



Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61020

Entry Year 2020

Acreage: 1,924

County Benzie

Management Area: Benzie Outwash

Revision Date: 2018-03-23

Stand Examiner: Craig Allen

Legal Description:

T25N-R13W; sections 2, 11, 14
Colfax Township of Benzie County, Michigan

Identified Planning Goals:

Compartment 20 is a 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, including the Betsie River which is a designated natural river; 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, oak wilt and beech bark disease.

Soil and topography:

The topography is mostly level. The soil types in this area include wet Roscommon sands and Kalkaska sands and loams.

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

This compartment is part of a large holding of State land that is surrounded by the communities of Bendon, Wallin, Nessen City, and Karlin. The compartment is almost entirely surrounded by State land. No private land in-holdings exist within the compartment boundary.

Unique Natural Features:

The Grass Lake flooding and the surrounding marsh dominates the northeast portion of the compartment. The Betsie River and Pickerel Creek run through the compartment. The Betsie River is a designated Michigan Natural River system. The designation begins at the Grass Lake dam, then extending downstream to its mouth at Betsie Lake near Frankfort.

Archeological, Historical, and Cultural Features:

There is a potential for archaeological sites within this compartment. Early Native Americans would commonly establish settlements along the Betsie River corridor.

Special Management Designations or Considerations:

The Grass Lake Flooding State Wildlife Management Area is within this compartment (stand 18). The Betsie River and its tributaries are a Designated State Natural River system.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Much of compartment 20 lays on either poorly drained outwash or lake plains in sections 2 and 14. These saturated peat or muck soils support a variety of wetland communities within this compartment. A large expanse of cattail marsh runs along both the Betsie River and Pickerel Creek. Stands of cedar, spruce, hardwoods, and aspen are present as the terrain rises and becomes less saturated. Small bogs and shrub communities are interspersed throughout the lowland forests. The Grass Lake Wildlife Dam is in this compartment in the center of section 2 and allows the water level to be manipulated upstream, which includes Grass Lake along with the surrounding emergent wetland. Future management of The Grass Lake Wildlife Flooding will be based on its management plan, which is scheduled for updating. Future harvests or habitat cuts in the lowland forested stands are should be carefully designed to optimize regeneration and to mimic naturally occurring blowdown pockets. Treatments such as these will benefit species like snowshoe hare, woodcock,

ruffed grouse, bobcats, and chestnut-sided warblers.

In sections 11 and the west side 2 the topography transitions into excessively drained sandy outwash plains. These fire prone soils currently support large stands of aspen as well as open barrens-type communities. There are several pine plantations within this compartment as well. Communities on this LTA should continue to be managed for a variety of forest age classes, successional stages, and patch sizes, as well as grass/shrub openings, consistent with the fire driven dynamics of these soils. Proposed aspen cuts should be designed to increase age class diversity and maximize the juxtaposition of the various age classes. These cuts should also include creation of dead and down logs which benefit many species of wildlife, such as deer, grouse, yellow-billed cuckoos, and cottontail rabbits. Parts of this landscape were, at times, shielded from fire, and therefore some management for successional advanced hardwood/conifer stands is fitting. Future management of pine stands should consider incorporating small (2-5 acre) islands that are left relatively unthinned within mature stands to provide winter roosting cover for turkeys. Deciduous species should be encouraged within conifer plantations for diversity.

Openings and semi-forested habitats are an integral part of this dry outwash plain and were historically maintained by periodic wildfire. These communities provide grasses and forbs for forage, nesting, and "bugging" areas. Scattered fruiting shrubs and mast producing trees provide food and cover. The "edge" component created by these grasslands is, yet another important habitat component provided. Mechanical treatments and prescribed burning have been proposed in several areas to maintain and enhance these communities by setting back woody (as well as bracken and sedge) encroachment, stimulating native herbaceous vegetation and berry production, preparing seed beds, and recycling nutrients. Selective hand felling will be used to set back encroachment where necessary.

Compartment 20 is within the Benzie Outwash Management Area (MA) of the Regional State Forest Management Plan. Featured species for this MA include marten, woodcock, bear, black-throated blue warbler, golden-winged warbler, mallard, pileated woodpecker, red-shouldered hawk, ruffed grouse, turkey, deer, wood duck, and wood thrush. Section 14 is included in the Little Betsie Grouse Enhanced Management Site (GEMS), which focuses on hunting opportunities in early successional habitats. Based on the natural disturbance history of the land type associations within the Benzie Outwash MA, the MA plan calls for managing the amount of open/semi-open lands at or above the current level to provide habitat for species which use openings. (Steve Griffith, Wildlife Div.)

Mineral Resource and Development Concerns and/or Restrictions

Sand/gravel pits are not located in the area, sand & gravel potential within the compartment appears to be limited. There has been some minor Antrim Shale gas production in the past to the west of the compartment and some active Antrim production to the southwest. Potential for additional Antrim development within the compartment is low. The southern end of the compartment extends into the northern margins of the Niagaran reef trend. There is one former Niagaran well within Section 14, and there is one remaining active lease in the compartment that is held by production from several drilling units located outside of the compartment. There may be potential for additional reef reservoirs within the southern portion of the compartment. There is no metallic mineral potential in this part of the state.
(DNR Geologist).

Vehicle Access:

There are many gravel seasonal county roads throughout this area offering good access to State land. There are also many State forest (2-track) roads in various areas of the compartment that are used for public use, recreation and DNR land management activities.

Survey Needs:

There are no survey needs within this compartment at this time.

Recreational Facilities and Opportunities:

The Platte River Snowmobile trail occurs near the boundary of the compartment in the northwest corner. The Grass Lake State Forest Campground is also within this compartment. The existing road access and two trout streams provide recreational interest in fishing, and dispersed camping. Other activities in the area due to the diverse habitat include hunting, trapping, kayaking, atv riding, hiking and cross-country skiing. (Parks&Rec.Div.)

