



Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61174

Entry Year 2022

Acreage: 1,592

County Kalkaska

Management Area: Boardman Plains

Revision Date: 2020-07-23

Stand Examiner: Steve Crigier

Legal Description:

T28N, R7W Sections 15, 16 and 17.

Identified Planning Goals:

Vegetation management in the Boardman Plains management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character, threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management objectives for this 10-year planning period include improving the age-class structure of aspen; increasing regeneration of oak; working toward balancing the red pine age-class structure; continuing emphasis on managing the northern hardwood resource for stand quality, age, and species diversity; wildlife values; and continued production of wood products. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunity. Expected trends within this 10-year planning period are: increased recreational pressure; increased oil and gas development; an increased wildland/urban interface; a need to restore oak/pine barrens communities; invasive plant control; and the conversion of poor oaks sites to mixed pine/oak sites

Soil and topography:

The Terrain is mostly upland on Kalkaska sandy loams with some rolling hills. The flood plain of the Rapid River is poorly drained soils on Rifle peat.

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

There are several private holdings within the compartment and there is a mixture of state and private land adjacent to the compartment. The land within the compartment has been intensely managed for hardwood lumber as is the state land next to the compartment. The private land in and around the compartment is mostly recreational/season use land. There is also a fair amount of oil & gas activity.

Unique Natural Features:

None known

Archeological, Historical, and Cultural Features:

None known

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

This compartment contains the North Branch of the Boardman River and Crofton Creek. Reasonable buffers (as outlined in Water Quality Management Practices on Forest Land) should be adhered to around all streams in this compartment. These streams are all naturally reproducing, are Type 1 designated trout streams; existing buffers appear to be appropriate for the proposed treatments.

Wildlife Habitat Considerations:

This compartment falls primarily within a pitted outwash plain and is partially incised by the valleys of the Rapid River and a tributary stream. A relatively large block of mature northern hardwood forest occupies state lands here. It should be maintained as closed canopy interior forest habitat in this largely fragmented landscape. Selective harvests should incorporate maintenance of tree species diversity, retention of cavity trees, and creation of down logs as habitat structure. Mast producing trees such as oak, beech, and cherry are important for wildlife. Conifer components present in the past are largely absent now, but a few spruce plantings complement the northern hardwood dominated uplands. Aspen seems to occupy draws within hardwood complexes in other similar landscapes, perhaps as a result of soil differences, cold air drainages, or local blowdown events where winds accelerate because of topography. Retention of snags and yellow birch and hemlock pockets within any aspen patch cuts will add to local diversity. Floodplains should be maintained in lowland conifer cover as much as possible. Natural blowdown pockets and beaver activity are sufficient to maintain some diversity in these types. The juxtaposition of hardwood forest and floodplain wetlands creates suitable habitat for red-shouldered

hawks. Timber sale activity should accommodate habitat needs for this raptor.

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 600 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. There is no current economic use for the Coldwater Shale. Gravel pits are located within this compartment, in Section 14. Gravel potential in the compartment is considered good. This area is located along the northern edge of the Silurian Niagaran reef trend. All State mineral rights are currently leased for oil and gas development. There may be additional reef potential. The Antrim Shale has been developed in the Compartment and to the north and west.

Vehicle Access:

Smith and Wallace Road provide good gravel access with numerous secondary and forest access roads branching off through out the compartment.

Survey Needs:

Might need some work done in the northwest quarter of section 16. A request will be submitted if no private corners are found.

Recreational Facilities and Opportunities:

There is no infrastructure within the compartment but there are lots of opportunities available for outdoor activities.

Fire Protection:

Department of Natural Resources (Kalkaska) and Station 7 Volunteer Fire Department.

