



Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 45176

Entry Year 2018

Acreage: 1,460

County Mackinac

Management Area: Lake Michigan Shoreline

Revision Date: 2016-07-19

Stand Examiner: Jennifer Burnham

Legal Description:

T42N, R10W, Sections 4, 5 & 6, Garfield Township

Identified Planning Goals:

This compartment is located south of Engadine along Big Knob Road. The area has a variety of landforms, with some unique features. The northwestern portion is shallow bedrock, while the southern and eastern portions are dune and swale complex and steep slopes around Knob Lake. The two areas are broken up by swamp conifer types from Knob Lake west to Crow Lake, following the Crow River corridor. The upland areas vary from aspen to mixed natural pine, mixed upland conifers and upland mixed forests. Harvesting treatments will be limited due to the SCA interior forest layer and HCVA wooded dune and swale complex.

Soil and topography:

The shallow to bedrock upland areas in the northwest portion of the compartment are comprised of Amadon-Rock outcrop complex and Longrie-Battydoe, stony complex. These areas are on the nearly level to rolling areas of bedrock-controlled ground moraines. The majority of the rest of the uplands within the compartment are dune and swale complexes, with some rolling to very steep areas. The soils associated with this area are mainly Eastport-Leafriver complex and Eastport sand, with smaller inclusions of Spot-Finch complex and Leafriver-Croswell-Wainola complex. The lowland coniferous forest are comprised of Markey and Carbondale mucks. Other lower grounds are associated with Histosols and Aqents, ponded.

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

The compartment is bounded by State lands to the north, west and south. A large private holding occurs to the northwest and is used as a hunting camp. Private holdings occur along Lake Michigan, with one (SWSW Sec 4) using access through State land. The rest of the private is Sec 4, continuing northeast along the lakeshore, is owned in small parcels, but is part of the Carnegie Trail Association. Many seasonal and permanent residences are located along the lakeshore.

Unique Natural Features:

A wooded dune and swale complex natural community exists in the southern portion of the compartment. An eagle nest is located in the area, as well as flora species associated with the Lake Michigan shoreline. Potential exists for other rare, threatened and endangered species and communities to exist in the area.

Archeological, Historical, and Cultural Features:

None noted

Special Management Designations or Considerations:

The wooded dune and swale complex natural community is currently designated as a SCA. There are several stands encompassing Crow Lake and the Crow River system. The interior forest layer is now a part of the compartment. The ERA is now in part of the NE area of stand 34 and the compartment to the south. The eastern half of the compartment is considered a deer wintering complex. Harvesting activities are restricted within these areas because of these references and with the winding narrow Big Knob Road.

Watershed and Fisheries Considerations:

This compartment contains the headwaters of the Crow River. Angler reports indicate that the Crow River may have historically supported a coaster brook trout population through the 1980's. Priorities include keeping beaver densities low and preventing sediment input via a 300' stream bank buffer. Knob Lake is shallow and is not actively managed for fisheries purposes.

Wildlife Habitat Considerations:

Compartment 176 is part of the Lake Michigan Shoreline Management Area where featured species include piping plover and white-tailed deer. It contains a mosaic of upland and lowland stands ranging from mixed upland aspen and pines to

cedar swamp and emergent wetlands, and is part of a transition zone between interior stands and lakeshore areas although it does not extend to the shoreline. The northern portion of the compartment is part of a larger aspen-dominated area extending toward US-2 that has undergone early successional habitat management over the last entry. Similar treatments have occurred toward the eastern side. Southern portions of the compartment contain ridge and swale features similar to the wooded dune and swale complex common along the lakeshore in this area, although not quite as pronounced. Most of the compartment is also deer wintering complex. Cedar and lowland conifer stands in the compartment will be retained to provide cover for wintering deer. A mixed stand in the northern part of the compartment will be left until a future year of entry to maintain some age class diversity in the area. Areas in the Designated Habitat Area should be left due to their unique habitat qualities.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel and peat and muck. The glacial drift thickness varies between 10-50 feet. The Silurian Engadine Group subcrops below the glacial drift. The Engadine is quarried for stone/limestone elsewhere in the UP. Gravel pits are located in the area and there should be potential on uplands. There is no current economic oil and gas production in the UP.