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

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

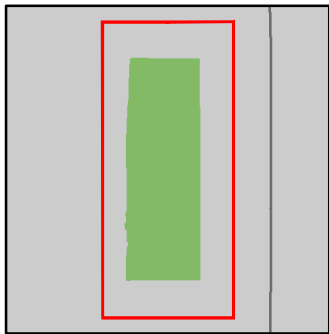
The following information is displayed, where pertinent, on the attached compartment maps:

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

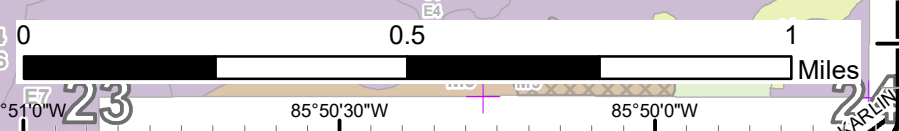
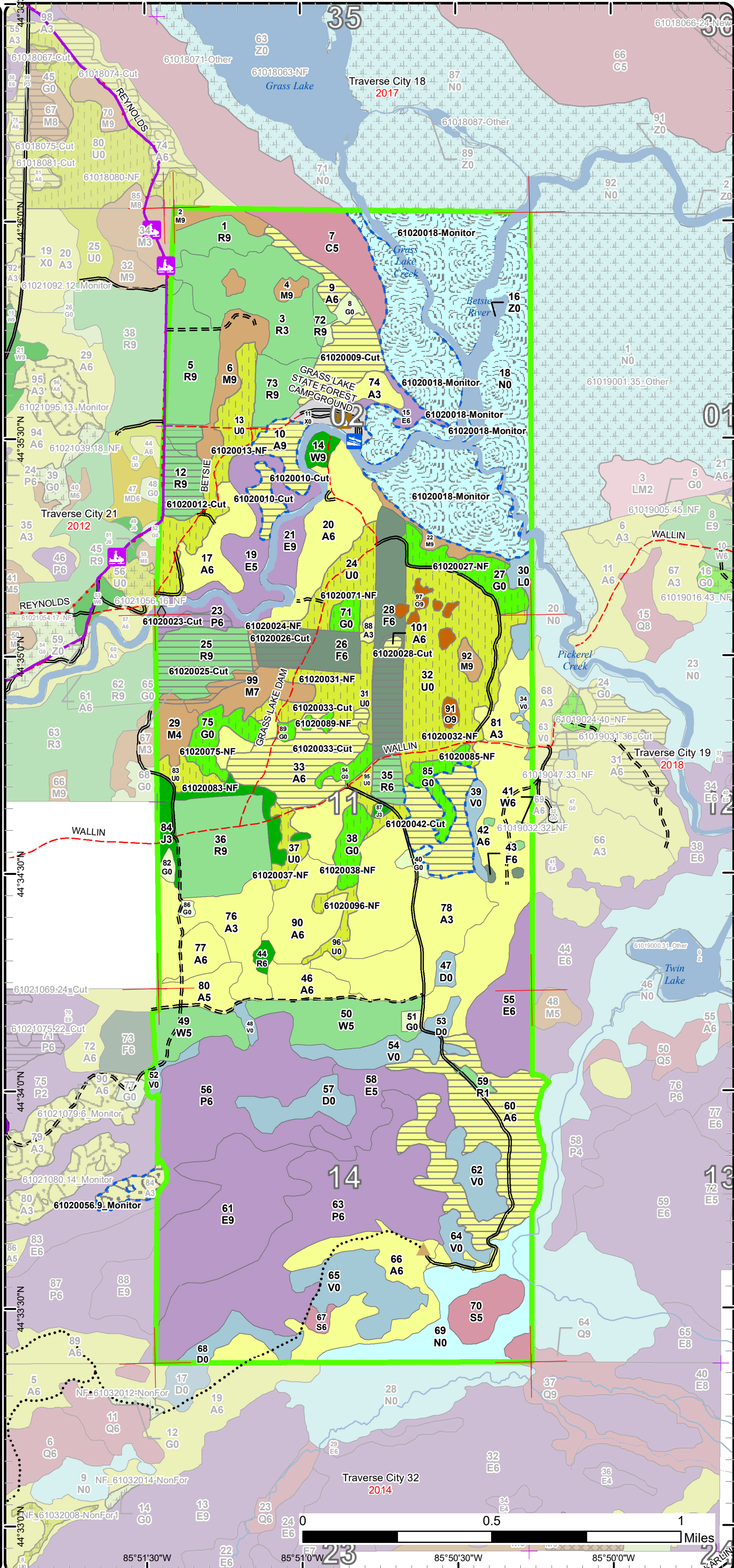
Cover Type & Treatments Map

Compartment: 20
T25N-R13W Sec. 02,11,14

County: Benzie
Unit: Traverse City
Mgmt Area: Benzie Outwash
YOE: 2020
Acres: 1,924 GIS Calculated
Examiner: Craig Allen
Map Revised: 10/11/2018
Map Phase: Post - Maps



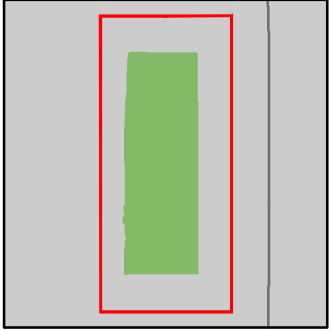
- Miris Corners
- + Remonumented Section Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Snowmobile Trails
- Designated Snowmobile Trails
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- ▲ Berms
- ▲ Boating Access Site
- ▲ Campground
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Regeneration Survey
- Opening Maintenance
- Monitoring
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 110 - Low Intensity Urban
- 211 - Cropland
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