Additional Compartment Information:

The following reports from the Inventory are attached:

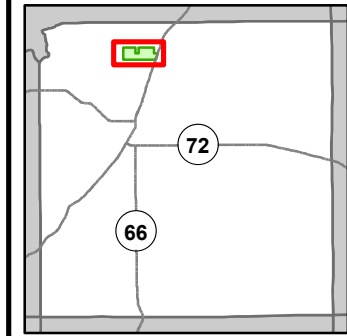
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

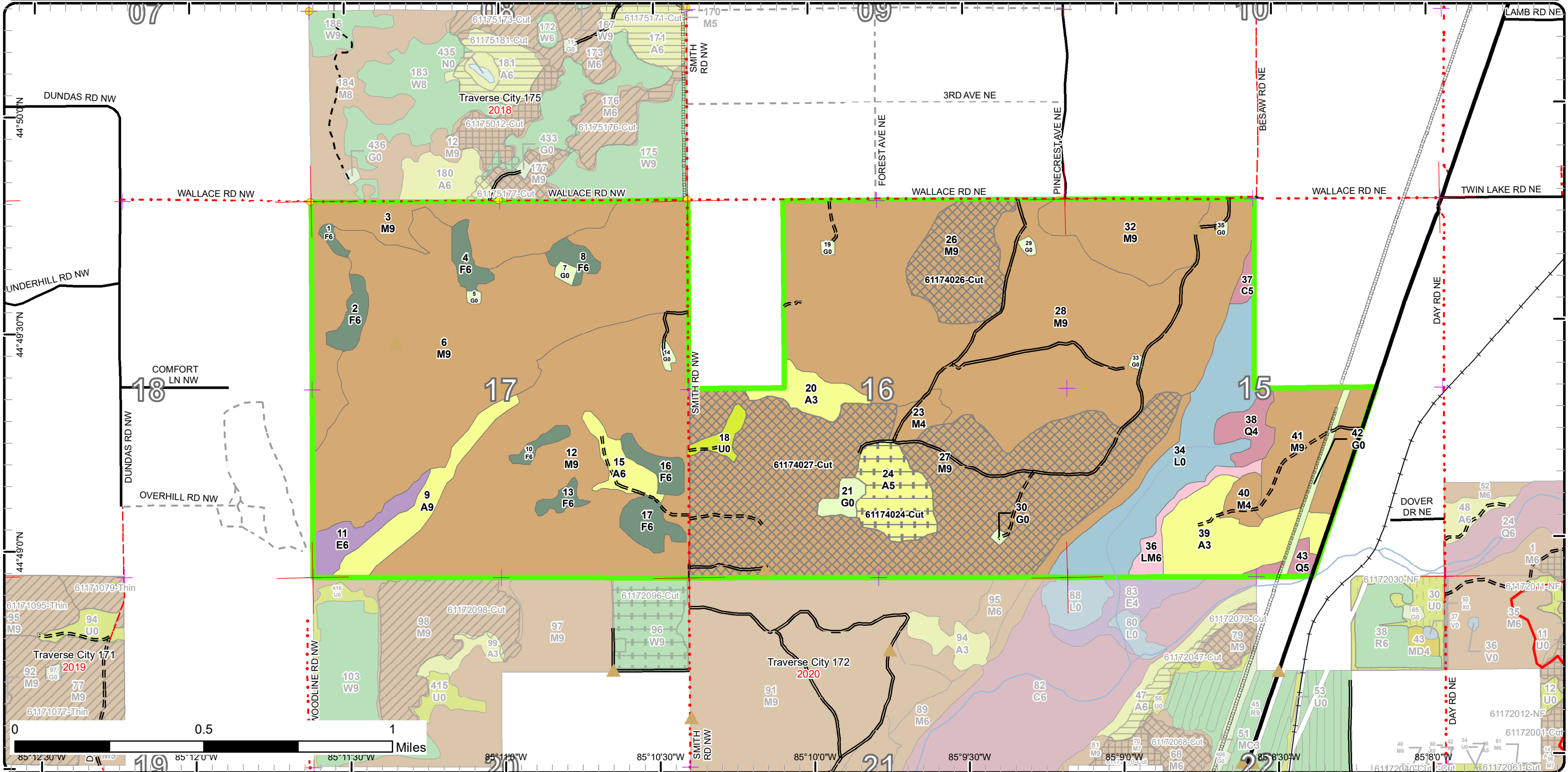
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 174
 T28N - R07W Sec. 15-17
 County: Kalkaska
 Unit: Traverse City
 Mgmt Area: Boardman Plains
 YOE: 2022
 Acres: 1,592.3 GIS Calculated
 Examiner: Steve Crigier
 Map Revised: 1/25/2021
 Map Phase: Post-Review

