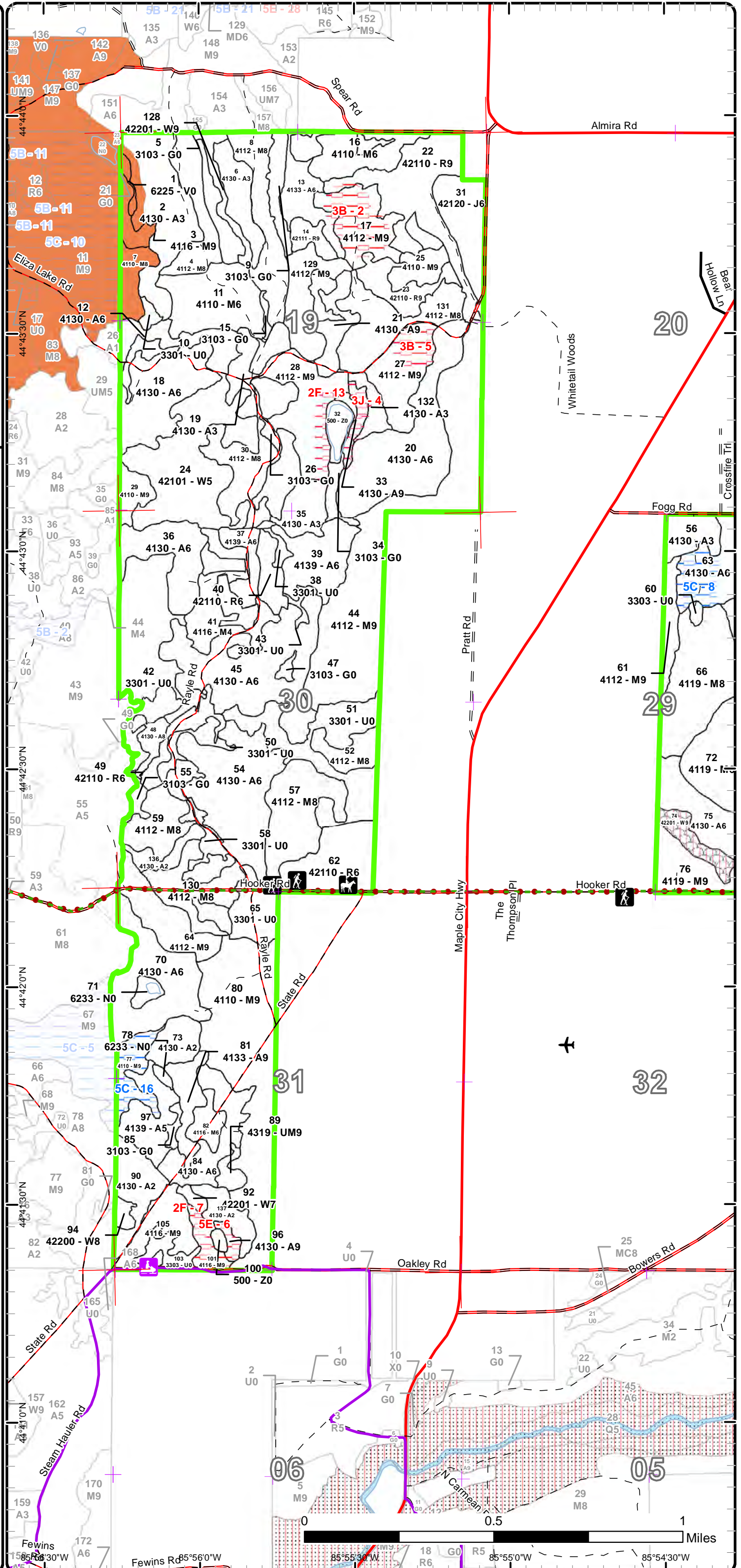


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- ▭ Available w/ Constraints
- ▭ Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 3B: Threatened, endangered, and special concern species/communities
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Special Conservation Areas
- Cold Water Streams
- Cold Water Lakes
- Other Habitat Area
- Other SCA (No Category Assigned)



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	96	47	76	6	352	82	0	2	4	0	0	0	0	0	0	0	15	680
Bog	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Herbaceous Openland	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Jack Pine	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	20
Low-Density Trees	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
Lowland Aspen/Balsam Poplar	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	12
Marsh	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Mixed Upland Deciduous	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Northern Hardwood	0	0	0	0	0	6	0	0	0	72	208	397	7	0	0	0	0	119	809
Red Pine	0	0	0	59	0	0	0	60	0	0	0	0	0	0	0	0	0	0	119
Upland Mixed Forest	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	9	13
Urban	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Water	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
White Pine	0	0	0	0	0	2	79	0	2	0	0	0	0	0	0	0	0	23	106
Total	192	96	47	135	6	366	161	84	4	76	211	409	7	0	0	0	7	166	1967



Report 2 – Treatment Summary

Traverse City Mgt. Unit
Year of Entry:

Acres of Harvest

Compartment 10
Total Compartment Acres: 1,966

Commercial Harvest - 502
Harvests with Site Condition - 68
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	212	0	0	0	0	7	0	0	0	220
Jack Pine	19	0	0	0	0	0	0	0	0	19
Lowland Aspen/Balsam Poplar	0	0	0	3	0	0	0	0	0	3
Mixed Upland Deciduous	0	0	0	0	0	3	0	0	0	3
Northern Hardwood	9	241	0	0	14	0	0	0	3	268
Red Pine	11	0	0	0	0	33	0	0	0	45
White Pine	0	8	0	0	0	4	0	0	0	12
Total	252	249	0	3	14	48	0	0	3	569

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	569	12	0	0	0	0	0	0	90	671
Next Step	0	68	43	0	0	19	562	0	0	691
Total	569	80	43	0	0	19	562	0	90	1363



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
4	61010004-Cut	15.7	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	100	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Uneven-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Select cut, reducing BA to about 90. Focus on cutting lower quality cherry and multi-stemmed maple. Release maple poles where possible.
Specs: Shortwood only.

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: Maple and cherry seedlings and stump sprouts are desired, but initial regeneration will likely be dominated by beech and ironwood in the near-term.

Other Comment: Tough slope in places.

Proposed Start Date: 10/01/2017

13	61010013-clearcut	7.9	4133 - Aspen, Mixed Pine	Poletimber Well	52	141-170	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition: Community/Species of Concern or T&E

Prescription Clearcut with mixed marked residuals (pine, cherry, maple, some aspen). Create some CWD during harvest.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: aspen sprouts with some white pine seedlings and mixed hardwood seedlings and stump sprouts

Other Comment:

Proposed Start Date: 10/01/2017

13	61010013-thin	4.9	4133 - Aspen, Mixed Pine	Poletimber Well	52	141-170	Harvest	Low Thinning	42201 - Natural White Pine, Mixed Deciduous	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Mark for a thinning, with a residual BA of about 110. Remove most of the aspen and mark other species to improve residual spacing & quality.
Specs:

Next Step Treatments:

Acceptable Regen:

Other Comment: Manage for mixed pine/hardwood, along with the NW patch of stand 22, to create one future stand.

Proposed Start Date: 10/01/2017

14	61010014-Cut	5.1	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	61	171-200	Harvest	Low Thinning	42111 - Planted Red Pine, Mixed Deciduous	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Mark for thinning down to 120-130 BA. Cut most of the aspen, thin the RP, WP, RM; mark BC to improve quality.
Specs:

Next Step Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
16	61010016-Cut	15.2	4110 - Sugar Maple Association	Poletimber Well	97	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Uneven-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Select cut; residual BA about 90. Target removal of most of the aspen and beech. Mark to release more promising pole & small sawlog maple. Take out beech saplings as much as possible.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: Maple and cherry seedlings and stump sprouts are preferred regeneration in gaps. However, beech and ironwood regeneration will likely dominate initially.

Other Comment:

Proposed Start Date: 10/01/2017

17	61010017-Cut	18.8	4112 - Maple, Beech, Cherry Association	Sawtimber Well	88	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Uneven-Aged	Proposal
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Habitat Cut: No

Site Condition: Community/Species of Concern or T&E

Prescription Mark for selection harvest with a residual BA of about 90. Target low quality & multi-stemmed trees for removal. Create some CWD during harvest.
Specs: Retain some mast bearing trees.

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: Maple and cherry seedlings and sprouts are preferred regeneration; beech and ironwood will also likely regenerate.

Other Comment:

Proposed Start Date: 10/01/2017

21	61010021-Cut	9.4	4130 - Aspen	Sawtimber Well	52	Unspecified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut to 2" dbh. Mark scattered mixed-species trees for retention, plus retain all red pine. Create some CWD during harvest.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: aspen sprouts

Other Comment:

Proposed Start Date: 10/01/2017

22	61010022-Cut	11.4	42110 - Planted Red Pine	Sawtimber Well	61	141-170	Harvest	Clearcut with Retention	42110 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut along with adjacent jack pine stand. Incorporate some red pine, along with jack pine/hardwoods, into retention islands.
Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)
Treatments:

Acceptable Regen: planted red pine

Other Comment: Delay replanting until anticipated jack pine volunteers in adjacent stand grow to 3-6' tall, then roller chop-trench-replant.

