



Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61142

Entry Year 2017

Acreage: 2,115

County Kalkaska

Management Area: Kirtland's Warbler

Revision Date: 2015-05-14

Stand Examiner: Donna Hagan

Legal Description:

Garfield Township - T25N, R5W, Sec. S1/2 13, 22, 23 & 24

Identified Planning Goals:

Kirtland's Warbler Management Area

Soil and topography:

Grayling Sand. Very Flat well drained

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

Almost this entire compartment is in state ownership. One 40 is privately owned in the SWSW of Sec. 22 and one acre of former school property along Fletcher Road in Sec. 23 has a cabin. An eighty acre parcel in Sec. 22 is owned by the U.S. Fish & Wildlife Service. A TransCanada natural gas pipeline, a high pressure 48" in diameter, runs through compartment.

Unique Natural Features:

This compartment falls within landtype association (LTA) 5111 of sub-subsection VII.2.2. LTA 5111 is a broad flat outwash plain with excessively drained sand and few kettle lakes.

MNFI ecologists have identified a high quality oak-pine barrens community in the southwest quarter of section 22 corresponding to U0 stands 28 and 33, O9 stands 27, 32 and 34, and O3 stand 30. Oak-pine barrens (G2?S2) are characterized by heterogeneous savanna vegetation with scattered and clumped mature oak and pine in a matrix of native grasses. Frequent wildfires were the dominant form of disturbance and the primary ecological process that maintained this community. Modern fire suppression has resulted in a shift in the fire regime and a conversion of many oak-pine barrens to closed-canopy forest. Today only a few hundred acres of high-quality oak-pine barrens exist in the entire state. This site, which occurs on rolling outwash sand and is dominated by scattered white oak and northern pin oak, has an element occurrence rank of C. We strongly encourage the use of prescribed fire to maintain the open structure and floristic diversity of this unique system. GLO surveyors commonly reported evidence of large wildfires within LTA 5111. As indicated by the notes of the original land surveyors the northeastern portion of the compartment contained the fire-dependent pine barrens community.

More than one threatened & endangered species is in this compartment.

Archeological, Historical, and Cultural Features:

Archeological concerns in section 22.

Special Management Designations or Considerations:

Kirtland's Warbler Management Area

Watershed and Fisheries Considerations:

No water in compartment.

Wildlife Habitat Considerations:

Compartment 142 is part of the Fletcher Road Area Kirtland's Warbler Management Unit. The Kirtland's Warbler Recovery Plan was developed in 1976, updated in 1985, and recently underwent a third revision, May 2014, in order to provide state and federal agencies with guidelines for management efforts to increase the Kirtland's warbler population.

Kirtland's warblers (KWs) nest in Michigan's northern Lower and Upper peninsulas, in Wisconsin and the province of Ontario. It nests under live branches of five to 20 year old jack pine forests. Kirtland's warblers prefer jack pine stands over 80 acres in size.

Jack pine stands are regenerated naturally by wildfires which were common on the sandy outwash plains. However with

modern fire prevention and suppression techniques, jack pine is not naturally regenerated like it used to be. In order to provide habitat for KWs, jack pine stands are managed by logging, burning, seeding, and replanting on a rotational basis to provide approximately 38,000 acres of productive nesting habitat at all times. By carrying these stands to a 50 year rotational age, nesting habitat can be maintained for the warblers with little sacrifice to the commercial harvest of jack pine. These jack pine stands also provide habitat for the upland sandpiper, Eastern bluebird, white tailed deer, black bear and snowshoe hare, and for several protected prairie plants, including the Allegheny plum, Hill's thistle, and rough fescue.

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 Michigan Formation. The Michigan is quarried for gypsum elsewhere in the State. The Compartment is located south of the Beaver Creek Field. Beaver Creek produces from the Devonian Richfield and Detroit River Formations and the Ordovician PdC. Most of the State's minerals are leased.

Vehicle Access:

Vehicle access is good with county roads bordering the compartment and running North-South every mile. Plus a two-track road runs along the TransCanada Pipeline.