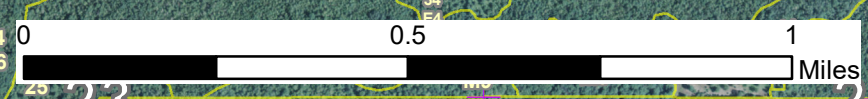
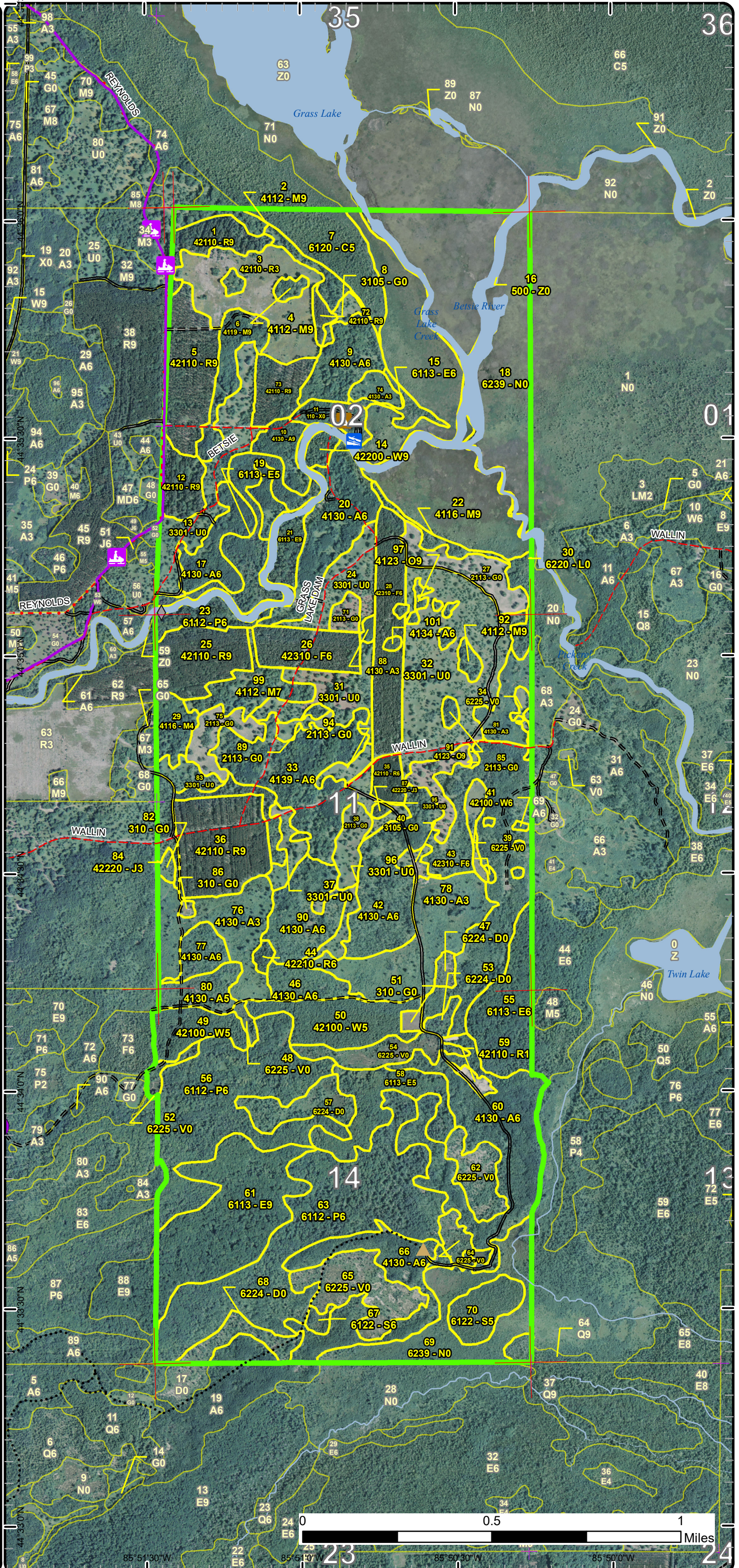
Stand Boundary Map

Compartment: 20
T25N-R13W Sec. 02,11,14

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Mgmt Area: Benzie Outwash
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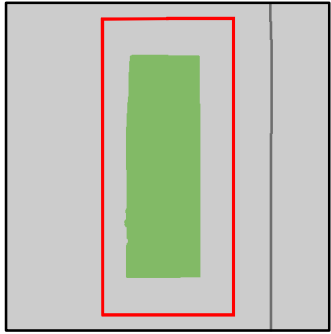