Proposed Start Date: 10/01/2017



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
22 61010022-thin	28.2	42110 - Planted Red Pine	Sawtimber Well	61	141-170	Harvest	Low Thinning	42110 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Mark for thinning down to a residual BA of about 120.

Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

27 61010027-Cut	19.2	4112 - Maple, Beech, Cherry Association	Sawtimber Well	96	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Uneven-Aged	Proposal
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Habitat Cut: No

Site Condition: Community/Species of Concern or T&E

Prescription Cut most of the aspen and beech, thin the rest. Create some CWD and regen holes. Leave a few big, old beech for wildlife.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable maple, cherry seedlings & stump sprouts preferred in canopy gaps, plus some aspen sprouts where mature aspen gets removed; ironwood and
Regen: beech regen may dominate initially

Other
Comment:

Proposed Start Date: 10/01/2017

28 61010028-Cut	18.6	4112 - Maple, Beech, Cherry Association	Sawtimber Well	91	111-140	Harvest	Group Selection	4112 - Maple, Beech, Cherry Association	Uneven-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Mark for a selection cut, with large regen. holes or patch cuts at the aspen clones. Target residual BA: about 90, outside of regen gaps.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable aspen sprouts in larger regen gaps, plus some additional red maple/cherry seedlings and stump sprouts
Regen:

Other Steepest slopes of the parent stand, leading down to Eliza Lake, have been excluded from the proposed sale.
Comment:

Proposed Start Date: 10/01/2017

31 61010031-Cut	19.0	42120 - Planted Jack Pine	Poletimber Well	61	Unspecified	Harvest	Clearcut with Retention	42110 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut along with part of the adjacent red pine stand. Incorporate some red pine, along with jack pine/hardwoods, into retention islands.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)
Treatments:

Acceptable planted red pine
Regen:

Other Delay replanting until anticipated jack pine volunteers grow to 3-6' tall, then roller chop-trench-replant.
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
36	61010036-Cut	11.5	4130 - Aspen	Poletimber Well	42	Unspec ified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Clearcut to 2" diameter. Retain scattered small islands where hardwoods are concentrated, totaling 1/2 to 1 acre. Create some CWD: leave 1-2
Specs: down trees per acre.

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable aspen sprouts, along with some mixed hardwood seedlings and stump sprouts
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

37	61010037-clearcut	4.9	4139 - Aspen, Mixed Deciduous	Poletimber Well	42	Unspec ified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Clearcut to a 2" diameter, retaining scattered trees, particularly some hardwoods along the road. Create some CWD during harvest.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable aspen sprouts, along with some mixed hardwood seedlings and stump sprouts
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

37	61010037-thin	2.6	4139 - Aspen, Mixed Deciduous	Poletimber Well	42	Unspec ified	Harvest	Low Thinning	4112 - Maple, Beech, Cherry Association	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Thin to 80-90 residual BA, removing low quality and multi-stemmed trees and releasing potential crop trees.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

38	61010038-NF	1.7	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	31021 - Cool Season Grass		Proposal
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Habitat Cut: No **Site Condition:**

Prescription This opening is dominated by bracken. Mechanically treat bracken, selectively remove woody encroachment to facilitate planting to annual rye for several years and then convert to an appropriate perennial pasture mix (i.e. clover/alfalfa) or native mix if soils will allow. Consider planting to RGS clover mix.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Periodic maintenance such as mowing, fertilization, reseeding, burning, and/or removal of woody encroachment.
Comment:

Proposed Start Date: 10/01/2017



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
39 61010039-Cut	9.5	4139 - Aspen, Mixed Deciduous	Poletimber Well	42	Unspecified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal

Habitat Cut: No Site Condition:

Prescription Clearcut to a 2" diameter. Create some CWD during harvest, 1-2 down trees per acre. Leave 2-3 retention islands including mixed hardwoods and aspen, totaling about 1/2 to 1 acre.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable aspen sprouts, along with some mixed hardwood seedlings and stump sprouts
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

41 61010041-Cut	2.9	4116 - Mixed N. Hardwood - Aspen	Poletimber Poor	60	1-50	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No Site Condition:

Prescription Clearcut. Mark scattered hardwoods and a few aspen for retention.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable aspen sprouts, plus some mixed hardwood seedlings and stump sprouts
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

42 61010042-NF	33.7	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Brush Cutting	320 - Upland Shrub		Proposal
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Habitat Cut: No Site Condition:

Prescription Preferably via adjacent timber sales. Selectively hand fell woody encroachment (focus on red maple and some cherry) to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. As needed, treat site to remove exotics. Then seed to site appropriate grasses for wildlife food and cover. Consider seeding in native grasses and forbs.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.
Comment:

Proposed Start Date: 10/01/2017

43 61010043-NF	1.8	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/ Grass Planting	31021 - Cool Season Grass		Proposal
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Habitat Cut: No Site Condition:

Prescription This opening is dominated by bracken. Mechanically treat bracken, selectively remove woody encroachment to facilitate planting to annual rye for several years and then convert to an appropriate perennial pasture mix (i.e. clover/alfalfa) or native mix if soils will allow. Consider planting to RGS clover mix.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Periodic maintenance such as mowing, fertilization, reseeding, burning, and/or removal of woody encroachment.
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
44	61010044-Cut	79.4	4112 - Maple, Beech, Cherry Association	Sawtimber Well	100	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Uneven-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Select cut per Compleat Marker guidelines to a residual BA of about 90. Could specify to cut all but a few green-marked beech and aspen; mark other species to cut. Create some CWD during harvest.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: maple and cherry seedlings & stump sprouts preferred in canopy gaps; ironwood and beech regen may dominate initially

Other Comment:

Proposed Start Date: 10/01/2017

45	61010045-Cut	22.7	4130 - Aspen	Poletimber Well	42	Unspec ified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut to 2" diameter. Retain scattered small islands where hardwoods are concentrated, totaling 1 to 1.5 acres. Create some CWD: leave 1-2 down trees per acre.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: aspen sprouts, along with some mixed hardwood seedlings and stump sprouts

Other Comment:

Proposed Start Date: 10/01/2017

47	61010047-NF	1.3	3103 - Rubus-Fern	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	31021 - Cool Season Grass		Proposal
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Habitat Cut: No

Site Condition:

Prescription This opening is dominated by bracken. Mechanically treat bracken, selectively remove woody encroachment to facilitate planting to annual rye for several years and then convert to an appropriate perennial pasture mix (i.e. clover/alfalfa) or native mix if soils will allow. Consider planting to RGS clover mix.
Specs:

Next Step Treatments:

Acceptable Regen:

Other Comment: Access may be difficult and slope could be a factor in tilling. If tillable, treat with stands 38 and 43. Periodic maintenance such as mowing, fertilization, reseeding, burning, and/or removal of woody encroachment.

Proposed Start Date: 10/01/2017

48	61010048-Cut	4.9	4130 - Aspen	Sawtimber Medium	42	Unspec ified	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut to 2" diameter. Leave a residual island (maybe just north of the south arm with mixed maple poles and some older trees) and/or mark some individual trees for retention (including any oak). Create some CWD.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: aspen sprouts, along with some mixed hardwood seedlings and stump sprouts

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
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51	61010051-46- New	10.0	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Brush Cutting	320 - Upland Shrub		Proposal
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Habitat Cut: No

Site Condition:

Prescription If FRD agrees, include this NE lobe of this stand in adjacent timber sales and harvest woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. WLD can mark trees to cut or to leave.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

54	61010054-Cut	21.1	4130 - Aspen	Poletimber Well	42	Unspec ified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut to 2" diameter. Retain scattered small islands where hardwoods are concentrated, totaling about 1 acre. Create some CWD: leave 1-2 down trees per acre.

Next Step Monitoring, Natural Regen (Re-Inventary)
Treatments:

Acceptable aspen sprouts, along with some mixed hardwood seedlings and stump sprouts
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

55	61010055-NF	2.5	3103 - Rubus-Fern	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	31021 - Cool Season Grass		Proposal
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Habitat Cut: No

Site Condition:

Prescription This opening is dominated by bracken. Mechanically treat bracken, selectively remove woody encroachment to facilitate planting to annual rye for several years and then convert to an appropriate perennial pasture mix (i.e. clover/alfalfa) or native mix if soils will allow. Consider planting to RGS clover mix.

Next Step
Treatments:

Acceptable
Regen:

Other Periodic maintenance such as mowing, fertilization, reseeding, and/or removal of woody encroachment.
Comment:

Proposed Start Date: 10/01/2017

58	61010058-NF	3.6	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	31021 - Cool Season Grass		Proposal
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Habitat Cut: No

Site Condition:

Prescription This opening is dominated by bracken. Mechanically treat bracken, selectively remove woody encroachment to facilitate planting to annual rye for several years and then convert to an appropriate perennial pasture mix (i.e. clover/alfalfa) or native mix if soils will allow. Consider planting to RGS clover mix.