Vehicle Access:

Big Knob Road, a DNR maintained gravel road, runs north-south through the middle of the compartment. Rock River Road, a DNR gravel road, takes off from Big Knob road just south of the compartment boundary and runs northerly through the eastern part of the compartment. The northwestern portion is accessed by a rocky two-track road. There is little access into the southwestern portion of the compartment. Two-tracks exist behind a gate in this southwestern portion, but generally the road(s) are to the south of the compartment line. This road is closed for general vehicle use, as it is also part of the Crow Lake Pathway.

Survey Needs:

None needed.

Recreational Facilities and Opportunities:

Two pathways are within the compartment; Big Knob Pathway and Crow Lake Pathway. Big Knob campground is located approximately 1.5 miles to the south along Big Knob Road. The uniqueness of the compartment offers many opportunities for viewing wildlife, hunting, trapping, hiking and berry and mushroom picking.

Fire Protection:

The potential for wildfires exists throughout the upland ridges and lowland ridges in dry years. These areas contain high components of conifer species some degrading from over maturity and lack of harvesting. Road access is limited to main travel routes and hilly terrain will make for slow progress for fire suppression.

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:

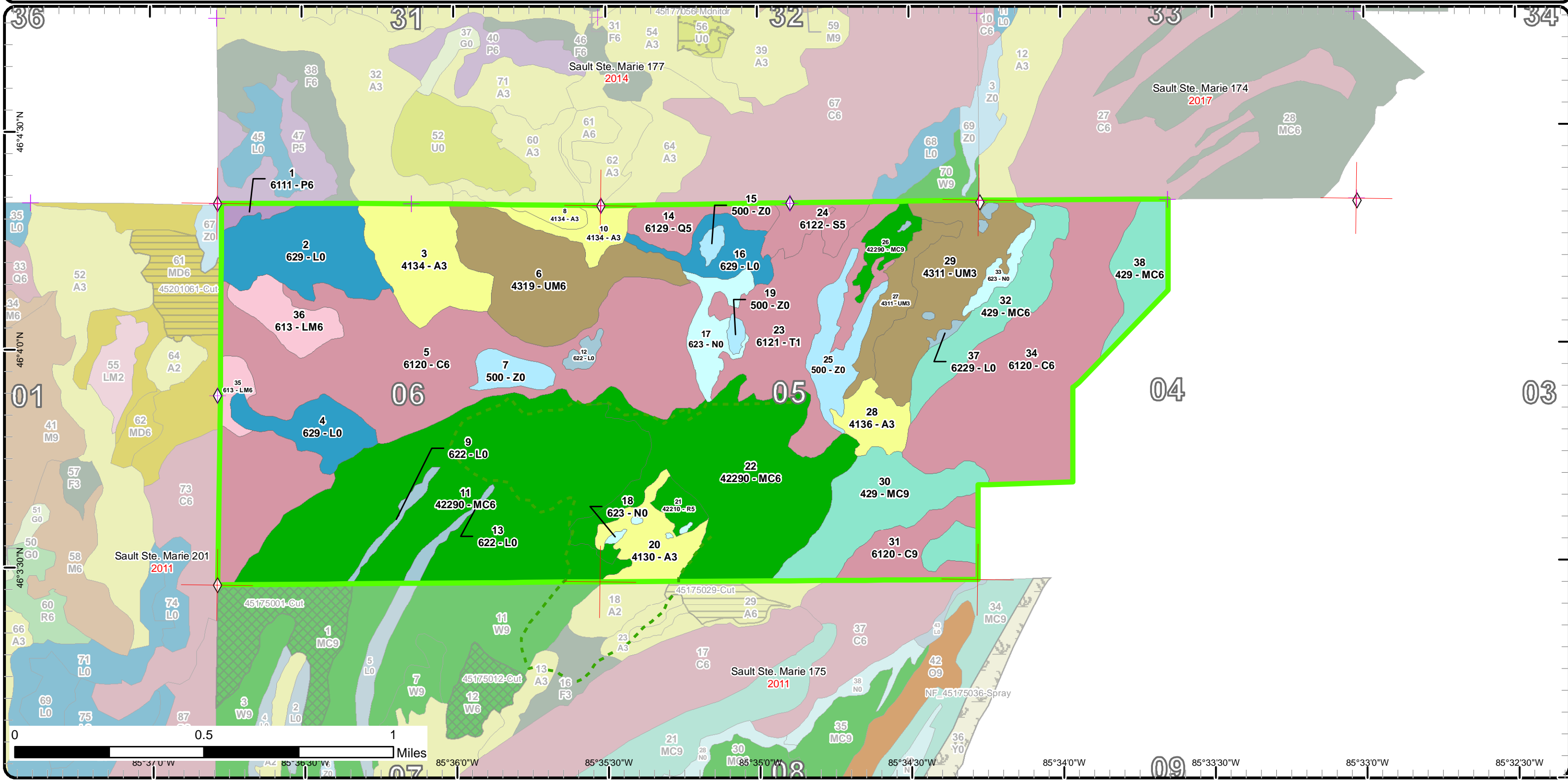
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map