85° 51' 30" W 85° 51' 0" W 85° 50' 30" W 85° 50' 0" W

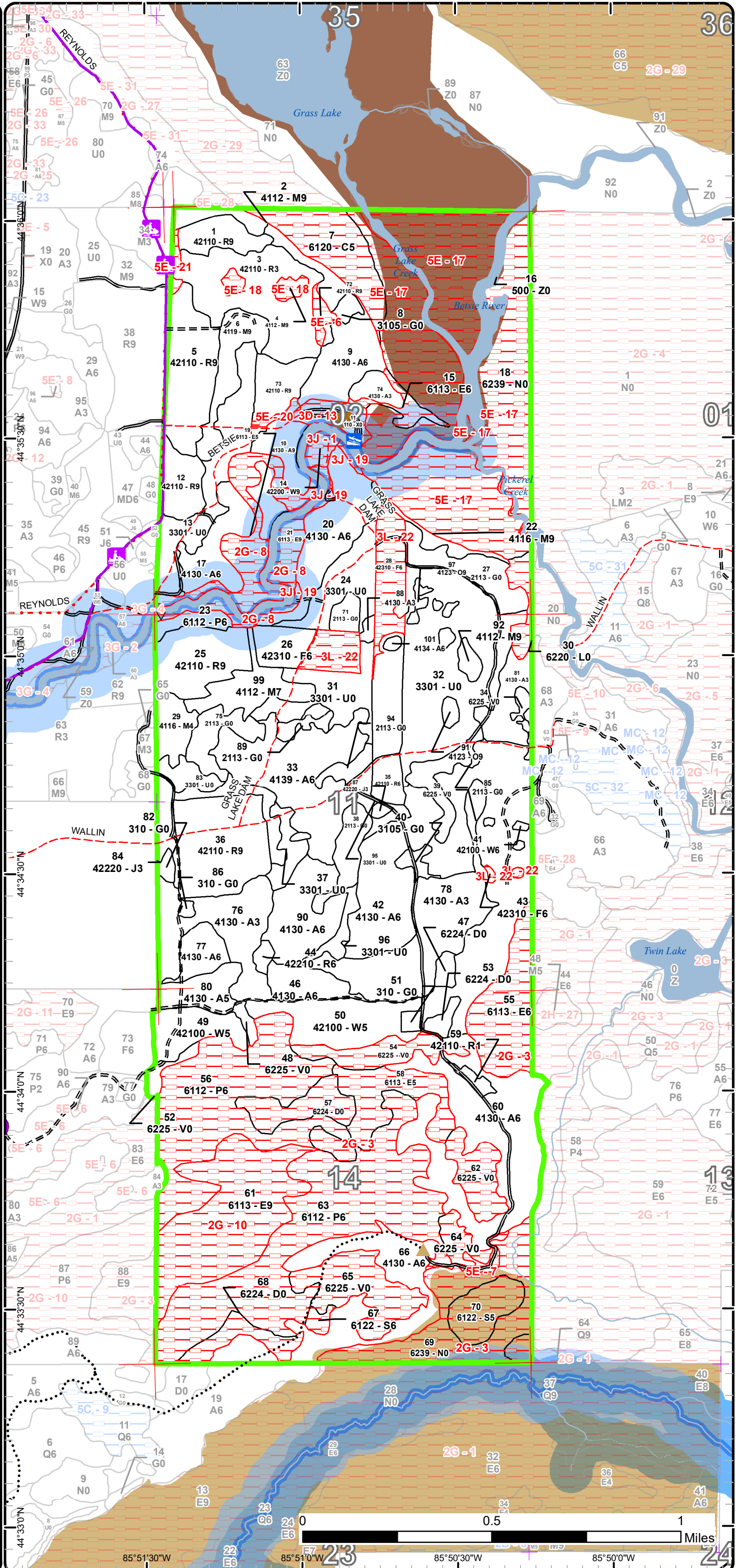
Special Conservation Areas & Site Conditions Map

Compartment: 20
T25N-R13W Sec. 02,11,14

County: Benzie
Unit: Traverse City
Mgmt Area: Benzie Outwash
YOE: 2020
Acres: 1,924 GIS Calculated
Examiner: Craig Allen
Map Revised: 10/11/2018
Map Phase: Post - Maps



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- + Remonumented Section Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Snowmobile Trails
- Designated Snowmobile Trails
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- ▲ Berms
- ▲ Boating Access Site
- ▲ Campground
- Compartment Boundary
- Unavailable
- 2G: Too wet (sensitive soils, does not include access issues)
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- 3L: Other wildlife concerns
- 5E: Long-Term Retention
- Stand Boundaries
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Forest Habitat Core Interior
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Wildlife Management Areas



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	97	0	34	18	333	16	27	0	0	0	0	0	0	0	0	0	0	525
Bog	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
Cedar	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	28
Cropland	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Herbaceous Openland	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Jack Pine	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Low-Density Trees	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163
Lowland Aspen/Balsam Poplar	0	0	0	0	0	183	0	0	10	0	0	0	0	0	0	0	0	0	193
Lowland Deciduous	0	0	0	0	26	27	5	0	0	94	8	0	0	0	0	0	0	0	160
Lowland Shrub	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Spruce/Fir	0	0	0	0	0	2	0	17	0	0	0	0	0	0	0	0	0	0	19
Marsh	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242
Northern Hardwood	0	0	0	0	0	0	0	10	0	52	0	0	0	0	0	0	0	0	60
Oak	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	7
Red Pine	0	44	0	0	0	0	6	133	5	0	0	0	0	0	0	0	0	0	187
Treed Bog	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Upland Spruce/Fir	0	0	0	0	0	0	51	0	0	0	0	0	0	0	0	0	0	0	51
Urban	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Water	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
White Pine	0	0	0	0	0	0	1	42	0	0	0	4	0	0	0	0	0	0	47
Total	630	141	0	51	44	545	79	229	15	149	12	32	0	0	0	0	0	0	1924



Report 2 – Treatment Summary

Traverse City Mgt. Unit
Year of Entry: 2020

Acres of Harvest

Compartment 20
Total Compartment Acres: 1,924

Commercial Harvest - 209
Harvests with Site Condition - 38
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	165	0	0	0	0	0	0	0	0	165
Lowland Aspen/Balsam Poplar	5	0	0	0	0	0	0	0	0	5
Red Pine	52	0	0	0	0	0	0	0	0	52
Upland Spruce/Fir	26	0	0	0	0	0	0	0	0	26
Total	247	0	0	0	0	0	0	0	0	247

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	247	0	0	0	0	0	207	0	215	669
Next Step	0	76	76	0	0	0	172	0	0	323
Total	247	76	76	0	0	0	379	0	215	991



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
9	61020009-Cut	26.9	4130 - Aspen	Poletimber Well	61	Unspecified	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal

Habitat Cut: No

Site Condition:

Prescription Harvest all aspen, maple, beech, cherry to regenerate and expand aspen. Leave some scattered unique/large maple for diversity. keep retention islands or areas near campground edge and along swamp edge and between stand 8 and swamp. Do not cut any oak or conifer except, ok to cut any jack pine. Will likely need to use adjacent stand 8 opening for landing area. Add drumming log specs.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: aspen, maple, oak, cherry

Other Comment:

Proposed Start Date: 10/1 /2019

10	61020010-Cut	15.8	4130 - Aspen	Sawtimber Well	59	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal
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Habitat Cut: No

Site Condition: Recreational/Scenic

Prescription Harvest all aspen, maple, beech, to regenerated and expand aspen. Leave any oak and conifers. Leave retention of uncut area along river edge at a minimum width of 100 feet from river. Also, consider retention near campground area if possible. Add drumming log specs.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: aspen, maple, oak,

Other Comment:

Proposed Start Date: 10/1 /2019

12	61020012-Cut	16.5	42110 - Planted Red Pine	Sawtimber Well	68	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut stand including most of the hardwood trees. Re-plant the stand to red pine. Could leave a few retention groups on corners or in spots visually pleasing for road users. Could mark to leave a few maple and/or cherry as well.