Next Step
Treatments:

Acceptable
Regen:

Other Periodic maintenance such as mowing, fertilization, reseeding, and/or removal of woody encroachment.
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
59	61010059-Cut	13.9	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	96	51-80	Harvest	Shelterwood with Retention	4112 - Maple, Beech, Cherry Association	Uneven-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Cut all but a few of the beech, salvaging before BBD mortality; maybe mark a few trees of other species, especially if needed for beech falling paths.
Specs: Result would be somewhat of a shelterwood cut with a residual BA of 30-50. Snow-free season harvest is preferred.

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Regen: Mixed maple and cherry regeneration is preferred, but beech and ironwood are likely to dominate much of the stand, at least in the short run.

Other Comment: Probable result will likely be a lot of beech/ironwood regeneration, but BBD mortality would have the same result. Some scarification during harvest may increase the odds of some maple regeneration.

Proposed Start Date: 10/01/2017

60	61010060-NF	1.2	3303 - Mixed Low Density Trees	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	31021 - Cool Season Grass		Proposal
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Habitat Cut: No

Site Condition:

Prescription This opening is dominated by bracken. Mechanically treat bracken, selectively remove woody encroachment (possibly via nearby timber sale) to facilitate planting to annual rye for several years and then convert to an appropriate perennial pasture mix (i.e. clover/alfalfa) or native mix if soils will allow. Consider planting to RGS clover mix. Will need to remove some stumps.

Next Step
Treatments:

Acceptable Regen:

Other Comment: Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, or removal of woody encroachment.

Proposed Start Date: 10/01/2017

63	61010063-Cut	24.2	4130 - Aspen	Poletimber Well	50	Unspec ified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut to 2" diameter. Retain scattered small islands where hardwoods & oaks are concentrated, totaling about 1 acre. Leave a concentration of hardwoods along Fogg Rd. (maybe set up a separate small thinning unit there, or mark numerous residuals). Leave some scattered mature oak and pine. Create some CWD: leave 1-2 down trees per acre.

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: aspen sprouts, along with some mixed hardwood and oak seedlings and stump sprouts

Other Comment: Consider dormant season cut to maximize aspen resprouting and therefore minimize spread of autumn olive.

Proposed Start Date: 10/01/2017

64	61010064-Cut	17.4	4112 - Maple, Beech, Cherry Association	Sawtimber Well	107	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Uneven-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Select cut to 80-90 residual BA; hit beech hard. Create some CWD during harvest (1 tree/ac.).
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: Maple and cherry regeneration is preferred, but ironwood and beech may dominate the regeneration in the short run.

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
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65	61010065-NF	12.4	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Fruit Tree/Shrub Planting	320 - Upland Shrub		Proposal
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Habitat Cut: No **Site Condition:**

Prescription Plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, or removal of woody encroachment.
Comment:

Proposed Start Date: 10/01/2017

69	61010069-NF	6.4	3303 - Mixed Low Density Trees	Nonstocked		Unspecified	NonForestMgt	Fruit Tree/Shrub Planting	320 - Upland Shrub		Proposal
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Habitat Cut: No **Site Condition:**

Prescription Plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.
Comment:

Proposed Start Date: 10/01/2017

74	61010074-Cut	7.9	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	110	111-140	Harvest	Single Tree Selection	42201 - Natural White Pine, Mixed Deciduous	Uneven-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Mark for selection down to 90-100 residual BA. Take out much of the cherry, some older sugar maple, multi-stemmed red maple, and aspen; leave most or all of the pine and hemlock. Create CWD, about 2 down trees or logs per acre.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable White pine and mixed hardwood seedlings are desired regeneration, plus potentially some hemlock.
Regen:

Other Down logs will hopefully provide substrate for hemlock regeneration, as well as wildlife habitat structure.
Comment:

Proposed Start Date: 10/01/2017

75	61010075-Cut	20.4	4130 - Aspen	Poletimber Well	46	Unspecified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Clearcut to 2" diameter. Retain scattered small islands where hardwoods & pines are concentrated, totaling about 1 acre. Create some CWD: leave 1-2 down trees per acre.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable aspen sprouts, along with some mixed hardwood seedlings and stump sprouts and white pine seedlings
Regen:

Other A 50' buffer should be left along the SE edge of the wetland.
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
80	61010080-Cut	11.7	4110 - Sugar Maple Association	Sawtimber Well	108	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Uneven-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Mark for selection to a residual BA of 80-90. Hit the beech, large basswood, and aspen hard. Create some CWD during harvest.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: Sugar maple, basswood and cherry are preferred species for regeneration in gaps.

Other Comment:

Comment:

Proposed Start Date: 10/01/2017

84	61010084-Cut	17.7	4130 - Aspen	Poletimber Well	43	Unspecified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut to 2" diameter. Retain scattered small islands where hardwoods are concentrated, totaling about 1 acre. Create some CWD: leave 1-2

Specs: down trees per acre. Also retain all elm, and some veteran white pine.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: aspen sprouts, along with some mixed hardwood seedlings and stump sprouts, and some white pine seedlings

Other Comment:

Comment:

Proposed Start Date: 10/01/2017

85	61010085-NF	1.8	3103 - Rubus-Fern	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/ Grass Planting	31021 - Cool Season Grass		Proposal
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Habitat Cut: No

Site Condition:

Prescription This opening is dominated by bracken. Mechanically treat bracken, selectively remove woody encroachment to facilitate planting to annual rye for several years and then convert to an appropriate perennial pasture mix (i.e. clover/alfalfa) or native mix if soils will allow. Consider planting to RGS clover mix.

Next Step

Treatments:

Acceptable Regen:

Other Comment:

Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Comment:

Proposed Start Date: 10/01/2017

86	61010086-Cut	3.3	4111 - S.Maple, Hard Mast Association	Sawtimber Well	108	81-110	Harvest	Other - Specify	4111 - S.Maple, Hard Mast Association	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Remove all red oak due to oak wilt infection.

Specs:

Next Step

Treatments:

Acceptable Regen:

Other Comment:

Removal will likely be in conjunction with oak wilt treatment on adjacent private land.

Comment:

Proposed Start Date: 08/01/2016



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
87	61010087-Prep	5.5	3105 - Mixed Upland Herbaceous	Nonstocked		Unspecified	SitePrep	Trenching	42110 - Planted Red Pine	Two-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Trench and plant in conjunction with neighboring stand 134 to the north. Weave planting trenches around existing trees as much as possible.
Specs:

Next Step Planting, Interplant
Treatments:

Acceptable Regen: Planted red pine; some encroachment of aspen sprouts into this stand is also expected when the adjacent aspen clone gets cut.

Other Comment: Stand 134 to north to be roller chopped/trenched/planted; this stand(87) will not need roller chopping. Be alert for potential homestead evidence. If found, work around at an appropriate distance.

Proposed Start Date: 09/01/2016

88	61010088-Cut	18.8	4117 - Mixed N. Hardwood - Pine	Sawtimber Well	103	141-170	Harvest	Single Tree Selection	4117 - Mixed N. Hardwood - Pine	Uneven-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Select cut, taking out most of the beech. Residual BA target about 100. Create some CWD for habitat and hemlock nurse logs.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventary)
Treatments:

Acceptable Regen: Maple, white pine, and hemlock are preferred regeneration; some beech may also regenerate in canopy gaps.

Other Comment:

Proposed Start Date: 10/01/2017

99	61010099-NF	3.9	3303 - Mixed Low Density Trees	Nonstocked		Unspecified	NonForestMgt	Fruit Tree/Shrub Planting	320 - Upland Shrub		Proposal
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Habitat Cut: No **Site Condition:**

Prescription Plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Specs:

Next Step
Treatments:

Acceptable Regen:

Other Comment: Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, or removal of woody encroachment.

Proposed Start Date: 10/01/2017

103	61010103-NF	5.9	3303 - Mixed Low Density Trees	Nonstocked		Unspecified	NonForestMgt	Fruit Tree/Shrub Planting	320 - Upland Shrub		Proposal
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Habitat Cut: No **Site Condition:**

Prescription Plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Specs:

Next Step
Treatments:

Acceptable Regen:

Other Comment: Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, or removal of woody encroachment.

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
105	61010105-Cut	6.0	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	96	81-110	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Clearcut to 2" diameter. Retain scattered small clumps of hardwoods and a few mature aspen and any cavity trees. Create some CWD: leave 1-2
Specs: down trees per acre.

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable aspen sprouts, along with some mixed hardwood seedlings and stump sprouts
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

105	61010105-Cutx	8.0	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	96	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Uneven-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Mark for selection harvest: cut most of the aspen and mark hardwoods lightly; residual BA 70-80. Reduce multi-stemmed maple. Create some
Specs: CWD. Employ pertinent sale specifications to protect the snowmobile trail.