Survey Needs:

SWSW of Sec. 22

Recreational Facilities and Opportunities:

There are no designated recreational facilities within this compartment (T.M.N. 12/10/14)

Fire Protection:

This area is a Zone 5 area of protection where aggressive fire prevention efforts are targeted because of the concentration of volatile fuels in the area.

Additional Compartment Information:

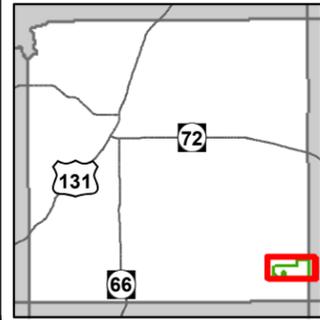
The following reports from the Inventory are attached:

- 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**

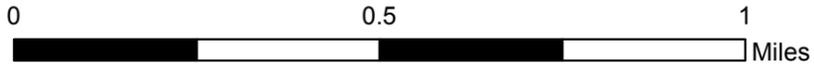
The following information is displayed, where pertinent, on the attached compartment maps:

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

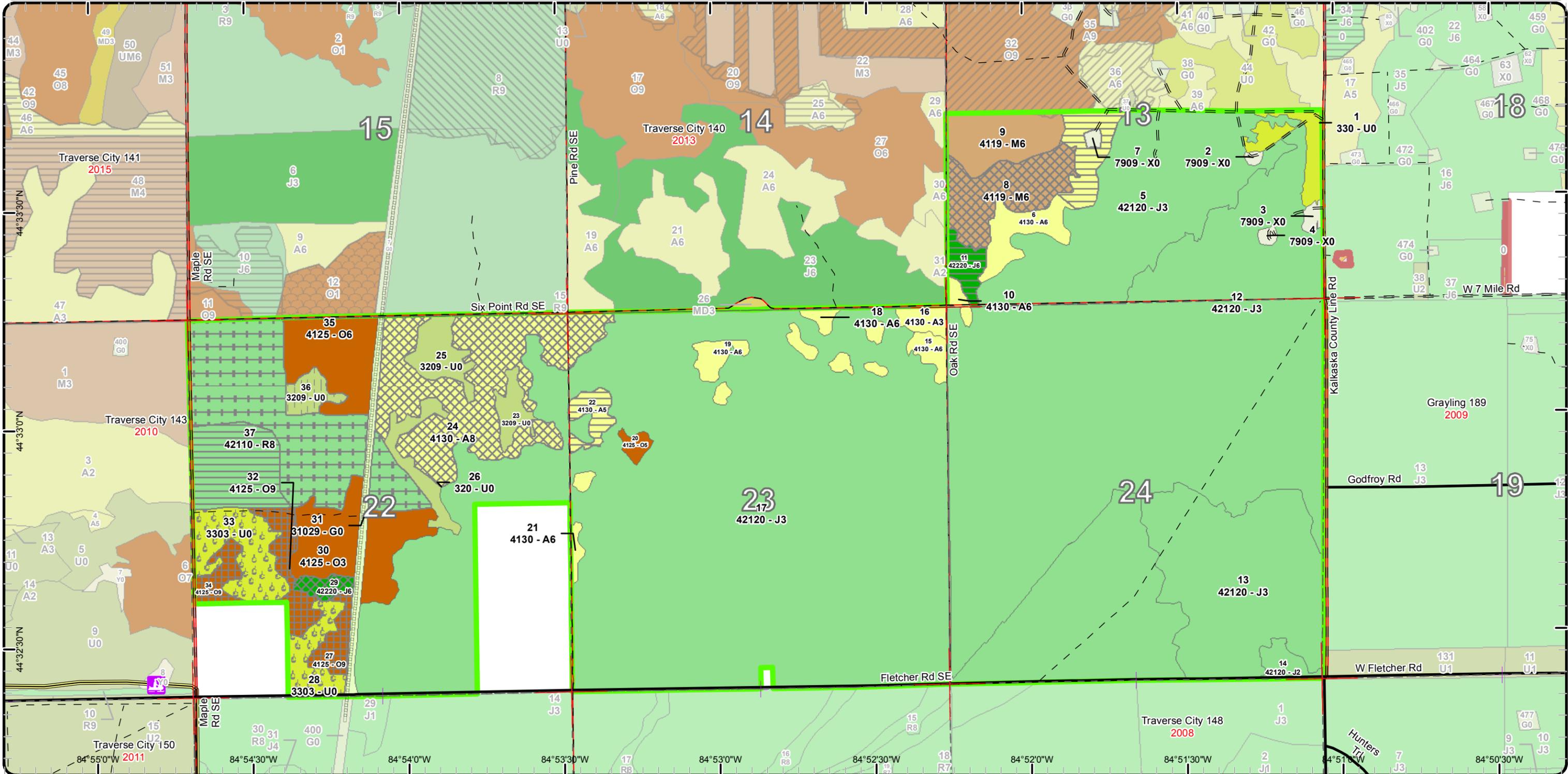
Cover Type & Treatments



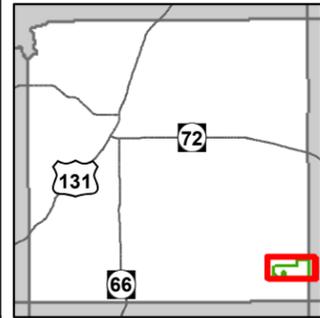
Compartment: 142
 T25N R05W S1/2 13, 22-24
 Kalkaska
 Unit: Traverse City
 Mgmt Area: Kirtland's Warbler
 YOE: 2017
 Acres: 2115 GIS Calculated
 Examiner: Donna Hagan
 Map Revised: 6/18/2015
 Map Phase: Pre-Review



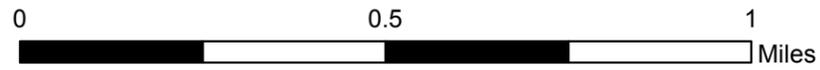
- ✚ Remonumented Section Corners
- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- - Poor Dirt Roads
- County Poor Dirt Roads
- 🚙 Snowmobile Trails
- Pipeline
- ▨ Selection (Group, Single Tree)
- ▭ Clearcut (w/Reserves)
- 🔥 Prescribed Burn
- ▭ Opening Maintenance
- ▭ Harvest, Overstory Removal
- ▨ Seed Tree (w/Reserves)
- Forest Covertype
 - 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen
 - 421 - Planted Pines
 - 422 - Natural Pines
- Non-Forest Covertype
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low Density Trees
 - 790 - Other Bare/Sparsely Vegetated