Next Step SitePrep, Trenching; Planting, Replant

Treatments:

Acceptable Regen: red pine

Other Comment:

Proposed Start Date: 10/1 /2019

13	61020013-NF	31.0	3301 - Low Density Deciduous Trees	Nonstocked	Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland			Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Stand objective is a barrens type community. Brush hog around select leave trees and/or patches but terrain is pretty bumpy. If unable to brush hog, selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. Maintain pockets of thick stem density such as aspen or clonal shrubs for thickets of cover/browse. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step Treatments:

Acceptable Regen:

Other Comment: Use annual herbaceous planting as necessary to prepare soil.

Treatments:

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
18	61020018-Monitor	200.2	6239 - Mixed Emergent Wetland	Nonstocked		Unspecified	Monitoring	Invasive Species	6230 - Cattail		Approved Proposal

Habitat Cut: No **Site Condition:** Long-Term Retention

Prescription Monitor for invasive wetland species and treat as necessary.

Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

23	61020023-Cut	5.0	6112 - Lowland Aspen	Poetimber Well	70	1-50	Harvest	Clearcut with Retention	6112 - Lowland Aspen	Even-Aged	Approved Proposal
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Habitat Cut: No **Site Condition:**

Prescription Clearcut upland area of the stand that contains aspen to regenerate and expand aspen. Keep harvest boundary a minimum of 100 feet away from river. Mark some leave trees of mature maple. Keep conifers and any oak that may be present. Add drumming log specs.

Specs:

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

Acceptable aspen, maple, pine, spruce.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

24	61020024-NF	18.6	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	320 - Upland Shrub		Approved Proposal
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Habitat Cut: No **Site Condition:**

Prescription Continue to mow and/or plant portions of these bracken dominated shrublands to encourage herbaceous forage and forbs. retain some areas of bracken for cover. Plant clumps of native fruiting shrubs and mast bearing trees. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Manage long term for upland shrub community but consider rotating locations of coniferous cover component (stand 26 and 28). Include potentials for burning when considering locations of conifer cover.
Comment:

Proposed Start Date: 10/1 /2019

25	61020025-Cut	28.6	42110 - Planted Red Pine	Sawtimber Well	68	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Approved Proposal
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Habitat Cut: No **Site Condition:**

Prescription Final harvest stand, then replant to red pine. May leave a few small retention islands along north edge of area.

Specs:

Next Step SitePrep, Trenching; Planting, Replant
Treatments:

Acceptable planted red pine
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019



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
26	61020026-Cut	10.5	42310 - Planted Spruce	Poletimber Well	56	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Approved Proposal

Habitat Cut: No

Site Condition:

Prescription Final harvest spruce stand and then trench area and re-plant to red pine. Possibly keep some small retention islands of spruce on south edge and on northwest edge closer towards river.

Next Step SitePrep, Trenching; Planting, Replant

Acceptable Regen: planted red pine

Other Comment:

Proposed Start Date: 10/1 /2019

27	61020027-NF	16.0	2113 - Forage Crops	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Continue herbaceous planting prescription. Should test soils and revise planting specs as necessary for what would be beneficial for wildlife and staff logistics, i.e. annual planting versus perennial and native versus non-native.

Next Step Treatments:

Acceptable Regen:

Other Comment: Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.

Proposed Start Date: 10/1 /2019

28	61020028-Cut	13.5	42310 - Planted Spruce	Poletimber Well	56	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut spruce then trench and replant area to red pine. Possibly leave a few very small retention islands of spruce trees for visual management near SW corner of stand and on edges of stand where trees have retained the branches.

Next Step SitePrep, Trenching; Planting, Replant

Acceptable Regen: planted red pine

Other Comment:

Proposed Start Date: 10/1 /2019

31	61020031-NF	20.5	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	320 - Upland Shrub		Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Continue to mow and/or plant portions of these bracken dominated shrublands to encourage herbaceous forage and forbs. retain some areas of bracken for cover. Plant clumps of native fruiting shrubs and mast bearing trees. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step Treatments:

Acceptable Regen:

Other Comment: Manage long term for upland shrub community but consider rotating locations of coniferous cover component (stand 26 and 28). Include potentials for burning when considering locations of conifer cover.

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
32	61020032-NF	67.3	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	320 - Upland Shrub		Approved Proposal

Habitat Cut: No

Site Condition:

Prescription Continue to mow and/or plant portions of these bracken dominated shrublands to encourage herbaceous forage and forbs. retain some areas of
Specs: bracken for cover. Plant clumps of native fruiting shrubs and mast bearing trees. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step
Treatments:

Acceptable
Regen:

Other Manage long term for upland shrub community but consider rotating locations of coniferous cover component (stand 26 and 28). Include
Comment: potentials for burning when considering locations of conifer cover.

Proposed Start Date: 10/1 /2019

33	61020033-Cut	33.6	4139 - Aspen, Mixed Deciduous	Poletimber Well	41	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Harvest all aspen, maple, beech, cherry, to regenerate and expand aspen component. Leave any oak. Leave retention maple islands where
Specs: little or no aspen exist. Could lightly select mark these islands to remove poor form or unhealthy trees. add drumming log specs.

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

Acceptable aspen, maple, oak
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

35	61020035-Cut	6.4	42110 - Planted Red Pine	Poletimber Well	56	171- 200	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Clearcut stand and re-plant to red pine. Possibly leave a few small retention islands.
Specs:

Next Step SitePrep, Trenching; Planting, Replant
Treatments:

Acceptable planted red pine
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

37	61020037-NF	7.0	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	320 - Upland Shrub		Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Continue to mow and/or plant portions of these bracken dominated shrublands to encourage herbaceous forage and forbs. retain some areas of
Specs: bracken for cover. Plant clumps of native fruiting shrubs and mast bearing trees. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step
Treatments:

Acceptable
Regen:

Other Manage long term for upland shrub community but consider rotating locations of coniferous cover component (stand 26 and 28). Include
Comment: potentials for burning when considering locations of conifer cover.