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Sugar maple, basswood, and white pine are preferred regeneration species. Some aspen in larger gaps is also acceptable.
Regen:

Other Initial BA is low, so not much hardwood should be marked in addition to the aspen to be removed. Intent is to capture aspen before it deteriorates
Comment: any more despite low overall BA and move stand to long-term hardwood management.

Proposed Start Date: 10/01/2017

109	61010109-Cut	47.6	4130 - Aspen	Poletimber Well	48	Unspecified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Scatter retention islands (total 2-3 acres) around the sale area with mixed hardwoods, oak, pine, and aspen. Consider leaving all oak, all red pine,
Specs: and white pine over 18" dbh. Create some CWD, 1-2 downed trees per acre. Leave a filter strip or uncut fringe along the edge of the adjacent bog.

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable aspen sprouts, along with some mixed hardwood/oak seedlings and stump sprouts, and white pine seedlings
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

111	61010111-Cut	2.5	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	69	111-140	Harvest	Low Thinning	4191 - Mixed Upland Deciduous with Conifer	Uneven-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Thin to a residual BA of 100-110. Take out much of the aspen, plus low quality stems of other species.
Specs:

Next Step
Treatments:

Acceptable Some white pine regeneration is acceptable.
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
115	61010115-Cut	3.0	6112 - Lowland Aspen	Sawtimber Medium	49	81-110	Harvest	Seed Tree with Retention	6139 - Mixed Lowland Forest	Two-Aged	Proposal
Habitat Cut: No			Site Condition: Too Wet								
<u>Prescription</u> Mark about 10-20 BA of mixed residual species; cut the rest.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable Regen:</u> quaking aspen, along with any mixture of red maple, basswood, yellow birch, cedar, hemlock, or white pine											
<u>Other Comment:</u> Harvest depends on adequate drying of the soil to prevent rutting. The sale will only be feasible if done in conjunction with other stands prescribed in the adjacent compartment to the east, the landing for which will likely be adjacent to this stand on top of the slope.											
<u>Proposed Start Date:</u> 10/01/2016											
117	61010117-Cut	18.6	4112 - Maple, Beech, Cherry Association	Sawtimber Well	92	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Uneven-Aged	Proposal
Habitat Cut: No			Site Condition: Unknown Access								
<u>Prescription</u> Select cut, taking most of the beech and leaving most of the oak. Avoid cutting hemlock. Residual BA: 80-90. Inclusion of planted spruce/pine (west edge) should be thinned as well.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable Regen:</u> Sugar maple, basswood, cherry, and white pine are all acceptable. Some beech and ironwood are likely as well, but less desirable.											
<u>Other Comment:</u> Steep slopes on the east side of the stand are excluded from the sale. Best (only?) access is via private land to the west.											
<u>Proposed Start Date:</u> 10/01/2017											
125	61010125-Cut	4.4	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	71	81-110	Harvest	Low Thinning	42201 - Natural White Pine, Mixed Deciduous	Uneven-Aged	Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Remove most of the aspen and mark other species to improve spacing and aesthetics along the road.											
<u>Specs:</u>											
<u>Next Step</u>											
<u>Treatments:</u>											
<u>Acceptable Regen:</u>											
<u>Other Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2017											
127	61010127-Cut	10.7	4130 - Aspen	Poletimber Well	50	Unspecified	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Clearcut with residuals. Vary the retention by marking some oak and pine and creating some leave islands, possibly including some of the smaller/denser pole timber patches. Cut most of the older, wolfy maple.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable Regen:</u> aspen sprouts, along with some mixed hardwood & oak seedlings and stump sprouts, plus some white pine seedlings											
<u>Other Comment:</u> Note that there are several adjacent homes.											
<u>Proposed Start Date:</u> 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
134	61010134- Prep	6.8	4130 - Aspen	Sapling Poor	6	Immature	SitePrep	Roller Chopping	42111 - Planted Red Pine, Mixed Deciduous	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Roller chop ironwood regeneration; and maybe part way into aspen regen patches to restart sprouts that have heavy antler-rubbing damage. Trench
Specs: and plant red pine after roller chopping.

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)
Treatments:

Acceptable planted red pine, white pine & oak volunteers, and aspen sprouts.
Regen:

Other
Comment:

Proposed Start Date: 09/01/2016

10	NF_61010010- NonFor	1.8	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Brush Cutting	3301 - Low Density Deciduous Trees		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription --Stephen Griffith : 10/31/2006 comments: Hand fell some woody encroachment. Leave some mast producing species uncut.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

26	NF_61010026- NonFor	1.0	3103 - Rubus-Fern	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	31021 - Cool Season Grass		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Plant cool season grasses.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

110	NF_61010110- NonFor	1.0	3303 - Mixed Low Density Trees	Nonstocked		Unspec ified	NonForestMgt	Mowing	3105 - Mixed Upland Herbaceous		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription MOW AND FERTILIZE EXISTING COOL SEASON GRASSES. HAND FELL SOME WOODY ENCROACHMENT. Leave some mast producing
Specs: species uncut.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

**Total Treatment
Acreage Proposed: 671.3**

Report 4 – Site Conditions

Traverse City Mgt. Unit

Tim Webb : Examiner

Compartment: 10

Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions						
		With Condition	Not Available		2B	5C	2F	2G	3B	3J	5E
680	615	58	8	Aspen		58			1	5	2
6	6	0	0	Bog							
35	35	0	0	Herbaceous Openland						0	
20	20	0	0	Jack Pine							
109	109	0	0	Low-Density Trees							
6	0	0	6	Lowland Aspen/Balsam Poplar				3		3	
7	0	0	7	Lowland Deciduous	0			7			
12	0	0	12	Lowland Mixed Forest				12			
11	11	0	0	Marsh							
3	3	0	0	Mixed Upland Deciduous							
809	744	32	33	Northern Hardwood	22	10	12		21		
119	118	0	1	Red Pine					1		
13	13	0	0	Upland Mixed Forest							
3	3	0	0	Urban							
27	27	0	0	Water							
106	106	0	0	White Pine	0						
1,966	1,810	90	66	Total Forested Acres	22	68	12	22	22	8	2
	92%	5%	3%	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
2	Unavailable	3B: Threatened, endangered, and special concern species/communities	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Tim Webb : Examiner

Compartment: 10

Year of Entry: 2018

3	Available	2B: Unknown if access through adjacent landowner(s) is possible	22	2I: Survey needed	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	5B: Maintain for regeneration purposes	5E: Long-Term Retention	Unspecified	Unspecified
Comments: Steep bank immediately adjacent to Eliza Lake. Retain; allow to succeed naturally from aspen to red maple.							
5	Unavailable	3B: Threatened, endangered, and special concern species/communities	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	2F: Too steep	6	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
Comments: maintain for diverse wildlife cover adjacent to wetland							
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Tim Webb : Examiner

Compartment: 10

Year of Entry: 2018

9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	3J: Water quality / BMPs (stream, river, or lake)	3H: Deer Wintering Areas	Unspecified	Unspecified
Comments:							
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	3J: Water quality / BMPs (stream, river, or lake)	3H: Deer Wintering Areas	Unspecified	Unspecified
Comments:							
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: If the soil dries adequately to harvest this stand without significant rutting, and if this occurs simultaneously with entry into prescribed stands in the adjacent compartment, this site condition can be lifted and harvest completed here, likely as a supplement to the contract for the compartment 11 sale.							
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	33	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	2F: Too steep	6	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Tim Webb : Examiner

Compartment: 10

Year of Entry: 2018

14	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	2G: Too wet (sensitive soils, does not include access issues)	3H: Deer Wintering Areas	Unspecified	Unspecified
Comments:							
16	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	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	8