Compartment: 176
 T42N, R10W, Sec: 04-06
 County: Mackinac
 Unit: Sault Ste. Marie
 Mgmt Area: Lake Michigan Shoreline
 YOE: 2018
 Acres: 1,460 GIS Calculated
 Examiner: Jennifer Burnham
 Map Revised: 12/6/2016
 Map Phase: Post Review

- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- - - Designated Hiking Trails
- Compartment Boundary
- 413 - Aspen Types
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland

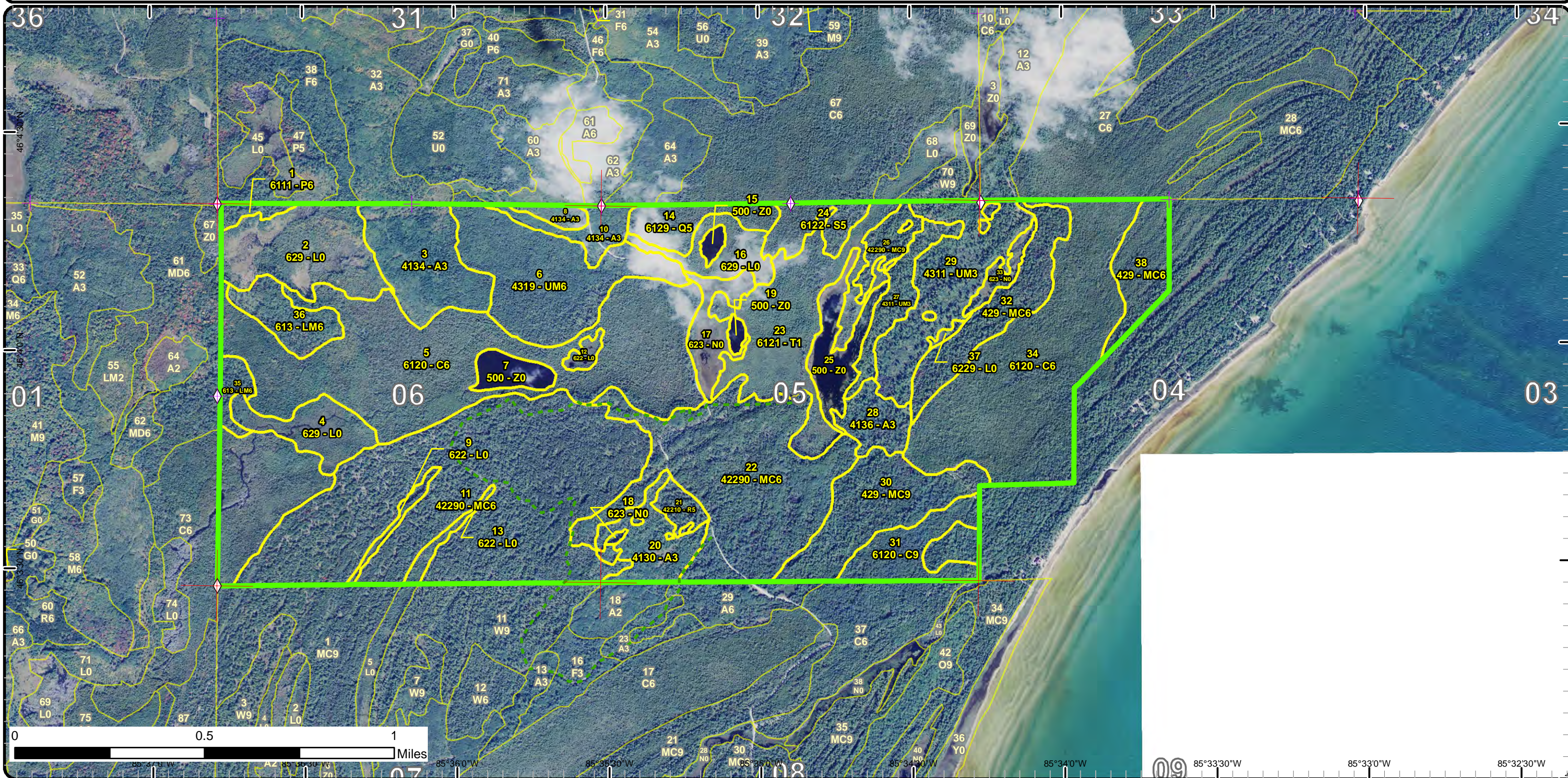


Stand Boundary Map

Compartment: 176
 T42N, R10W, Sec: 04-06
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 Unit: Sault Ste. Marie
 Mgmt Area: Lake Michigan Shoreline
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 - 629 - Mixed non-forested wetland



Report 1 – Total Acres by Cover Type and Age Class

Sault Ste. Marie Mgt. Unit
Jennifer Burnham : Examiner

Compartment 176 Year of Entry 2018



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	60	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106
Cedar	0	0	0	0	0	0	0	0	0	0	27	0	0	228	139	0	0	0	393
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	19
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	28
Lowland Shrub	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	16
Marsh	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Natural Mixed Pines	0	0	0	0	0	0	355	11	0	0	0	0	0	0	0	0	0	0	366
Red Pine	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Tamarack	0	0	0	0	0	0	0	0	73	0	0	0	0	0	0	0	0	0	73
Upland Conifers	0	0	0	0	0	0	0	0	36	0	0	0	0	0	25	0	59	0	120
Upland Mixed Forest	0	0	75	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0	147
Water	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Total	178	0	135	46	0	0	72	355	18	109	5	46	17	0	256	164	0	59	1458