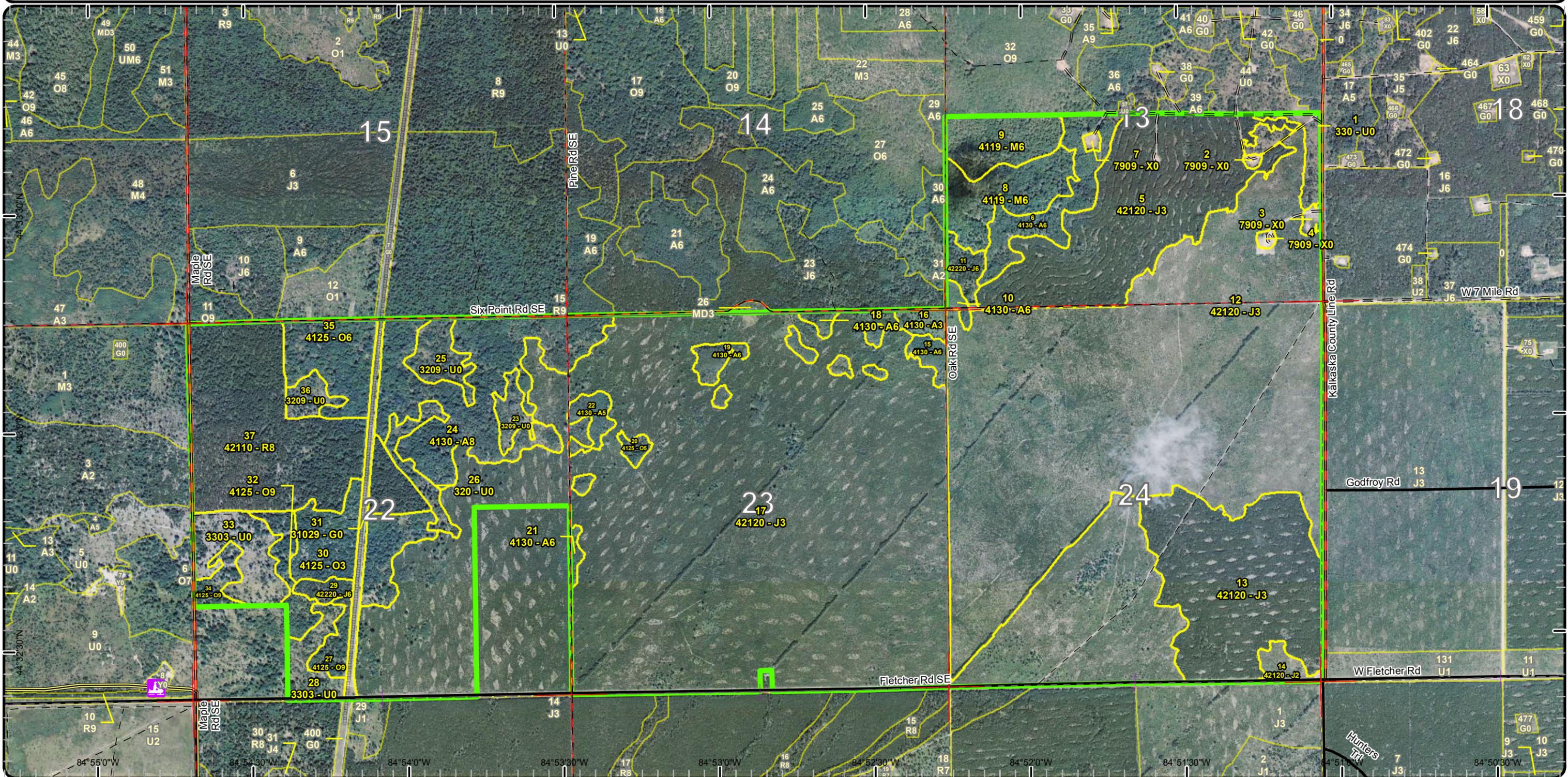
Stand Boundary Map



Compartment: 142
 T25N R05W S1/2 13, 22-24
 Kalkaska
 Unit: Traverse City
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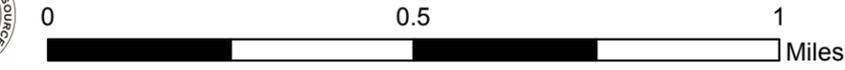
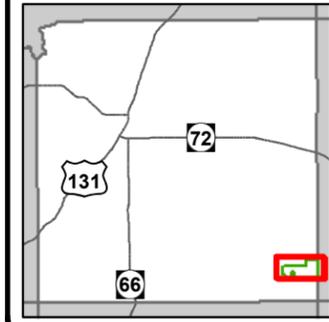