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
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4130 - Aspen	Sapling Well	33.0	15	Immature	Clearcut by previous owner. Bracken fern, wintergreen. Scattered cherry and red maple. saplings. Scattered residual mature white pine, plus some mixed deciduous.
3	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	5.2	49	81-110	Stand is mostly on side slopes. Some juneberry, hawthorn in understory. Patches of sugar maple and beech seedlings.
4	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	15.7	100	111-140	[2006 comments: Thinned by previous owner. Wind exposure from across the adjacent clearcut and over the ridge has resulted in some blowdown patches. Stand is mostly on side slopes of ridges. Beech seedlings and blackberry in open gaps. Most aspen is at the north end of the stand and is old and declining. Most of the understory white pine is along the east stand edge at the bottom of the slope. Second age on red maple was about 67.] 2015 BAs: 160, 120, 60, 130, 140; mean 122.
6	4130 - Aspen	Sapling Well	11.9	6	1-50	Stand was clearcut in Feb. 2010 with scattered mature red maple and white pine retained. Well stocked with aspen regeneration.
7	4110 - Sugar Maple Association	Sawtimber Medium	8.2	106	81-110	Thinned by previous owner. Some beech seedlings, a few stunted hemlock, but little else in the understory. Good quality cherry; medium to good quality sugar maple (though some is multi-stemmed). Some dead ash. Stand is on a hillside.
8	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	20.8	105	81-110	Mostly on side slopes. Fair amount of skidder damage from a previous timber harvest. 2015 BAs: 90, 130, 30, 90, 120, 100; mean 93. [2006 comments: Thinned heavily by previous owner. opening/landing at south end. Numerous beech seedlings, blackberry in gaps. Some post-harvest blowdown. Occasional stunted hemlock.]
11	4110 - Sugar Maple Association	Poletimber Well	25.9	84	51-80	2015 BAs: 90, 140, 90, 70, 130, 160; mean 113. [2006 comments: Numerous multi-stemmed sugar maple. A few 14" white pines.]
12	4130 - Aspen	Poletimber Well	5.8	38	Unspecified	Some dead ash.
13	4133 - Aspen, Mixed Pine	Poletimber Well	12.8	52	141-170	2016 BAs: 180 (RP in NE arm), 140, 90, 180; mean 148.
14	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	5.1	61	171-200	2016 BAs: 170, 190, 200; mean 187. [2006 comments: Unthinned. Sporadic rows. Beech seedlings, trout lily. RP heights: 62', 66'.]
16	4110 - Sugar Maple Association	Poletimber Well	15.2	97	111-140	2016 BAs: 150, 150, 120, 90; mean 128. [2006 comments: Some larger timber at east end of stand, but the majority is lower density of poles and saplings. Let grow for now, unless desired to have a small acreage thinning at east end. Trace amounts of bigtooth aspen, red pine, white pine. BA's recorded: 150, 50, 90, 140.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	4112 - Maple, Beech, Cherry Association	Sawtimber Well	18.8	88	111-140	Numerous multi-stemmed trees. 2016 BAs: 100, 110, 170, 140, 150; mean 137. [2016 comments: Some planted RP within hardwood stand, edges of adjacent plantations transitioning into hardwoods. Rolling terrain. Stick nest, likely goshawk.]
18	4130 - Aspen	Poletimber Well	28.9	42	Unspecified	Sugar maple regeneration is thick in places. [2006 comments: Somewhat heterogenous in distribution/size of hardwoods, but overall a pole aspen stand. Some scattered larger hardwoods, plus along west edge. Some older planted WP, but many of the WP patches appear to be volunteers that grew after last regen cut.]
19	4130 - Aspen	Sapling Well	7.6	7	Unspecified	
20	4130 - Aspen	Poletimber Well	44.2	26	Immature	Some open areas, especially in valley bottoms and around old landing. Scattered juneberry. Mostly black cherry, but some pin cherry in patches.
21	4130 - Aspen	Sawtimber Well	9.4	52	Unspecified	[2006 comments: Some variation in sizes, maybe ages, of aspen clones. Could clearcut, leaving cherry for mast/structure. Stand is mainly on slopes and at base of slopes.]
22	42110 - Planted Red Pine	Sawtimber Well	39.6	61	141-170	2016 mean of 10 BAs = 167, range 110 - 220. [2006 comments: Stand was previously 3rd row thinned. Wide open understory except a few cherry, beech seedlings and black cherry poles. Trace of quaking aspen in canopy. Might be ready for another thinning. BA's recorded: 200, 170, 120, 160; RP heights: 61', 68', 65', 63.]
23	42110 - Planted Red Pine	Sawtimber Well	15.0	61	111-140	Small amount of mortality in RP: bark beetle, porcupine damage. 2016 BAs: 180, 110, 130, 140, 120; mean 136. [2006 comments: Some beech seedlings. Patches of hardwood saplings without red pine scattered through stand. Trace of quaking aspen in canopy. Was cut tree marked for a first thinning last time. Curvy rows. RP heights: 67', 56', 71'.]
24	42101 - Planted White Pine, Mixed Deciduous	Poletimber Medium	79.0	52	111-140	2016 BA = 120 (mean of 10 plots). [2006 comments: Some curving rows, hillsides make thinning difficult in places. High percentage of weevil damaged trees. Inclusions of hardwoods and aspen. WP heights (2006): 45', 50', 49', 57', 53', 57'.] [2012 comments: Row thinned summer 2012, plus all aspen cut in two NE blocks. Post-harvets BA from sale cruise = 73 WP + 45 NH/A = 118. Scattered elm and ironwood present.]
25	4110 - Sugar Maple Association	Sawtimber Well	7.5	118	81-110	Traces of ironwood, red pine poles in canopy. Thinned in 8/2010 under TSC #610070801. 2016 BAs: 90, 80, 120; mean 96.
27	4112 - Maple, Beech, Cherry Association	Sawtimber Well	19.2	96	111-140	Some blowdown at south end adjacent to young aspen stand. A few scattered hemlock. Beech has scale. Aspen is deteriorating. 2016 BA 133, mean of 7 plots. [2006/10 comments: Beech, ironwood, and occasional hemlock seedlings and saplings. Fair amount of CWD. Groups of large, old beech and old bigtooth aspen clones. Rolling terrain. Trout lily, dutchman's breeches. RSH activity in and around stand; stick nest in a beech. Stand was left out of adjacent 2010 thinning to north because of RSH nesting.]



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	4112 - Maple, Beech, Cherry Association	Sawtimber Well	24.6	91	111-140	N/S ridge adjacent to Eliza Lake. Scattered clones of very large bigtooth aspen. 2016 BAs: 150, 110, 110, 90, 220; mean 136. Riparian area next to Eliza Lake, with some steep slopes.
29	4110 - Sugar Maple Association	Sawtimber Well	6.4	96	81-110	2016 BAs: 90, 60, 120; mean 90. [2006 comments: A few nice sugar maple and black cherry, but generally poor quality timber. Some mortality in aspen and black cherry. Numerous cavity trees.]
30	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	18.1	96	81-110	2016 BAs: 80, 130, 80; mean 97. Thinned in 2009 under TSC #61-081-08-01. [2006 comments: Patches of suppressed/overtopped planted white pine. Heavy to pole timber in places. Sugar maple, ironwood saplings. Hilly, rolling terrain. 2nd age is a planting record for the white pine component.]
31	42120 - Planted Jack Pine	Poletimber Well	20.4	61	Unspecified	Some mortality & breakage in JP, but still relatively sound. Should be cut before mortality sets in. [2006 comments: Sparse beech/cherry/s. maple seedlings, maple heavily browsed. Some mortality in jack pine. Dense rings. Could clearcut and replant. Remnant sugar/red maple along east edge and scattered through stand. Scattered patches of pole/sapling hardwoods. East edge should be excluded from AOI, including a small opening that WLD may wish to maintain. JP heights: 53', 47', 53']
33	4130 - Aspen	Sawtimber Well	4.2	81	Unspecified	Riparian area. Stand is on a steep bank going right down to Eliza Lake. Allow red maple to slowly take over.
35	4130 - Aspen	Sapling Well	10.1	7	1-50	Some WP, BC, AB, SM retained in addition to red maple. Note: some of the black cherry regen listed may actually be pin cherry (hard to tell apart when young/leafless). [2011 comments: Steep slopes. Clearcut in summer 2009, some patches of hardwoods were retained. TSC #61-081-08-01.]
36	4130 - Aspen	Poletimber Well	20.3	42	Unspecified	Some patches of older hardwoods.
37	4139 - Aspen, Mixed Deciduous	Poletimber Well	7.5	42	Unspecified	Some patches of older remnant hardwoods. Little aspen in middle section.
39	4139 - Aspen, Mixed Deciduous	Poletimber Well	18.6	42	Unspecified	Stand goes back and forth between hardwood and aspen domination; some separation is evident on imagery.
40	42110 - Planted Red Pine	Poletimber Well	16.2	29	141-170	2016 BAs: 140, 140, 180, 170; mean 158. 2006: RP heights: 20', 24'
41	4116 - Mixed N. Hardwood - Aspen	Poletimber Poor	17.2	60	1-50	2016 BAs: 30, 70, 30; mean 43. Trenched and under-planted acorns on 2.7 acres of stand in spring 2009, mostly failed to germinate. [2006 comments: Possibility for oak interplanting. Open grown old-field cherry and maple with "halos" of maple saplings around older cherry trees. Slowly going back to hardwoods. Some junberry clumps and juniper.]