Report 2 – Treatment Summary

Sault Ste. Marie Mgt. Unit
Year of Entry: 2018

Compartment 176
Total Compartment Acres: 1,460

Acres of Harvest

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



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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
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#Type!

Habitat Cut:

Site Condition:

Prescription
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date:

**Total Treatment
Acreage Proposed: 0.0**

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit
Jennifer Burnham : Examiner

Compartment: 176
Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions				
		With Condition	Not Available		2E	5F	1C	3J	5D
106	81	0	25	Aspen			25		
394	394	0	0	Cedar					
5	0	5	0	Lowland Aspen/Balsam Poplar	5				
19	0	0	19	Lowland Conifers				19	
28	0	0	28	Lowland Mixed Forest			28		
112	112	0	0	Lowland Shrub					
17	0	0	17	Lowland Spruce/Fir				17	
27	27	0	0	Marsh					
367	11	0	355	Natural Mixed Pines			355		
7	0	0	7	Red Pine			7		
73	0	0	73	Tamarack					73
121	96	0	25	Upland Conifers			25		
146	74	72	0	Upland Mixed Forest		72			
39	39	0	0	Water					
1,460	834	76	549	Total Forested Acres	5	72	440	35	73
	57%	5%	38%	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	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	2E: Road needed	5	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
Comments: small stand and poor quality. would need to treat with adjacent stand.							
2	Unavailable	1C: Other dept or div proc/practices	228	Unspecified	Unspecified	Unspecified	Unspecified
Comments: DHA							

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit
Jennifer Burnham : Examiner