- ✚ Remonumented Section Corners
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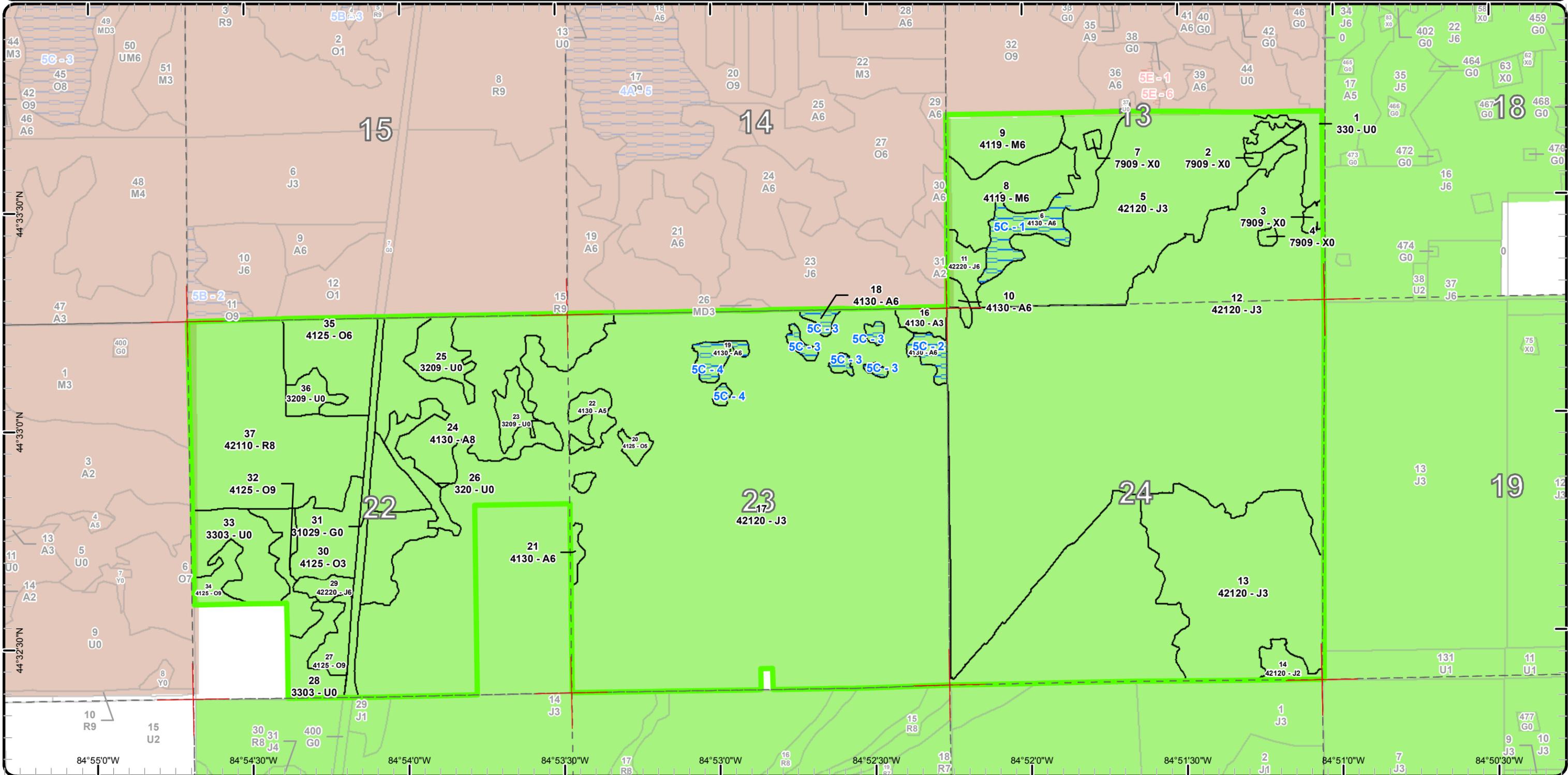


Special Conservation Areas & Site Conditions Map

Compartment: 142
 T25N R05W S1/2 13, 22-24
 Kalkaska
 Unit: Traverse City
 Mgmt Area: Kirtland's Warbler
 YOE: 2017
 Acres: 2115 GIS Calculated
 Examiner: Donna Hagan
 Map Revised: 6/16/2015
 Map Phase: Pre-Review



- Miris Corners
- Stand Boundaries
- Site Condition
- Available w/ Constraints
- Available Factors W/ Constraints
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Special Conservation Areas
- Kirtland Warbler Habitat
- Research, Development, and Military Lands