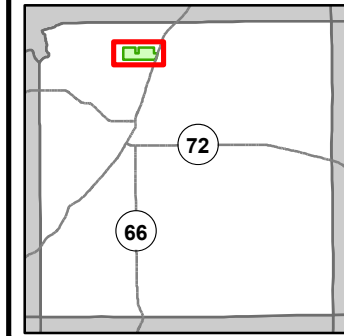


- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Active Railroads
- Designated ATV Trails
- ▲ Berms
- Perennial River
- Pipeline
- Compartment Boundary
- Selection (Group, Single Tree)
- Harvest, Overstory Removal
- 411 - Northern Hardwood
- 413 - Aspen Types
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub

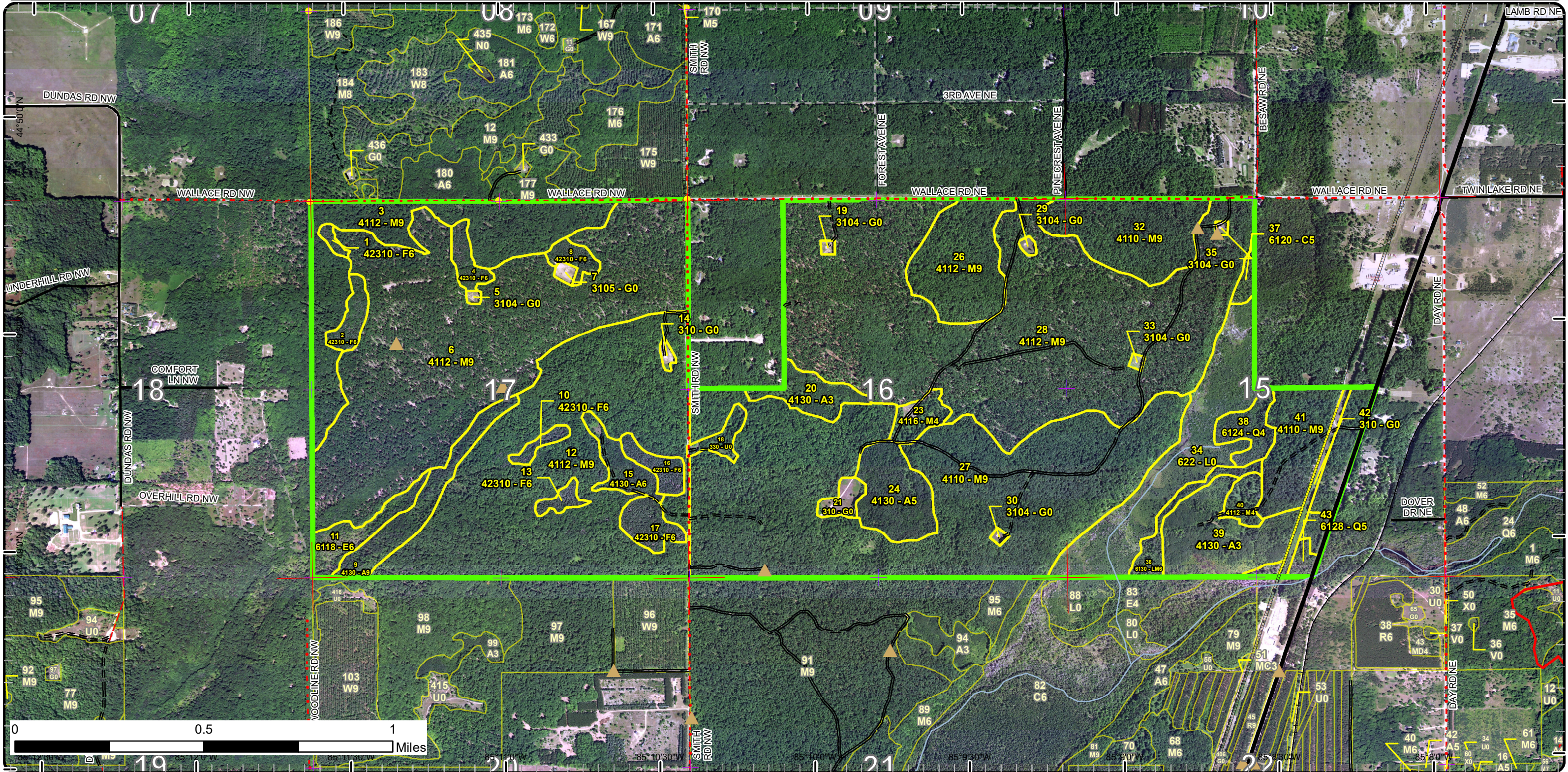


Stand Boundary Map

Compartment: 174
 T28N - R07W Sec. 15-17
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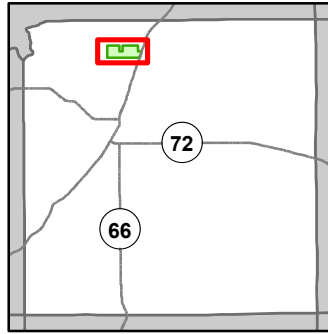


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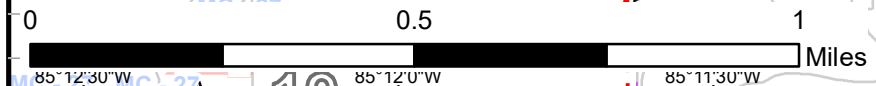
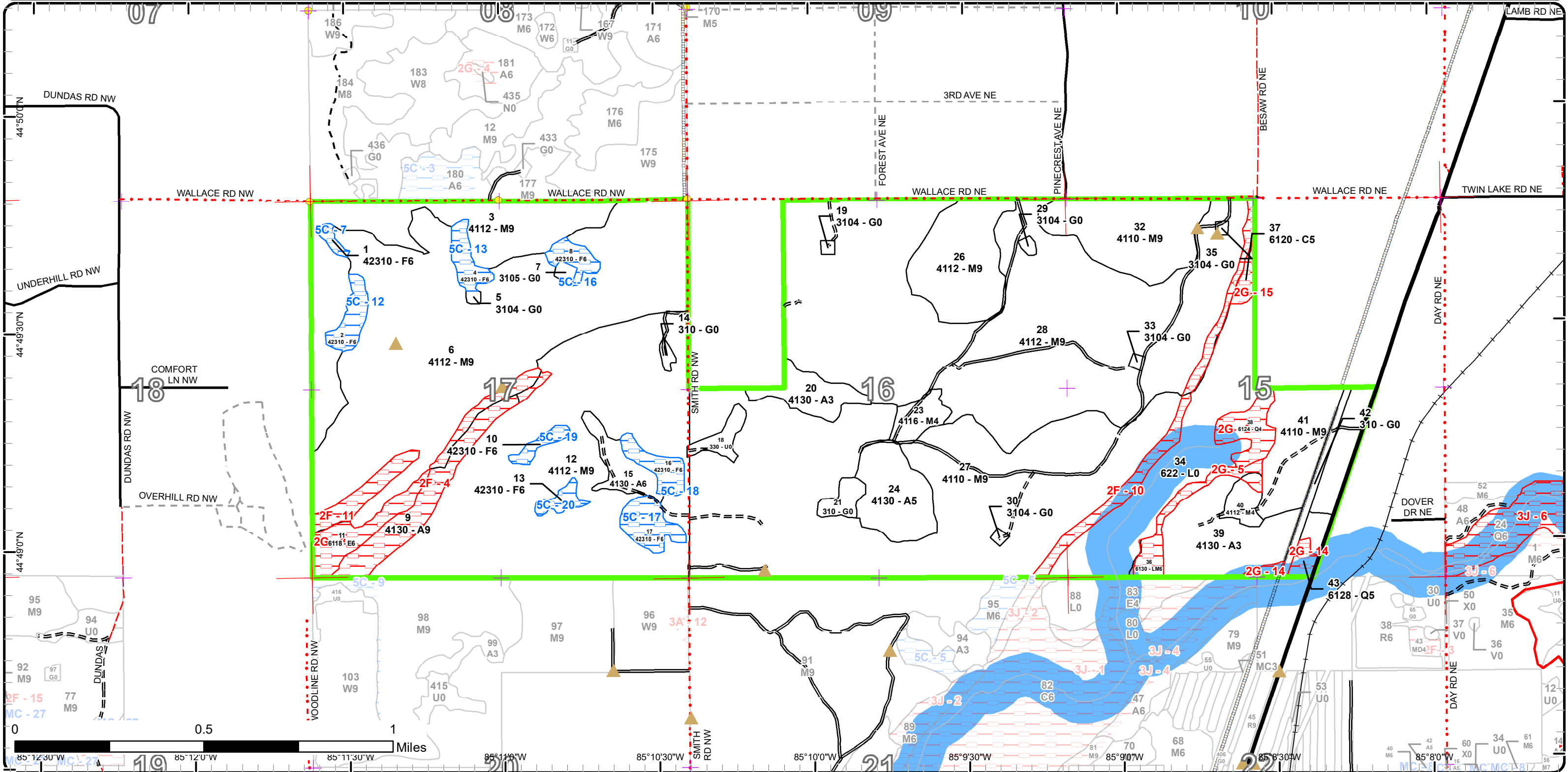