Proposed Start Date: 10/1 /2019



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
38	61020038-NF	9.1	2113 - Forage Crops	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal

Habitat Cut: No

Site Condition:

Prescription Continue herbaceous planting prescription. Should test soils and revise planting specs as necessary for what would be beneficial for wildlife and staff logistics, i.e. annual planting versus perennial and native versus non-native.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Comment:

Proposed Start Date: 10/1 /2019

42	61020042-Cut	22.2	4130 - Aspen	Poletimber Well	47	Unspec ified	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal
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Habitat Cut: No

Site Condition: Too Wet

Prescription Harvest aspen, maple, cherry, to regenerate and expand aspen component. Leave any oak and conifer. Mark a few retention islands and possibly retention trees along edge of adjacent lowland area. Add drumming log specs.
Specs:

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

Acceptable aspen, maple, oak
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

56	61020056.9_Monitor	7.0	6112 - Lowland Aspen	Poletimber Well	46	Unspec ified	Monitoring	Natural Regen (Re-Inventory)	4130 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition: Too Wet

Prescription monitor for regen
Specs:

Next Step
Treatments:

Acceptable aspen, maple, cherry, white pine, cedar, hemlock
Regen:

Other Percent to Treat = 100%
Comment:

Proposed Start Date: 10/1 /2019

60	61020060.28_Cut	66.0	4130 - Aspen	Poletimber Well	46	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Harvest all aspen, maple, cherry to regenerate and expand aspen. Leave all oak and conifers. leave retention islands in various locations along with some individual retention along edges of adjacent lowland areas. Add drumming log specs.
Specs:

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

Acceptable aspen, maple, cherry
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019



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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
71 61020071-NF	4.3	2113 - Forage Crops	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal

Habitat Cut: No

Site Condition:

Prescription Continue herbaceous planting prescription. Should test soils and revise planting specs as necessary for what would be beneficial for wildlife and staff logistics, i.e. annual planting versus perennial and native versus non-native.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Comment:

Proposed Start Date: 10/1 /2019

75 61020075-NF	11.6	2113 - Forage Crops	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Continue herbaceous planting prescription. Should test soils and revise planting specs as necessary for what would be beneficial for wildlife and staff logistics, i.e. annual planting versus perennial and native versus non-native.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Comment:

Proposed Start Date: 10/1 /2019

83 61020083-NF	6.1	3301 - Low Density	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	320 - Upland Shrub		Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Continue to mow and/or plant portions of these bracken dominated shrublands to encourage herbaceous forage and forbs. retain some areas of bracken for cover. Plant clumps of native fruiting shrubs and mast bearing trees. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Manage long term for upland shrub community but consider rotating locations of coniferous cover component (stand 26 and 28). Include potentials for burning when considering locations of conifer cover.
Comment:

Proposed Start Date: 10/1 /2019



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
85	61020085-NF	9.3	2113 - Forage Crops Nonstocked			Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal

Habitat Cut: No

Site Condition:

Prescription Continue herbaceous planting prescription. Should test soils and revise planting specs as necessary for what would be beneficial for wildlife and staff logistics, i.e. annual planting versus perennial and native versus non-native.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Comment:

Proposed Start Date: 10/1 /2019

89	61020089-NF	3.2	2113 - Forage Crops Nonstocked			Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Continue herbaceous planting prescription. Should test soils and revise planting specs as necessary for what would be beneficial for wildlife and staff logistics, i.e. annual planting versus perennial and native versus non-native.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Comment:

Proposed Start Date: 10/1 /2019

94	61020094-NF	4.2	2113 - Forage Crops Nonstocked			Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Continue herbaceous planting prescription. Should test soils and revise planting specs as necessary for what would be beneficial for wildlife and staff logistics, i.e. annual planting versus perennial and native versus non-native.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.
Comment:

Proposed Start Date: 10/1 /2019



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
95	61020095-NF	6.1	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	320 - Upland Shrub		Approved Proposal

Habitat Cut: No

Site Condition:

Prescription Continue to mow and/or plant portions of these bracken dominated shrublands to encourage herbaceous forage and forbs. retain some areas of bracken for cover. Plant clumps of native fruiting shrubs and mast bearing trees. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step
Treatments:

Acceptable
Regen:

Other Manage long term for upland shrub community but consider rotating locations of coniferous cover component (stand 26 and 28). Include potentials for burning when considering locations of conifer cover.

Proposed Start Date: 10/1 /2019

96	61020096-NF	6.3	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	320 - Upland Shrub		Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription Continue to mow and/or plant portions of these bracken dominated shrublands to encourage herbaceous forage and forbs. retain some areas of bracken for cover. Plant clumps of native fruiting shrubs and mast bearing trees. Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step
Treatments:

Acceptable
Regen:

Other Manage long term for upland shrub community but consider rotating locations of coniferous cover component (stand 26 and 28). Include potentials for burning when considering locations of conifer cover.

Proposed Start Date: 10/1 /2019

28	61020101-Cut	2.0	42310 - Planted Spruce	Poletimber Well	56	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Approved Proposal
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Habitat Cut: No

Site Condition:

Prescription clearcut this small area with no retention due to small size and want to open-up area to sunlight in effort to expand aspen. Some parts of the adjacent spruce stand will also be cut to open the area to sunlight. Add drumming log specs.