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	0	0	5	154	0	0	0	0	0	0	0	0	0	0	0	0	159
Bare/Sparsely Vegetated	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Herbaceous Openland	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Jack Pine	0	1298	0	249	0	0	8	5	0	0	0	0	0	0	0	0	0	0	1560
Low-Density Trees	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
Northern Hardwood	0	0	0	0	25	32	0	0	0	0	0	0	0	0	0	0	0	0	57
Oak	0	0	40	0	0	31	0	0	0	32	0	0	0	0	0	0	0	0	103
Red Pine	0	0	0	0	0	0	0	0	0	122	0	0	0	0	0	0	0	0	122
Upland Shrub	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Total	112	1298	40	249	30	217	8	5	0	154	0	2113							



Report 2 – Treatment Summary

Traverse City Mgt. Unit
Year of Entry: 2017

Acres of Harvest

Compartment 142
Total Compartment Acres: 2,115

Commercial Harvest - 0
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 41

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	22	88	0	0	0	0	0	0	0	111
Jack Pine	8	5	0	0	0	0	0	0	0	13
Northern Hardwood	0	32	0	0	0	0	0	0	0	32
Oak	0	0	0	29	0	0	0	0	0	29
Red Pine	33	0	0	0	0	0	89	0	0	122
Total	63	126	0	29	0	0	89	0	0	307

Proposed and Next Step Treatments by Harvest Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	307	0	0	0	41	0	0	0	0	348
Next Step	0	33	33	0	29	0	348	0	0	443
Total	307	33	33	0	70	0	348	0	0	791



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
6	61142006-Cut	14.8	4130 - Aspen	Poletimber Well	49	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Final harvest. Retention around well pad would be a possible good retention area.

Specs:

Next Step

Treatments:

Acceptable Aspen, oak, pine

Regen:

Other Smaller aspen is in the southern part of stand. Hold till next time. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

8	61142008-Cut	32.4	4119 - Mixed Northern Hardwoods	Poletimber Well	47	81-110	Harvest	Single Tree Selection	4121 - Oak, Aspen	Two-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Remove aspen and red maple.

Specs:

Next Step

Treatments:

Acceptable Oak, aspen, maple

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

11	61142011-Cut	7.8	42220 - Natural Jack Pine	Poletimber Well	50	51-80	Harvest	Clearcut with Retention	4132 - Aspen, Jack Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Final harvest

Specs:

Next Step

Treatments:

Acceptable jack pine, aspen

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

22	61142022-Cut	7.6	4130 - Aspen	Poletimber Medium	49	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Final harvest

Specs:

Next Step

Treatments:

Acceptable Aspen, pine, oak

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016



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
24	61142024-Cut	88.3	4130 - Aspen	Sawtimber Medium	49	81-110	Harvest	Group Selection	4131 - Aspen, Oak	Two-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Remove aspen and red maple from stand.

Specs:

Next Step
Treatments:

Acceptable Aspen, oak, maple
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

27	61142027-Cut	7.9	4125 - Black, N. Pin Oak	Sawtimber Well	87	51-80	Harvest	Seed Tree	412 - Oak Types	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Cut to maintain oak/pine barren component leaving approximately between 0-70sq ft. of oak and pine.

Specs:

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

Acceptable Oak, pine, aspen
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

28	61142028-Burn	14.8	3303 - Mixed Low Density Trees	Nonstocked		Unspecified	Burn	Understory	330 - Low-Density Trees		Proposal
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Habitat Cut: Yes **Site Condition:**

Prescription Burn to maintain oak/pine barren component.

Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

29	61142029-Cut	5.0	42220 - Natural Jack Pine	Poletimber Well	64	111-140	Harvest	Single Tree Selection	412 - Oak Types	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Remove jack pine and leave the oak. Part of stand falls within an ERA- Oak/Pine Barrens.