Special Conservation Areas

Compartment: 174
 T28N - R07W Sec. 15-17
 County: Kalkaska
 Unit: Traverse City
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- Private - Dirt / Gravel Road
- Active Railroads
- Designated ATV Trails
- ▲ Berms
- Perennial River
- Pipeline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer



85°12'30"W 85°12'0"W 85°11'30"W 85°11'0"W 85°10'30"W 85°10'0"W 85°9'30"W 85°9'0"W 85°8'30"W

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	0	57	0	0	11	27	0	0	0	22	0	0	0	0	0	0	0	117
Cedar	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Herbaceous Openland	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Low-Density Trees	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	12	5	0	0	0	0	0	0	17
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
Lowland Shrub	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
Northern Hardwood	0	0	0	0	0	8	7	0	0	0	1276	0	0	0	0	0	0	0	1291
Upland Spruce/Fir	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	46
Total	93	0	57	0	0	19	34	46	0	0	1338	5	0	0	0	0	0	0	1591



Report 2 – Treatment Summary

Traverse City Mgt. Unit
Year of Entry: 2022

Acres of Harvest

Compartment 174
Total Compartment Acres: 1,592

Commercial Harvest - 337
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	0	0	0	0	0	27	0	0		27
Northern Hardwood	0	310	0	0	0	0	0	0		310
Total	0	310	0	0	0	27	0	0		337

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	337	0	0	0	0	0	0	0		337
Next Step	0	0	0	0	0	310	0	0		310
Total	337	0	0	0	0	310	0	0		646



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	Habitat Cut
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Approved Treatments:

24	61174024-Cut	26.8	4130 - Aspen	Poletimber Medium	56	51-80	Harvest	Overstory Removal	411 - Northern Hardwood	Even-Aged	No
<p><u>Prescription</u> Cut all trees, except try to leave and protect the sugar maple that is less than 4" in diameter. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> aspen, cherry, maple, basswood. <u>Regen:</u> <u>Other</u> Stand has variable stocking A4/ A6 with an M3 understory. Nice thick clone of bigtooth at the southern end of the stand. some thick pockets <u>Comment:</u> of just young ironwood. Other areas are open grown cherry brush <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>											
26	61174026-Cut	42.2	4112 - Maple, Beech, Cherry Association	Sawtimber Well	92	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No
<p><u>Prescription</u> Select cut stand with a target BA of about 80. Also, line out about 5 (~1ac) regen gaps. These gaps should have everything over 4' tall cut <u>Specs:</u> down. <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> maple, aspen, cherry, basswood. <u>Regen:</u> <u>Other</u> Nice quality hardwoods. Under story Looks heavy to ironwood, some signs of Sugar maple. A bit of wind damage. Some scattered hemlock <u>Comment:</u> <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>											
27	61174027-Cut	267.6	4110 - Sugar Maple Association	Sawtimber Well	93	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	No
<p><u>Prescription</u> Select cut stand with a BA target of ~ 80. Also, line out some .5-1ac regen gaps, maybe 1 for every 10 acres so about 28 of them. Have the <u>Specs:</u> regen gaps cleaned up really well, a hot saw would be the preferred equipment to use in these. <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> maple, aspen, basswood, cherry. <u>Regen:</u> <u>Other</u> Some Scattered hemlock. Good quality hardwoods. Understory is pretty heavy to ironwood. Some wind throw. East end of the stand <u>Comment:</u> seems to be more pole timber and higher stocking. Less of a hemlock component and more cherry. <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>											