Compartment: 176
Year of Entry: 2018

3	Unavailable	1C: Other dept or div proc/practices	25	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: DHA</p>							
4	Unavailable	1C: Other dept or div proc/practices	7	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: DHA</p>							
5	Unavailable	1C: Other dept or div proc/practices	6	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: HCVA = wooded dune and swale complex. The aspen age triggers silvicultural criteria, but due to HCVA designation, this should not be harvested?</p>							
6	Unavailable	1C: Other dept or div proc/practices	28	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: DHA</p>							
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	17	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: If treating with other stands, it might be possible to harvest some of the acres. Look again with stand 6 when ready to treat.</p>							
8	Unavailable	1C: Other dept or div proc/practices	82	2F: Too steep	Unspecified	Unspecified	Unspecified
<p>Comments: DHA</p>							

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit
Jennifer Burnham : Examiner

Compartment: 176
Year of Entry: 2018

9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	19	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: If treating with other stands, it might be possible to harvest some of the acres. Look again with stand 6 when ready to treat.</p>							
10	Unavailable	5D: Unproductive Forest Land	73	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							
11	Unavailable	1C: Other dept or div proc/practices	25	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: HCVA- Dune and Swale</p>							
12	Available	5F: Evaluated for Forest Health Considerations	72	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							
13	Unavailable	1C: Other dept or div proc/practices	40	1C: Other dept or div proc/practices	Unspecified	Unspecified	Unspecified
<p>Comments: DHA</p>							



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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
	Potential Old Growth		SCA Removal	245
Comments				
Already a HCVA - Core interior.				
Big Knob Campground	Type 1 or Type 2 Old Growth	Possible Type 2 Old Growth Area	SCA Removal	398
Comments				
This area does not meet Possible Type 1 or Type 2 Old Growth Criteria, already a Forest Habitat Core Interior Conservation Area.				