Specs:

Next Step
Treatments:

Acceptable Pine and oak
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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	61142032-Cut	12.7	4125 - Black, N. Pin Oak	Sawtimber Well	87	81-110	Harvest	Seed Tree	412 - Oak Types	Two-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Cut to maintain oak/pine barren component leaving approximately between 0-70sq ft. of oak and pine. The southern part of stand has a small stand of aspen. May want to final harvest the aspen, leaving the oak.
Specs:

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

Acceptable Oak, aspen, pine
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

33	61142033-Burn	26.5	3303 - Mixed Low Density Trees	Nonstocked		Unspec ified	Burn	Understory	330 - Low- Density Trees		Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Burn to maintain oak/pine barren component.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

34	61142034-Cut	8.3	4125 - Black, N. Pin Oak	Sawtimber Well	87	81-110	Harvest	Seed Tree	412 - Oak Types	Two-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Cut to maintain oak/pine barren component leaving approximately between 0-70sq ft. of oak and pine.
Specs:

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

Acceptable Oak, pine, maple
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

37	61142037-Cut&Leave	89.3	42110 - Planted Red Pine	Sawtimber Medium	80	111- 140	Harvest	Overstory Removal	4122 - Oak, Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Remove overstory letting the understory of oak and maple take over the stand. Leave red pine scattered throughout stand.
Specs:

Next Step
Treatments:

Acceptable Oak, maple, pine
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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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
37	61142037-Cut&Plant	32.9	42110 - Planted Red Pine	Sawtimber Medium	80	111-140	Harvest	Clearcut	42110 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Final harvest and re-plant to red pine.

Specs:

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

Treatments:

Acceptable Red pine, oak

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

**Total Treatment
Acreage Proposed: 348.3**

Dominant Site Conditions

5C

Aspen	37
Bare/Sparse Vegetated	
Herbaceous Openland	
Jack Pine	
Low-Density Trees	
Northern Hardwood	
Oak	
Red Pine	
Upland Shrub	
Total Forested Acres	37
Relative Percent	

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Traverse City Mgt. Unit

Donna Hagan : Examiner

Compartment: 142

Year of Entry: 2017

4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 6 – 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 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
5	42120 - Planted Jack Pine	Sapling Well	128.4	27	1-50	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. Kirtland's Warbler Habitat. (Grieve)
6	4130 - Aspen	Poletimber Well	29.8	49	51-80	Smaller aspen (6") in the southern part of the stand. OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
8	4119 - Mixed Northern Hardwoods	Poletimber Well	32.4	47	81-110	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
9	4119 - Mixed Northern Hardwoods	Poletimber Well	25.0	30	1-50	OPIC - FMD: OI Stand Year Origin was 1985
10	4130 - Aspen	Poletimber Well	3.0	49	51-80	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
11	42220 - Natural Jack Pine	Poletimber Well	7.8	50	51-80	
12	42120 - Planted Jack Pine	Sapling Well	470.8	6	Immature	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. TS# 30-98 Planted in 2008. Kirtland's Warbler Habitat. SI is that of Fletcher Fire pine. Will most likely be higher than this because of better spacing. This area has been harvested but not replanted yet. (Grieve)
13	42120 - Planted Jack Pine	Sapling Well	121.1	27	Immature	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. Kirtland's Warbler Habitat. SI is that of Fletcher Fire pine. Will most likely be higher than this because of better spacing. (Grieve) Planted in 1987.
14	42120 - Planted Jack Pine	Sapling Medium	6.9	7	Immature	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. TS# 30-98. Was cut but not replanted by Wildlife, at least at the time of this inventory. Natural seeding coming back. (Grieve) Replanted in 2008.
15	4130 - Aspen	Poletimber Well	5.6	49	81-110	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
16	4130 - Aspen	Sapling Well	5.5	30	Immature	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
17	42120 - Planted Jack Pine	Sapling Well	819.9	7	Immature	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. TS# 30-98 Planted over 4 years from 2003-2007. Kirtland's Warbler Habitat.
18	4130 - Aspen	Poletimber Well	8.9	49	51-80	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
19	4130 - Aspen	Poletimber Well	7.3	49	51-80	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)