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	4112 - Maple, Beech, Cherry Association	Sawtimber Well	79.4	100	111-140	Lots of scale on beech. Aspen declining, some mortality. There is a concentration of hemlock on the east edge of the north lobe, with some winter deer use. Average BA from 12 plots = 129. [2006 comments: Middling quality hardwoods, but some nicer single-stemmed red maple. Beech and ironwood seedlings. More sugar maple toward north end. Aspen in clumps. Little CWD. Scattered frost pockets with sparse timber. Parts of the south end were thinned in 2001. BA's recorded: south end 100, 150, 40, 90, 110; north end 120, 140, 120, 100, 120. Make AOI north end only. Second age on RM about 78.]
45	4130 - Aspen	Poletimber Well	49.9	42	Unspecified	[2006 comments: Remnant maples from before last harvest. Mixed aspen/hardwood poles, scattered small openings/frost pockets. Bigtooth mainly on hills & ridges, mainly quaking aspen on lower slopes and depressions. Successional push to hardwoods (RM, SM, AB). Trace of beech in overstory. Sapling layer mostly red maple, sugar maple, also some beech and ironwood.]
48	4130 - Aspen	Sawtimber Medium	4.9	42	Unspecified	South tail end is older northern hardwoods, no aspen. Maple is mostly low quality, older, multi-stemmed.
49	42110 - Planted Red Pine	Poletimber Well	19.9	29	141-170	2016 BAs: 190, 160, 140; mean 163. 2006 RP heights: 29', 21', 27'.
52	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	8.3	102	81-110	Heavy beech scale. 2016 BAs: 80, 100, 90; mean 90. [2006 comments: Previously select cut in 2000, fairly heavy removal with lots of regen gaps, which are mostly filling in with beech seedlings and stump sprouts. Trace of white ash in overstory (now dead).]
54	4130 - Aspen	Poletimber Well	41.8	42	Unspecified	[2006 comments: Density varies: thicker on hills, sparse on lower slopes, semi-open in kettle depressions. Kettles mostly covered with older black cherry, little aspen. Little structural diversity, CWD, snags, etc. Aspen is self thinning. Trace of paper birch and beech.]
56	4130 - Aspen	Sapling Well	9.4	7	Unspecified	Well stocked regeneration. Autumn olive is thick in the southeast lobe of the stand, scattered elsewhere.
57	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	26.5	95	81-110	Heavy beech scale. 2016 BAs: 150, 60, 30, 120, 160, 80; mean 100; 120+ outside of regen gaps. [2006 comments: Previously thinned with some large regeneration holes which are filling in with mostly beech seedlings, some with dense aspen sprouts. Numerous multi-stemmed trees, middling quality. BA's recorded: 130, 90, 110, 90, 160, mean 116.]
59	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	14.0	96	51-80	Stand was thinned in fall 2011 to a residual BA of about 55; whole tree/chip harvested. Beech scale is present. 2016 BAs: 80, 50, 80; mean 70.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	4112 - Maple, Beech, Cherry Association	Sawtimber Well	7.7	96	81-110	Scattered beech, red oak, old bigtooth aspen, veteran white pine; patch of pole w. pine at north end along with some younger maple. 2016 BAs: 100, 90, 100, 120; mean 102. [2006 comments: Traces of red oak, beech. Some of the canopy (and BA) is intermediate ironwood crowns. Other hardwood crowns still mostly free to grow, so can hold off on thinning this entry period. Neighboring private stand to west has been heavily thinned.]
62	42110 - Planted Red Pine	Poletimber Well	22.9	29	111-140	A few scattered q. aspen and white pine. 2016 mean BA 132, from 5 plots. 2006 RP heights: 24', 25', 26'.
63	4130 - Aspen	Poletimber Well	49.2	50	Unspecified	[2006 comments: 2-aged stand: remnant oak and hardwoods over pole aspen. White pine throughout, including understory seedlings, saplings, and poles, as well as a few overstory log-sized trees.]
64	4112 - Maple, Beech, Cherry Association	Sawtimber Well	17.4	107	111-140	Mean 2016 BAs from 4 plots: SM 68, RM 40, AB 10, BC 12, total 130. [2006 comments: Thinned in 2001. Beech seedlings, thick in places. Some girdled beech are now dead and falling down. Scattered hemlock snags, some hemlock saplings. Let recover and grow another 10 years, then cut again. Regen holes with beech, some cherry seedlings. Fair amount of CWD.]
66	4119 - Mixed Northern Hardwoods	Sawtimber Medium	35.1	103	51-80	Thinned in 2009 under TSC #61-017-08-01. 2016 BAs: 50, 70, 100, 70; mean 73. [2006 comments: Diverse stand: mix of mature aspen, multi-aged hardwoods, supercanopy white pine, and some hemlock. A few beech, red oak.]
67	4130 - Aspen	Sapling Well	10.7	7	Unspecified	Stand has a few remnant sugar maple and basswood in addition to oak and pine. Well stocked aspen regeneration.
70	4130 - Aspen	Poletimber Well	31.7	27	Unspecified	[2006 comments: Thick regen, little structural diversity (CWD, snags, etc.) except for a few remnant hemlock and white pine. Stand surrounds a wetland.]
72	4119 - Mixed Northern Hardwoods	Poletimber Well	138.2	103	81-110	Ash, cherry, and some of the aspen have died, so BA is still relatively low. Average BA from 13 plots = 99; 46% SM, 12% BW, 24% RM, 7 % RO, rest is beech, ironwood, white pine. [2006 comments: Traces of white ash, white pine, and ironwood in canopy. Aspen is beginning to fall out of the stand. Lots of cavity trees and a few snags. BA's measured: 60, 90, 130, 130, 80, 100, 140, mean 104. Even-aged pole stand. Many low quality, sub-merchantable saplings present. Highly variable in BA. Some areas are definitely ready for a crop tree release thinning, while other areas are too small in diameter to thin yet. Commercial harvest would be possible but many areas would be lightly marked.]
73	4130 - Aspen	Sapling Medium	8.8	5	1-50	Stocking generally OK, but open at the bottom of the basin. [2011 comments: Stand was clearcut in fall 2011, retaining white pine, single-stemmed maple, cherry, basswood, hemlock, about 16 BA. Stand is in a low lying area, may be a cold air sink.]



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
74	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	7.9	110	111-140	2016 BAs: 90, 190, 120; mean 133. [2006 comments: Fair amount of hemlock in understory. May enhance hemlock regeneration with harvest/scarification. Needs some CWD. Aged hemlock was a 7" dbh understory tree, very tight rings. Large, old white pine; may have old growth potential. Little CWD.]
75	4130 - Aspen	Poletimber Well	35.4	46	Unspecified	[2006 comments: Aspen is mostly poles, but occasional patch of larger, maybe older trees. Conifer component is mainly in NW part of stand. Older timber in a strip along the south and east sides of wetland at south end of stand.]
76	4119 - Mixed Northern Hardwoods	Sawtimber Well	14.2	107	81-110	2016 BAs: 100, 80, 120, 120, 130; mean 110. [2006 comments: Traces of paper birch, cherry, red oak. Aspen in clumps here and there. Most overstory white pine is in the NW part of the stand. Consider thinning in 10 years.]
77	4110 - Sugar Maple Association	Sawtimber Well	10.0	95	111-140	2016 BAs: 120, 160, 120, 60; mean 115. [2006 comments: Lower quality hardwoods, but has some decent sugar maple poles that would benefit from a thinning. Sale here would be low value, marginally marketable. Trace of mature hemlock, some maple-leaved viburnum, trillium. BA's recorded: 110, 180, 120, 90, mean 125.]
80	4110 - Sugar Maple Association	Sawtimber Well	70.1	108	81-110	2016 mean BAs from 12 plots: SM 58, BW 18, Aspen 8, RM 4, BC 1, AB 7, EH 1, IW 2, total 99. BAs higher north half of stand. [2006 comments: Size/density quite variable. Several kettle depressions. NW part of stand was thinned in 2001. BA's recorded: 40, 110, 110, 130, 140, mean 106. Second age on SM of about 77. Trace of beech in canopy.]
81	4133 - Aspen, Mixed Pine	Sawtimber Well	10.0	43	81-110	2016 BAs: 90, 110, 110; mean 103. [2006 comments: Most of the aspen ages to a previous cut. Much of stand is on a sidehill and lower slope. Good growth on WP, some older remnants.]
82	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	5.9	90	81-110	2016 BAs: 12, 70, 110, 130; mean 108. [2006 comments: Some nice quality sugar maple poles, good single-stemmed basswood. Trace of white ash.]
84	4130 - Aspen	Poletimber Well	17.7	43	Unspecified	Scattered elm, red maple. [2006 comments: Scattered individuals and patches of remnant hardwood and white pine within regenerated pole aspen stand.]
86	4111 - S.Maple, Hard Mast Association	Sawtimber Well	50.2	108	81-110	Thinned in winter 2009-2010 under TSC #610320801. Standing dead ash. White pine filling in slowly. Some regeneration gaps set up adjacent to mature oaks have only ironwood and a little white pine regeneration. 2016 BAs: 60, 60, 120, 90, 60, 80; mean 78. [2006 comments: Traces of bigtooth aspen, hemlock, beech in overstory. Density and diameter vary throughout the stand - some pockets more pole-sized, others larger. Red oak most concentrated at east end of stand. some white pine, hemlock regeneration present.]
88	4117 - Mixed N. Hardwood - Pine	Sawtimber Well	18.8	103	141-170	Very good quality white pine. Lots of beech scale present. 2016 BAs: 150, 100, 170, 160, 140; mean 144. [2006 comments: Previously thinned about 4 years ago. Some hemlock blowdown. Numerous snags. Traces of white ash, red oak, bigtooth aspen. Cored WP was 108' tall.]