Total Treatment 336.6
Acreage Proposed:

Report 4 – Site Conditions

Traverse City Mgt. Unit
Steve Crigier : Examiner

Compartment: 174
Year of Entry: 2022

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	5C	2F	2G
		With Condition	Not Available				
117	95	0	22	Aspen		22	0
4	0	0	4	Cedar			4
20	20	0	0	Herbaceous Openland			
6	6	0	0	Low-Density Trees			
17	0	0	17	Lowland Conifers			17
14	0	0	14	Lowland Deciduous		0	14
10	0	0	10	Lowland Mixed Forest			10
67	67	0	0	Lowland Shrub		0	0
1292	1255	0	37	Northern Hardwood		36	1
46	0	46	0	Upland Spruce/Fir	46		
1,592	1,442	46	104	Total Forested Acres	46	58	46
	91%	3%	7%	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	2G: Too wet (sensitive soils, does not include access issues)	18	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Steve Crigier : Examiner

Compartment: 174

Year of Entry: 2022

3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2F: Too steep	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	39	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Stand is a buffer to the head waters of the Rapid River							
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Unavailable	2F: Too steep	4	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit
Steve Crigier : Examiner

Compartment: 174
Year of Entry: 2022

9	Unavailable	2F: Too steep	8	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	2F: Too steep	19	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	2F: Too steep	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit
Steve Crigier : Examiner

Compartment: 174
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15	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
16	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
17	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
19	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Compartment: 174

Steve Crigier : Examiner

Year of Entry: 2022

20	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

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 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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																												
1	42310 - Planted Spruce	Poletimber Well	1.9	60	111-140	N/A	4-6stick poles. Starting to see some mortality. stand, if cut might make a nice regen gap for hardwoods. some maple and cherry mixed in.																																												
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Spruce</td> <td>90</td> <td>Pole</td> <td>8</td> <td>60</td> </tr> <tr> <td>Red Maple</td> <td>5</td> <td>Pole</td> <td>6</td> <td></td> </tr> <tr> <td>Black Cherry</td> <td>5</td> <td>Pole</td> <td>6</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	White Spruce	90	Pole	8	60	Red Maple	5	Pole	6		Black Cherry	5	Pole	6																															
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2	42310 - Planted Spruce	Poletimber Well	7.4	60	141-170	N/A	4-6 Stick spruce with a few few pockets of hardwoods. seeing some mortality in the spruce. Might be good to final harvest if it can be paired up with another stand.																																												
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4	42310 - Planted Spruce	Poletimber Well	6.6	60	141-170	N/A	spruce is about 4-6 Sticks. Some mortality. Some cherry and red maple mixed in. Might want to cut before the spruce declines any further.																																												
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5	3104 - Degraded	Nonstocked	0.8		Unspecified		active well site.																																												
6	4112 - Maple, Beech, Cherry Association	Sawtimber Well	254.7	93	81-110	N/A	- Stand was thinned in fall of 2015 1850 Wallace Hardwoods 61-036-12-01. Stand had some wind damage that was salvage so there is some sparse stocking in areas. Decent quality hardwoods, south end has pretty steep bluff, some areas were not harvested due to the terrain.																																												
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7	3105 - Mixed Upland Herbaceous	Nonstocked	1.6		Unspecified	No	Old well site plugged in 1974.																																												