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Traverse City Mgt. Unit

Report 8 – Forested Stands

Compartment: 142
Year of Entry: 2017

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4125 - Black, N. Pin Oak	Poletimber Medium	3.0	80	51-80	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
21	4130 - Aspen	Poletimber Well	3.8	49	1-50	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
22	4130 - Aspen	Poletimber Medium	7.6	49	51-80	OPIC - FMD: 12/14/2004 Area of Fletcher Fire May 1966. (Grieve)
24	4130 - Aspen	Sawtimber Medium	88.3	49	81-110	Aspen in clumps with heavy understory. Where overstory aspen isn't present just heavy understory exists.
27	4125 - Black, N. Pin Oak	Sawtimber Well	7.9	87	51-80	ERA area - Oak/Pine Barrens
29	42220 - Natural Jack Pine	Poletimber Well	5.0	64	111-140	OPIC - FMD: 12/14/2004 Cut in ten years. (Grieve) A lot of dead and down jack pine.
30	4125 - Black, N. Pin Oak	Sapling Well	39.8	15	Immature	OPIC - FMD: Sale #181-97.
32	4125 - Black, N. Pin Oak	Sawtimber Well	12.7	87	81-110	ERA area - Oak/Pine Barrens. Aspen clone in southern part of stand.
34	4125 - Black, N. Pin Oak	Sawtimber Well	8.3	87	81-110	ERA site - Oak/pine Barrens
35	4125 - Black, N. Pin Oak	Poletimber Well	31.1	44	1-50	OPIC - FMD: 12/14/2004 Stand still coming. (Grieve)
37	42110 - Planted Red Pine	Sawtimber Medium	122.2	80	111-140	West side of stand has less regeneration than elsewhere. OPIC - FMD: Part of a 127 acre sale #203-97-01 that was thinned in the late fall of 1999 and winter of 2000. The sale was a removal of Red Maple, Jack Pine and all Oak. In addition, the Red Pine was thinned where appropriate. A close look at this stand should be undertaken during the next inventory. The BA of residual Red Pine may be high yet in some areas.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	330 - Low-Density Trees	12.7	No	OPIC - FMD: 12/14/2004 Grass at northeast end of warbler habitat, not planted by Wildlife. In the very northeast tip is an Old oil well facility? Fenced & power poles. Not in use any more. Needs to be cleaned up. Need to call Quikesilver. (Grieve) 2/24/15 Grieve could not find who owned the fence and poles so they are still there.
2	7909 - Nonstocked (OI)	0.9	No	OPIC - FMD: 12/14/2004 Oil/gas well. (Grieve)
3	7909 - Nonstocked (OI)	2.5	No	OPIC - FMD: 12/14/2004 Oil/gas well. & facility (Grieve)
4	7909 - Nonstocked (OI)	1.3	No	OPIC - FMD: 12/14/2004 Oil/gas well. (Grieve)
7	7909 - Nonstocked (OI)	1.2	No	OPIC - FMD: 12/14/2004 Oil/gas well. (Grieve)
23	3209 - Upland Shrub (OI)	7.7	No	OPIC - FMD: 12/14/2004 U-type not planted by wildlife. (Grieve)
25	3209 - Upland Shrub (OI)	13.3	No	Choke cherry with scattered oak logs.
26	320 - Upland Shrub	11.0	No	OPIC - FMD: 12/14/2004 cut next time around. (Grieve)
28	3303 - Mixed Low Density Trees	14.8	No	OPIC - FMD: 12/14/2004 U-type not planted by wildlife. (Grieve)
31	31029 - Grass (OI)	13.1	No	OPIC - FMD: 12/14/2004 Trans-Canada Gas pipeline. (Grieve)
33	3303 - Mixed Low Density Trees	26.5	No	OPIC - FMD: 12/14/2004 U-type not planted by wildlife. (Grieve)
36	3209 - Upland Shrub (OI)	7.5	No	OPIC - FMD: 12/14/2004 Stand is moving away from U type to forested. (Grieve)