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
89	4319 - Mixed Upland Forest	Sawtimber Well	3.4	98	81-110	Aspen somewhat suppressed. Scattered elm. 2016 BAs: 100, 100, 90; mean 97. [2006 comments: Sugar maple, other hardwood seedlings. SM/WP is older, larger, denser at south end of stand, more pole aspen and hardwood mix to north.]
90	4130 - Aspen	Sapling Medium	14.1	17	Unspecified	Dense, good quality where bigtooth aspen is dominant; otherwise sparse where quaking aspen is dominant mixed with ironwood. Scattered pole-sized maple, cherry, elm. [2006 comments: Cherry, sugar maple, ironwood seedlings. Several small grassy open patches. Patches of elm.]
91	42200 - Natural White Pine	Sawtimber Well	3.1	64	81-110	2016 BAs: 170, 100, 60; mean 110. [2006 comments: Older, larger WP to the NW in adjacent stands was probably the seed source for this younger WP invading an old field. Fair amount of weeveling. WP variable in age; cored tree is probably toward the older end for this stand.]
92	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Poor	1.8	40	1-50	Wolfy, open-grown white pine in a kettle depression. Good wildlife cover patch.
93	4139 - Aspen, Mixed Deciduous	Sawtimber Well	10.7	46	81-110	2016 BAs: 90, 120, 120; mean 110.
94	42200 - Natural White Pine	Sawtimber Medium	2.4	70	51-80	2016 BAs: 80, 120, 60; mean 87. [2006 comments: Stand was cut through in 1999, all but WP was removed. Trace of red maple, cherry small pole trees also left.]
95	6131 - Hemlock, White Pine, Maple, Birch	Sawtimber Medium	12.0	105	141-170	Some supercanopy white pine; trace of black cherry; some dead black ash. Seeps/streams emerging from base of hill. Little winter deer sign; good cover but no browse. Some blowdown. Shoreline on Upper Woodcock Lake.
96	4130 - Aspen	Sawtimber Well	2.3	76	Unspecified	Some hawthorn, juneberry. [2006 comments: Stand is on a steep, inoperable slope. Slope goes straight down to wetland without any room to turn logging equipment around. This part of original stand was retained when more operable portion was clearcut in fall 2011; aspen will likely fall apart at some point in the future and succeed to red maple/white pine.]
97	4139 - Aspen, Mixed Deciduous	Poletimber Medium	14.5	43	51-80	Formerly part of stand 84 to east; split off in YOE 2018 inventory. Deteriorating quaking aspen with patchy remnant hardwoods. Thick with sugar maple and/or ironwood regeneration throughout, especially in gaps from dying aspen. 2016 BA = 74 (mean from 5 plots).
98	4130 - Aspen	Poletimber Well	12.2	46	Unspecified	Some low ground, wet spots.
101	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	6.0	108	111-140	Maintain for wildlife cover. Aspen declining, some mortality. Red maple age is from adjacent stand 80. 2016 BAs: 120, 110, 150; mean 127. [2006 comments: Steep slope north off Oakley Rd. Most of stand is on steep, inoperable slopes leading down to a wetland. Patches of honeysuckle. Very diverse stand on slopes. May be a good candidate for old growth designation. Some hemlock present.]



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
105	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	14.0	96	81-110	Fair amount of mature aspen. Could clearcut to regenerate aspen/hardwood mix, but aspen distribution is patchy. Some multi-stemmed sugar maple, but otherwise fairly good quality hardwoods. Aspen is at risk. Probably best to manage for uneven-aged hardwoods. Mean BA from 6 plots = 95, quite variable.
106	4319 - Mixed Upland Forest	Sawtimber Well	1.3	69	111-140	2016 BAs: 150, 130, 110; mean 130. [2006 comments: Decent white pine, little weevil damage.]
109	4130 - Aspen	Poletimber Well	80.1	48	Unspecified	Trace of autumn olive. [2006 comments: Occasional clones of larger aspen. Soil, species mix changes through stand: more hilly with hardwood mixed in to the north, more pure aspen to the south, plus some small patches of predominantly northern hardwoods here and there. Scattered large white pine.]
111	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	2.5	69	111-140	2016 BAs: 120, 160, 140; mean 140. [2006 comments: Second age is on aspen (very iffy ring count), which is fairly old and declining in health. Pine will be released naturally as aspen falls out of the canopy. Decent white pine with little weevil damage.]
113	4311 - Pine, Aspen Mix	Sawtimber Well	8.7	78	111-140	2016 BAs: 90, 110, 170; mean 123. [2006 comments: Nice white pine in various age classes. Allow to self-thin as aspen falls out of canopy. Good cover for local diversity within larger aspen pole stand.]
114	4119 - Mixed Northern Hardwoods	Sawtimber Medium	3.5	88	81-110	2016 BAs: 80, 90, 90; mean 87. Thinned in 9/2010 under TSC #610320801.
115	6112 - Lowland Aspen	Sawtimber Medium	6.0	49	81-110	Ash overstory is dead; understory saplings still alive. Some understory viburnum, hawthorn. [2006 comments: Cedar and hemlock are concentrated along the creek at the east end of the stand, providing deer winter cover. Trace amounts of white pine, white birch, black cherry, and elm. Q. aspen is declining.]
116	42200 - Natural White Pine	Poletimber Poor	1.6	36	1-50	Frost pocket opening filling in. Red oak on edges.
117	4112 - Maple, Beech, Cherry Association	Sawtimber Well	22.2	92	111-140	Fair amount of standing dead ash. Good quality sugar maple. White pine & white spruce listed are in a plantation which spills over onto state land from the adjacent private property to the west; less than 1 acre. 2016 BAs: mean of 8 plots = 118; range 80-180. [2006 comments: Trace amounts of aspen, hemlock. Understory hemlock is mostly in one patch.]
118	6119 - Mixed Lowland Deciduous Forest	Sawtimber Medium	6.9	158	81-110	Floodplain of Platte River; riparian zone. Not operable because of steep adjacent slopes and seeps at the base of the bluff. Age of y. birch is estimated; transferred from 2006 aging of now-dead ash. 2016 BAs: 80, 60, 130, 110; mean 95. Little deer sign winter 2015-16. [2006 comments: deer yarding, little browse; trace of white pine, 18" avg.]
121	4130 - Aspen	Poletimber Well	14.3	47	Unspecified	Oak looks promising. Trace of beech. [2006 comments: Aspen is slightly larger than average to the west, maybe a bit older. Small opening along road at east end of stand. Trace of white ash poles.]



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
122	4119 - Mixed Northern Hardwoods	Poletimber Well	6.7	85	81-110	2016 BAs: 120, 90, 90; mean 100. [2006 comments: Traces of beech, cherry. Numerous multi-stemmed maple. Some veteran white pine, red oak.]
125	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	4.4	71	81-110	Some large, veteran WP & SM, traces of BC, AB, EH, BW. Multi-aged WP, aged tree (2006) was of median size. 2016 BAs: 90, 110, 50; mean 83.
126	4112 - Maple, Beech, Cherry Association	Poletimber Poor	1.1	45	1-50	
127	4130 - Aspen	Poletimber Well	10.7	50	Unspecified	Some areas with smaller diameter aspen. Appears to have been a lot of residual from the originating cut, which may have suppressed some of the regenerated aspen. [2006 comments: Scattered large remnant sugar maple. Trace of black cherry.]
128	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	6.0	56	111-140	This stand was retained for a wildlife cover corridor between red pine and aspen regeneration cuts to the west and east, respectively. There are some older, veteran white pine. White pine ages are variable. Stand is almost all on a side hill. 2015 BAs: 150, 140, 140, 60; mean 125.
129	4112 - Maple, Beech, Cherry Association	Sawtimber Well	15.9	88	81-110	Scattered cherry stump sprouts from last harvest. Some planted RP within hardwood stand, edges of adjacent plantations transitioning into hardwoods. Rolling terrain. Thinned under TSC #610070801 in 8/2010.
130	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	16.7	96	51-80	Shore-to-Shore Trail through stand on Hooker Rd. Stand was thinned in fall 2011 to a residual BA of about 55; whole tree/chip harvested. Beech scale is present. 2016 BAs: 50, 60, 60; mean 57. There are numerous promising patches of advanced sugar maple saplings and red/sugar maple poles. Newer regeneration gaps from 2011 are mostly just filling in with beech and ironwood seedlings.
131	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	24.1	96	81-110	Thinned in 2010 under TSC #610070801. 2016 BAs: 90, 130, 110, 20, 60; mean 82. [2006 comments: Some small, open kettle depressions. Beech, ironwood, and occasional hemlock seedlings and saplings. Fair amount of CWD. Groups of large, old beech and old bigtooth aspen clones. Rolling terrain. Concentrations of aspen, cherry on sidehills of kettles. Trout lily, dutchman's breeches. RSH activity in and around stand; stick nest in a beech in stand to south.]
132	4130 - Aspen	Sapling Well	5.2	6	1-50	[2011 comments: Clearcut in 9/2010 under TSC #610070801. Some blowdown. Some mature hardwoods retained.]
134	4130 - Aspen	Sapling Poor	6.8	6	Immature	Clearcut in 1/2010 under TSC #610320801. Aspen regeneration is patchy, and a very high percentage have damage from antler rubbing. Lots of ironwood coming up outside of the aspen patches, but some white pine seedlings are starting to fill in.
135	4130 - Aspen	Sapling Poor	4.9	6	1-50	Clearcut in 9/2010 under TSC #610320801. Some hardwoods retained: about 5 BA of RO, SM, WA, WP, EH, WB, RM. Aspen regeneration is patchy; unstocked areas are filling in with cherry. White pine is concentrated in the SW part of the stand.