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

Acceptable aspen
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

Total Treatment Acreage Proposed: 674.8

Report 4 – Site Conditions

Traverse City Mgt. Unit

Craig Allen : Examiner

Compartment: 20

Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions				
		With Condition	Not Available		2G	3D	3J	3L	5E
525	500	0	24	Aspen	0	16	4		4
74	13	0	61	Bog	61				
28	0	0	28	Cedar					28
58	58	0	0	Cropland					
11	11	0	0	Herbaceous Openland					
17	17	0	0	Jack Pine					
163	163	0	0	Low-Density Trees					
193	5	0	188	Lowland Aspen/Balsam Poplar	188				
160	0	0	160	Lowland Deciduous	155	0			5
7	0	0	7	Lowland Shrub					7
20	0	0	20	Lowland Spruce/Fir	20				
242	0	0	242	Marsh	41				200
61	56	0	5	Northern Hardwood	0				5
7	7	0	0	Oak					
188	182	0	7	Red Pine					7
31	6	0	25	Treed Bog	25				
51	24	0	27	Upland Spruce/Fir				27	
9	0	0	9	Urban		9			
35	35	0	0	Water	0				
47	43	0	4	White Pine			4		
1,924	1,119		805	Total Forested Acres	490	25	8	27	256
	58%		42%	Relative Percent					

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Craig Allen : Examiner

Compartment: 20

Year of Entry: 2020

3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	388	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Was long term retention for adjacent stand 71 that was harvested and replanted to red pine.							
7	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: retention for stand 60 harvest							
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	39	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	63	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	3D: Recreational / Scenic values	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments: This is the Grass Lake campground							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Craig Allen : Examiner

Compartment: 20

Year of Entry: 2020

17	Unavailable	5E: Long-Term Retention	240	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: these were retention islands for surrounding red pine stand.							
19	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Retention/setback along Betsie river...minimum of 100 feet width from river.							
20	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: when stand is final harvested...leave this retention area. Also, serves as mature tree zone next to campground and road for aesthetic purposes.							
21	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
22	Unavailable	3L: Other wildlife concerns	27	Unspecified	Unspecified	Unspecified	Unspecified
Comments: keep for wildlife thermal/escape cover.							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	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.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.

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Traverse City Mgt. Unit

Report 7 – Forested Stands

Compartment: 20
Year of Entry: 2020

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42110 - Planted Red Pine	Sawtimber Well	13.2	69	51-80	Nice pockets of variable regeneration. Also contains some scattered balsam fir pole size.
4112 - Maple, Beech, Cherry Association	Sawtimber Well	5.9	85	81-110	
42110 - Planted Red Pine	Sapling Well	41.3	6	Immature	Was a mature red pine stand that was final harvested and trenched and re-planted to red pine. Red pine seedlings planted on 5/1/2012
4112 - Maple, Beech, Cherry Association	Sawtimber Well	4.7	86	51-80	
42110 - Planted Red Pine	Sawtimber Well	30.7	69	111-140	
4119 - Mixed Northern Hardwoods	Sawtimber Well	15.8	80	51-80	
6120 - Lowland Cedar	Poletimber Medium	27.8	106	Unspecified	Lots of blowdowns. Some cedar regen in spots where deer can't get at them. (6" to 2' tall) But most regen is balsam fir.
4130 - Aspen	Poletimber Well	26.9	61	Unspecified	Also contains occasional beech, white pine, red pine, jack pine, balsam fir.
4130 - Aspen	Sawtimber Well	15.8	59	51-80	
42110 - Planted Red Pine	Sawtimber Well	12.5	68	81-110	Jack pine removed in 2000.
42200 - Natural White Pine	Sawtimber Well	4.0	100	51-80	Park- like understory 6" to 1' oak seedlings present.
6113 - Lowland Maple	Poletimber Well	5.2	57	Unspecified	
4130 - Aspen	Poletimber Well	17.9	37	Unspecified	Variable terrain. Some higher ground. Occasional sugar maple.
6113 - Lowland Maple	Poletimber Medium	25.8	37	1-50	occasional white cedar and hemlock too.
4130 - Aspen	Poletimber Well	33.0	27	1-50	Contains many scattered large DBH oak trees - mostly red oak.
6113 - Lowland Maple	Sawtimber Well	8.3	94	51-80	
4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	5.0	85	51-80	

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Traverse City Mgt. Unit

Report 7 – Forested Stands

Compartment: 20
Year of Entry: 2020

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	6112 - Lowland Aspen	Poletimber Well	9.8	70	1-50	1/2 upland 1/2 lowland.
25	42110 - Planted Red Pine	Sawtimber Well	24.8	68	141-170	Was row-thinned in 2000. Was alternating rows of red & jack. jack has died out.
26	42310 - Planted Spruce	Poletimber Well	19.1	56	81-110	
28	42310 - Planted Spruce	Poletimber Well	30.8	56	81-110	
29	4116 - Mixed N. Hardwood - Aspen	Poletimber Poor	9.9	61	1-50	
33	4139 - Aspen, Mixed Deciduous	Poletimber Well	50.5	41	1-50	Also contains some scattered oak saps and poles, a few beech log/poles.
35	42110 - Planted Red Pine	Poletimber Well	6.4	56	171-200	
36	42110 - Planted Red Pine	Sawtimber Well	37.9	68	111-140	
41	42100 - Planted White Pine	Poletimber Well	1.2	50	51-80	
42	4130 - Aspen	Poletimber Well	110.1	47	Unspecified	Also contains scattered w pine saps and scattered white oak saps. Lots of course woody debris.
43	42310 - Planted Spruce	Poletimber Well	1.0	56	1-50	
44	42210 - Natural Red Pine	Poletimber Well	2.1	70	81-110	
46	4130 - Aspen	Poletimber Well	11.4	46	Unspecified	
49	42100 - Planted White Pine	Poletimber Medium	15.1	69	51-80	
50	42100 - Planted White Pine	Poletimber Medium	26.5	69	51-80	
55	6113 - Lowland Maple	Poletimber Well	30.6	85	81-110	
56	6112 - Lowland Aspen	Poletimber Well	80.0	46	Unspecified	
58	6113 - Lowland Maple	Poletimber Medium	27.0	46	1-50	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
59	42110 - Planted Red Pine	Sapling Poor	2.5	9	Immature	Possible old sandy, degraded oil/gas well site. Was hand planted to red pine by FRD staff with leftover pine seedlings from another planting project.
60	4130 - Aspen	Poletimber Well	70.3	46	1-50	Also, has some scattered White pine of various size and age class. Also scattered oak.
61	6113 - Lowland Maple	Sawtimber Well	63.4	85	81-110	
63	6112 - Lowland Aspen	Poletimber Well	103.2	46	1-50	Also has some ash, birch, elm, white oak, spruce, fir, white pine.
66	4130 - Aspen	Poletimber Well	42.7	47	1-50	Stand is on ridge line. Occasional white oak, (sap & pole) and occasional fir (sap & pole).
67	6122 - Black Spruce	Poletimber Well	2.4	45	Unspecified	Mostly low with standing water
70	6122 - Black Spruce	Poletimber Medium	17.3	65	Unspecified	
72	42110 - Planted Red Pine	Sawtimber Well	3.1	72	141-170	
73	42110 - Planted Red Pine	Sawtimber Well	13.8	69	111-140	
74	4130 - Aspen	Sapling Well	5.4	8	Immature	occasional oak sap or pole. Site was harvested in fall of 2010 for aspen regen.
76	4130 - Aspen	Sapling Well	34.2	7	Unspecified	Harvested in fall of 2010 Also contains scattered w pine saps and scattered white oak saps. Lots of course woody debris.
77	4130 - Aspen	Poletimber Well	9.5	47	Unspecified	Also contains scattered w pine saps and scattered white oak saps. Lots of course woody debris.
78	4130 - Aspen	Sapling Well	43.5	7	Unspecified	Harvested in fall of 2010 Also contains scattered w pine saps and scattered white oak saps. Lots of course woody debris.
80	4130 - Aspen	Poletimber Medium	12.0	47	Unspecified	
81	4130 - Aspen	Sapling Well	13.8	8	Immature	Harvested fall of 2010 Also contains scattered w pine and oak saps. Lots of course woody debris.