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9	4130 - Aspen	Sawtimber Well	22.3	93	81-110	N/A	Unique stand with large Aspen overstory and hemlock understory. Nice mature aspen, quite a bit of log volume, 6-7 sticks. Stand is on pretty steep hill. Look like it would be hard to operate on and try to protect the hemlock.																																													
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10	42310 - Planted Spruce	Poletimber Well	3.5	60	141-170	N/A	Decent quality spruce 4-6 sticks tall, some cherry and red maple mixed in on the edges of the stand.																																													
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11	6118 - Lowland Deciduous with Cedar	Poletimber Well	14.0	99	51-80	N/A	Stand has small perennial drain running through it.																																													
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12	4112 - Maple, Beech, Cherry Association	Sawtimber Well	208.9	93	81-110	N/A	- Thick regen stand was opened up nicely. Stand has bluff as the north boundary. - Some scattered hemlock and white pine. Some areas with sugar maple regen! Medium quality hardwoods. A few pockets of wind throw. Some veins of planted spruce in the south end. BAs 90, 90, 110, 110, 90, 90, 120, 80, 90, 90 = AVG 97sqft/ac																																													
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13	42310 - Planted Spruce	Poletimber Well	3.7	60	141-170	N/A	Decent quality spruce 4-6 sticks tall. A bit of cherry and maple mixed in. Some mortality. stand is in a bit of depression. It might be good to final harvest when Stand 12 is cut. Hopefully it would seed into hardwoods.																																													
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14	310 - Herbaceous Openland	Nonstocked	1.4		Unspecified	No	Old well pad. There was 2 wells on this site one plugged in 1974 the other in 1986.																																													



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
15	4130 - Aspen	Poletimber Well	11.1	45	51-80	N/A	Stand is a mix of bigtooth and quaking aspen ~5-6 stick tall. Overstory stocking is somewhat variable, some parts are more of a A5. There is a good amount of Sugar maple in the understory M3-M5. Look to do an overstory Removal now or in 10yrs.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Bigtooth Aspen		80	Pole/Sapling	6	45	Sugar Maple		High	>20 feet	Sapling
Sugar Maple		10	Pole/Sapling	5						
Basswood		5	Pole	8						
Black Cherry		5	Pole	8						
16	42310 - Planted Spruce	Poletimber Well	7.6	60	141-170	N/A	spruce is about 5-6 stick tall. Some individual mortality. Stand is in a Slight depression. Look to final harvest to provide a hardwood regen gap.			
Canopy Species		% Cover	Size Class	DBH	Age					
Bigtooth Aspen		5	Pole	8						
White Spruce		95	Pole	8	60					
17	42310 - Planted Spruce	Poletimber Well	10.0	60	141-170	N/A	nice spruce stand,sticks. Some mortality. If final harvested it might make a nice regen gap for hardwoods.			
Canopy Species		% Cover	Size Class	DBH	Age					
Sugar Maple		5	Pole	7						
White Spruce		85	Pole	8	60					
Black Cherry		5	Pole	6						
Quaking Aspen		5	Pole	7						
18	330 - Low-Density Trees	Nonstocked	5.5		Immature	No	Stand is an opening filling in.			
19	3104 - Degraded	Nonstocked	0.8		Unspecified		Active well pad			
20	4130 - Aspen	Sapling Well	14.1	17	Immature	N/A	aspen is in a bit of a depression. South end of stand isn't regeneratin as thick as the north. Tree are about 20-25' tall. Stand is unit 3 of 'Powerline Aspen' A mix of hardwoods on the edge of the stand.			
Canopy Species		% Cover	Size Class	DBH	Age					
Quaking Aspen		85	Sapling	2	17					
Sugar Maple		5	Sapling	1						
Red Maple		5	Sapling	2						
Ironwood		5	Sapling	1						
21	310 - Herbaceous Openland	Nonstocked	5.3			No	Edges are starting to fill in with a mix of hardwoods.			
23	4116 - Mixed N. Hardwood - Aspen	Poletimber Poor	8.4	44	1-50	N/A	opening filling in with Cherry and clones of aspen. Understory filling in with some sugar maple.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Quaking Aspen		25	Pole	6		Quaking Aspen		Medium	Variable	Sapling
Black Cherry		70	Pole	6	44	Sugar Maple		Medium	Variable	Sapling
Sugar Maple		5	Pole/Sapling	6						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																			
24	4130 - Aspen	Poletimber Medium	26.8	56	51-80	N/A	Stand has variable stocking A4/ A6 with an M3 understory. Nice thick clone of bigtooth at the southern end of the stand. some thick pockets of just young ironwood. Other areas are open grown cherry brush																																																			
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26	4112 - Maple, Beech, Cherry Association	Sawtimber Well	42.2	92	111-140	N/A	thinned in 2004 'Pinecrest Hardwoods' some nice pockets of hard maple regen. - nice quality hardwoods. Understory Looks heavy to ironwood, some signs of Sugar maple. A bit of wind damage. some scattered hemlock. BA: 130, 120, 90, 120. Avg= 115																																																			
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27	4110 - Sugar Maple Association	Sawtimber Well	279.5	93	111-140	N/A	- Stand thinned in 2006. 'Gasfield Hardwoods'. - Some Scattered hemlock. Good quality hardwoods. Understory is pretty heavy to ironwood. Some wind throw. East end of the stand seems to be more pole timber and higher stocking. Less of a hemlock component and more cherry. BAs:100, 130, 100, 60, 120, 100, 140, 110, 100, 130, 130, 120, 100, 130, AVG = 112sqft/ac																																																			
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28	4112 - Maple, Beech, Cherry Association	Sawtimber Well	324.2	90	81-110	N/A	- Stand was thinned in 2016, Oil Field Hardwoods 61-055-12-01. Stand received some wind damage that was salvaged so there are some areas that are more sparse than others. Average BA is around 80sqft. Good quality timber. Ironwood and beech regen is a concern. - Ironwood beech and raspberry coming in pretty thick, but there are some areas with sugar maple and cherry regen. Nice quality timber. scattered pockets of hemlock. West end is more of a pole stand.																																																			
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29	3104 - Degraded	Nonstocked	1.0		Unspecified		Active well pad																																																			
30	3104 - Degraded	Nonstocked	0.8		Unspecified		Inactive well pad plugged in 2019 and is in need of rehab.																																																			