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Traverse City Mgt. Unit

Report 7 – Forested Stands

Compartment: 10
Year of Entry: 2018



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
136	4130 - Aspen	Sapling Medium	12.2	5	Immature	Clearcut in fall 2011, with scattered residuals. Residuals include a few beech, oak, and white pine in addition to the listed species. Generally well stocked with aspen regeneration, but there are some sparse or unstocked patches.
137	4130 - Aspen	Sapling Medium	8.3	5	1-50	Clearcut in fall 2011, with scattered residual white pine and hardwoods. Residual WP is denser to the north.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	6225 - Bog	1.6	No	Mostly leatherleaf bog, plus open fringe of grass/fern on upland transition zone. Narrow upland opening connecting two basins.
5	3103 - Rubus-Fern	7.2		Clearcut Jan. 2010, replanted 2011. So-so survival of planted red pine: some spots fully stocked, others failed. Some white pine seedlings are filling in. Stand has 2 inclusions: a hardwood retention island toward the south end, and a small pond in the middle. The water level in the pond rose significantly since the last field visit.
9	3103 - Rubus-Fern	7.3		Clearcut Jan. 2010, replanted 2011. Some failed patches of red pine seedlings, but mostly decent stocking.
10	3301 - Low Density Deciduous Trees	1.8	No	Ground cover info is from 2006 inventory. [2006 comments: Milkweed, lycopodium, strawberry, grass spp. Nice remote forest opening. Frost pocket.]
15	3103 - Rubus-Fern	1.2	No	[2006 comments: Rice cut grass, red maple seedlings, moss, lycopodium. Frost pocket/valley. Slash blocking old skidder trail.]
26	3103 - Rubus-Fern	1.5	No	Ground cover info is from 2006 inventory. [2006 comments: Spotted knapweed, hawkweed, sheep sorrel, moss, juniper. Frost pocket. Road through stand.]
32	500 - Water	5.1	No	Eliza Lake. Water level up significantly from last field visit. [2006 comments: Wood ducks, mallards seen. Pair of sandhill cranes feeding, possibly nesting here.]
34	3103 - Rubus-Fern	4.8	No	Adjacent to Eliza Lake. Lots of club moss. [2006 comments: Bluebird seen. Nice natural opening, probably frost influenced. Leave alone.]
38	3301 - Low Density Deciduous Trees	1.7	No	Ground cover is from 2006 inventory. [2006 comments: Small junipers, strawberry, hawkweed, moss. Foot access only. Shallow frost pocket.]
42	3301 - Low Density Deciduous Trees	33.7	No	Halos of maple regeneration around older open-grown cherry. One clump of lilac seen. Ground cover info is from 2006 inventory. [2006 comments: Scattered rubus, lycopodium, deciduous and coniferous seedlings, juniper, spotted knapweed, sheep sorrel, hawkweed, strawberry. Horsemint near south end of opening.]
43	3301 - Low Density Deciduous Trees	1.8	No	Ground cover info is from 2006 inventory. [2006 comments: South end was used as a timber landing in the past. Frost holes. Aster and pussy toes. Rolling terrain.]
47	3103 - Rubus-Fern	1.3	No	Ground cover info is from 2006 inventory. [2006 comments: Slow aspen encroachment into frost pocket. Rice grass, sheep sorrel, lycopodium, and some poverty grass. Frost pocket and foot access only.]
50	3301 - Low Density Deciduous Trees	5.2	No	Ground cover info mostly from 2006 inventory. [2006 comments: Large clump of red maple, quaking aspen, juneberry in center of south lobe. Frost pocket. Rice grass, sedges, hawkweed, beech saps, crab apple, hawthorne, strawberry, sumac.]



Stand	Cover Type	Acres	Managed Site	General Comments:
51	3301 - Low Density Deciduous Trees	30.8	No	Ground cover info is from 2006 inventory. Adjacent private homes to the east. Stand is succeeding to northern hardwoods, with halos of maple regeneration surrounding older open-grown cherry. [2006 comments: Sparse, open grown hardwoods: cherry, red maple, sugar maple. Scattered white pine and juniper. Series of frost pockets and old farm fields. Rice grass, lycopodium, moss, hawkweed, rubus, SJW. Old farm field portion of stand borders private property.]
55	3103 - Rubus-Fern	2.5	No	Ground cover info mostly from 2006 inventory. [2006 comments: In a valley. Trace of sedge under bracken. Rice cut grass, sheep sorel, occassional beech along perimeter. Red maple, black cherry, and quaking aspen encroachment.]
58	3301 - Low Density Deciduous Trees	3.6	No	Large patch along road in south lobe of old cherry surrounded by maple saplings and poles. Chip landing in stand from 2011 aspen harvest in adjacent stand. [2006 comments: Frost pockets. Some hardwood regenerating around old remnant BC & RM. Lots of trout lily seasonally.]
60	3303 - Mixed Low Density Trees	1.2	No	Managed as a landing for adjacent forested stands and to keep some openland habitat in this area.
65	3301 - Low Density Deciduous Trees	12.4	Yes	Ground cover information is from 2006 inventory. [2006 comments: Lots of poverty grass seed heads. Some regen surrounding log trees. Spotted knapweed in areas devoid of bracken. Occassional old stumps. St. John's wort, autumn olive, grass spp., lycopodium, cladonia and moss, rubus, sheep sorrel, one spruce pole, leafy spurge, strawberry, goats beard, mullein, yarrow, daisy fleabane, chokecherry. Houses to the east. Basically flat with some depressions probably from old homestead.]
69	3303 - Mixed Low Density Trees	6.4	No	Trees are mostly in dense patches; rest of stand is fairly open. [2006 comments: Lilac on perimeter by road. Goldenrod, sheep sorrel, leafy spurge, mullein, occassional juniper. There is an island of aspen and white pine and there are some depressions in the ground possibly from old homestead. Old apple and basswood. Residence directly across the Hulbert Road to the east. This stand has almost 0.25 miles of road frontage. Possible old homestead.]
71	6233 - Wet Meadow	2.9	No	Much higher water level than last field visit. [2006 comments: lots of frogs calling]
78	6233 - Wet Meadow	1.1	No	Much higher water level than last field visit. Some reed canary grass on edge. [2006 comments: Lots of frogs calling. Silverweed along edge.]
83	6233 - Wet Meadow	2.0	No	Water level is up from previous inventory. Ground cover info is from 2006. [2006 comments: Hawthorn with fruit in woods bording this non-forest stand. Dry when inventoried.]
85	3103 - Rubus-Fern	1.8	No	Recorded ground cover info is primarily from 2006 inventory. [2006 comments: Opening in a draw, likely maintained naturally as an opening by cold air flow and frost. Choke cherry, rubus, hawthorne, juneberry, milkweed, timothy, horsemint, bunchgrass, sedges, daisy fleabane, strawberry, cladonia, hoary alysum.] old grade along south edge



Stand	Cover Type	Acres	Managed Site	General Comments:
87	3105 - Mixed Upland Herbaceous	6.9	No	[2006 comments: Strawberry, cladonia, hoary alysum, mullein. Scattered stumps. Pipe sticking out of ground in clump of old white pine. Old homestead? Right on Hulbert Road.]
99	3303 - Mixed Low Density Trees	3.9	No	[2006 comments: Found leafy spurge near road. Autumn olive, blueberry, moss, pussytoes, strawberry, sheep sorrel, rice grass, couple of red oaks. Stand is bisected by Hooker road. There is a residence about 200 yards to west. Some minor woody encroachment. Nice size and shape for planting.]
100	500 - Water	1.3	No	Much higher water level than previous inventory. [2006 comments: floating mat, various forbs, rubus, frogs, some open water, several dead and down; deer bed]
102	6225 - Bog	4.5	No	
103	3303 - Mixed Low Density Trees	5.9	No	Southeast part of stand was a separate stand (105) in previous inventory; now combined and re-numbered. That part had numerous exotic species listed: spotted knapweed, leafy spurge, common St. Johnswort.
107	3103 - Rubus-Fern	0.9	No	
110	3303 - Mixed Low Density Trees	1.2	No	Ground cover data copied from 2006 inventory. [2006 comments: Golden rod, mullein, sheep sorrel, junipers, oaks on perimeter, red pine planted in a row. Traces of leafy spurge/SKW/SJW.]
112	500 - Water	20.2	No	Upper Woodcock Lake
120	6239 - Mixed Emergent Wetland	4.8	No	[2006 comments: Platte River and bottoms. Some alder/willow, mostly open. Soem duck boxes erected.]
123	122 - Road/Parking Lot	2.8	No	