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Traverse City Mgt. Unit

Report 7 – Forested Stands

Compartment: 20
Year of Entry: 2020

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
84	42220 - Natural Jack Pine	Sapling Well	15.8	25	Immature	
87	42220 - Natural Jack Pine	Sapling Well	1.0	25	Immature	
88	4130 - Aspen	Sapling Well	1.4	25	Immature	also some scattered white spruce saps in under story
90	4130 - Aspen	Poletimber Well	25.4	46	Unspecified	Also contains scattered w pine saps and scattered white oak saps.
91	4123 - Red Oak	Sawtimber Well	3.1	85	51-80	
92	4112 - Maple, Beech, Cherry Association	Sawtimber Well	3.1	85	81-110	
97	4123 - Red Oak	Sawtimber Well	3.5	90	1-50	
99	4112 - Maple, Beech, Cherry Association	Sawtimber Poor	16.5	80	1-50	
101	4134 - Aspen, Spruce/Fir	Poletimber Well	0.9	45	81-110	



Stand	Cover Type	Acres	Managed Site	General Comments:
8	3105 - Mixed Upland Herbaceous	3.2	No	This is a nice forest opening situated near the edge of the Grass Lake Flooding.
11	110 - Low Intensity Urban	8.8	Yes	Grass Lake State Forest Campground.
13	3301 - Low Density Deciduous Tree	31.0	No	Also found sjw, skw, strawberry, rubus, cladonia, moss, goldenrod, sheep sorrel.
16	500 - Water	35.0	No	Betsie River
18	6239 - Mixed Emergent Wetland	200.3	No	Cattails, marsh grasses, willow, alder, probable glossy buckthorn in areas. High concentration of cattails.
24	3301 - Low Density Deciduous Tree	18.6	No	
27	2113 - Forage Crops	16.1	Yes	This field is currently planted to a grass/clover mix and is maintained on an annual basis.
30	6220 - Alder/willow	6.9	No	
31	3301 - Low Density Deciduous Tree	20.5	No	
32	3301 - Low Density Deciduous Tree	67.3	No	
34	6225 - Bog	2.4	No	
37	3301 - Low Density Deciduous Tree	7.0	No	This stand was inventoried in the field and is essentially a continuation of stand 31, where the complete data has been entered and comments and management considerations have been logged.
38	2113 - Forage Crops	9.1	Yes	
39	6225 - Bog	5.0	No	
40	3105 - Mixed Upland Herbaceous	3.1	No	Was used for a logging landing when adjacent stand to the south (78) was harvested.
47	6224 - Treed Bog	2.8	No	
48	6225 - Bog	2.2	No	



Stand	Cover Type	Acres	Managed Site	General Comments:
51	310 - Herbaceous Openland	1.8	No	Originally made for oil/gas well site. Was used as landing for logging when adjacent stand was thinned. Spotted knapweed and occasional upland will shrub and autumn olive.
52	6225 - Bog	3.4	No	
53	6224 - Treed Bog	3.0	No	
54	6225 - Bog	14.0	No	
57	6224 - Treed Bog	14.4	No	
62	6225 - Bog	14.3	No	
64	6225 - Bog	6.5	No	
65	6225 - Bog	26.4	No	
68	6224 - Treed Bog	10.4	No	
69	6239 - Mixed Emergent Wetland	41.2	No	
71	2113 - Forage Crops	4.3	Yes	
75	2113 - Forage Crops	11.6	Yes	
82	310 - Herbaceous Openland	1.8	No	
83	3301 - Low Density Deciduous Tree	6.1	No	
85	2113 - Forage Crops	9.3	Yes	
86	310 - Herbaceous Openland	1.0	No	
89	2113 - Forage Crops	3.2	Yes	
94	2113 - Forage Crops	4.2	Yes	



Stand	Cover Type	Acres	Managed Site	General Comments:
95	3301 - Low Density Deciduous Tree	5.9	No	This stand was inventoried in the field and is essentially a continuation of stand 31, where the complete data has been entered and comments and management considerations have been logged.
96	3301 - Low Density Deciduous Tree	6.3	No	This stand was inventoried in the field and is essentially a continuation of stand 31, where the complete data has been entered and comments and management considerations have been logged.