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32	4110 - Sugar Maple Association	Sawtimber Well	45.0	95	81-110	N/A	- thinned in 06 'Besaw Rd. Hardwoods.'																																													
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33	3104 - Degraded	Nonstocked	0.8		Unspecified		Inactive well pad, plugged in 2019 and is in need of rehab.																																													
34	622 - Lowland Shrub	Nonstocked	67.0		Immature	No	Rapid River and its flood plain.																																													
35	3104 - Degraded	Nonstocked	0.8		Unspecified		Inactive well pad, plugged in 2019 and is in need of rehab.																																													
36	6130 - Fir, Aspen, Maple	Poletimber Well	10.0	99	51-80	N/A																																														
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37	6120 - Lowland Cedar	Poletimber Medium	3.6	99	81-110	N/A	Rapid River cooridor																																													
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38	6124 - Lowland Spruce-Fir	Poletimber Poor	11.7	99	1-50	N/A	Lots of wind throw. Rapid R. cooridor. very sparse stocking.																																													
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39	4130 - Aspen	Sapling Well	43.1	18	Immature	N/A	regen 20-25' tall & thick. Softer ground near the river. Some pockets of mature aspen where left for retention. More of a fir componet towards 131. Cut in 2003 'Powerline Aspen'. some ruts still visible in the West end of the stand. stocking is more sparse at the southend and the ground is pretty wet down there																																																	
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40	4112 - Maple, Beech, Cherry Association	Poletimber Poor	6.9	50	1-50	N/A	Scattered cherry and red maple. Balsam fir and white pine in the understory.																																																	
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41	4110 - Sugar Maple Association	Sawtimber Well	45.9	93	81-110	N/A	Stocking is variable. Most of stand has been thinned in 2004 'Powerline Hwds', except for the middle portion. Stand turns to more of a red maple/balsam fir mix towards north and west. Stand has pipeline running through it. south end of stand has a Steep bluff. Quite a bit of wind damage. Nice quality Sugar maple at the southern end. North of the two track the timber is smaller and is lower quality. BAs: 90, 110, 120, 80. AVG =100.																																																	
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42	310 - Herbaceous Openland	Nonstocked	6.5		Unspecified	No	Pipeline and Power line corridor.																																																	
43	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	5.3	100	51-80	N/A	Rapid river corridor That was left when stand 39 was cut. Stand transitions to sparse black spruce and tag alder near. the river.																																																	
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