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR.
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
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.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6111 - Lowland Balsam Poplar	Poletimber Well	4.7	91	Unspecified	Stand appears smaller from photos due to beaver activity. Stand has marsh types on most sides, access would have to be from the PVT to the North. Canopy similar to pre-inv stand 9. Age is from pre-inv stand 9.
3	4134 - Aspen, Spruce/Fir	Sapling Well	46.0	24	Unspecified	Good regeneration. Dogwood in the understory getting browsed. Rock at surface.
5	6120 - Lowland Cedar	Poletimber Well	228.2	139	81-110	Poor to fair quality cedar. There are areas with higher BA and then cedar is self-pruned well and less of the other spp present. Areas of more open or blow down is where the other spp and shorter cedar are found. Crow River and Crow Lake are found within the stand. Other areas of pocketed water present.
6	4319 - Mixed Upland Forest	Poletimber Well	71.6	58	1-50	Dogwood in understory with some browse. Rocky ground. Thick stand!!!! Big Tooth Aspen more prevalent to the north. Northern half of stand was cut by wildlife for regeneration purposes, but southern half of stand isn't much different - just some older residual trees scattered.
8	4134 - Aspen, Spruce/Fir	Sapling Well	5.2	14	Immature	Good regeneration. Maple and birch are mainly stump sprouts. Rock at surface and small boulders scattered throughout.
10	4134 - Aspen, Spruce/Fir	Sapling Well	13.9	14	Immature	Good regeneration, some areas are better stocked but still filling in. more conifer in the NE corner. Regen 5 - 15 feet tall. Some deer browse. Rock at surface.
11	42290 - Natural Mixed Pine	Poletimber Well	227.5	67	51-80	Crow Lake Pathway runs thru stand. Hilly with some steep ridges mainly along the boundary common with stand 5. Small wet swales are present too. Jack Pine is more prevalent in the eastern half of stand. HCVA -The jack pine age triggers silvicultural criteria, but due to HCVA designation, this should not be harvested. The jack pine, birch and scattered maple and aspen are at max age and starting to fall apart. There is little to no regeneration in the understory.
14	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	18.8	107	Unspecified	Stand is mainly wet with rock on the west side. Cedar is in pockets. Some areas of fair quality. Drains scattered that go into stand 15.
20	4130 - Aspen	Sapling Well	25.0	14	1-50	Cut in 2002. Left WP - multi aged with some old super canopy trees down to WP saps 2 - 3 " dbh/24' tall. Some deer browse on aspen regen.
21	42210 - Natural Red Pine	Poletimber Medium	7.4	70	51-80	Cut in 2002. RP and WP left. Aspen regenerating. Some low swales between ridges. More WP to the north and RP to the south.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	42290 - Natural Mixed Pine	Poletimber Well	127.8	65	81-110	<p>The BA plots fall more to 80-90. There are also open areas with BA down to 30 or less. Regeneration is limited. Black spruce is found on the north edge by stand 23. Stand will not get much better, treatment would be nice but very difficult for the majority of the stand due to steep slopes. Harvest line placement based on topo map and site visit.</p> <p>Big Knob Pathway totally within stand. Crow Lake Pathway partially within stand. Must consider scenic values near pathways. Very hilly! DHA-The aspen age triggers silvicultural criteria, but due to the designation, this should may not be harvested.</p>
23	6121 - Tamarack	Sapling Poor	73.3	85	Unspecified	<p>Some marsh areas. There are some merchantable sticks in the spruce and tamarack but the majority of the stand is low quality, small diameter and very high water table. Variable stand due to water drainage. Low quality, boggy stand. Age was not taken here due to small dbh and poor quality. Used age data from adjacent stands.</p>
24	6122 - Black Spruce	Poletimber Medium	16.5	119	1-50	<p>Poor quality due to very high water table. There are some low sand ridges. Labrador tea throughout stand.</p>
26	42290 - Natural Mixed Pine	Sawtimber Well	11.3	79	81-110	<p>Pine Island looking, bracken and blueberry for ground cover. Small low areas scattered with Labrador tea and stunted spruce in the areas. When treating surrounding stands this stand could be harvested to get reproduction in the understory. Low sand ridges.</p>
27	4311 - Pine, Aspen Mix	Sapling Well	18.7	13	51-80	<p>Good aspen regeneration. Red maple and white birch are mainly stump sprouts. Very hilly with highest ridge overlooking Knob Lake.</p>
28	4136 - Aspen, Mixed Conifer	Sapling Well	16.4	13	Immature	<p>Some of the spruce and fir have budworm just starting to show. They are all the same age and not merchantable. BA of merchantable pine ranges from 10-30. Ridges and swales with vernal ponds.</p>
29	4311 - Pine, Aspen Mix	Sapling Well	56.0	13	51-80	<p>Bracken fir and blueberry on the high ground with sphagnum moss and Labrador tea in the low areas with stunted spruce. Most of the regeneration of the white and red pine are found mainly in the skid trails. Majority of stand in Compartment 174. Cut in 2003 - cut all but WP and RP. Aspen is regenerating, but there is some deer browse on aspen and red maple. Some wet holes within stand.</p>
30	429 - Mixed Upland Conifers	Sawtimber Well	59.4	120	51-80	<p>Two different stands depending if you are on the ridge or at the bottom of it. Bf on the ridges getting shaded out and dying. Stripped maple only on the high ground. Low is wet but appears to dry out. Cedar is of good quality. Not sure of operability because the ridges are narrow and steep. Upland to transitional to lowland. Ridge and swales, with vernal ponds too. Budworm must have gone thru here in the past (lots of slash). WP supercanopy with cedar, red maple and white birch.</p>
31	6120 - Lowland Cedar	Sawtimber Well	27.1	103	81-110	<p>Not the "park like" C9 - Regeneration is in the understory, mostly shaded out and starting to die out. Good quality cedar. Some small pockets of blowdown.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	429 - Mixed Upland Conifers	Poletimber Well	36.3	82	51-80	Stand has areas of fair timber then poor. Ponds between the road and the stand and then between the ridges. There is potential to treat is low after buffering the ponds and getting product off the ridges. Several low ridges wiath wet swales between. Variable stand species wise and upland/lowland.
34	6120 - Lowland Cedar	Poletimber Well	138.5	143	81-110	Some blow down areas. Cedar is shorter than the other species but of better quality. Other species are fair to poor quality. Edges and some patches in the stand contain the birch, red maple and pine. These areas have potential for harvesting but cedar would have to be removed for operability. Some low ridges run thru stand.
35	613 - Lowland Mixed Forest	Poletimber Well	7.7	139	51-80	No good access to the stand. Looks like an old skid road on the photos but could not find it on the ground. Access might be possible from the west in the adjacent compartment if cutting is allowed. A slightly higher ground level allowing for more red maple and bam to grow.
36	613 - Lowland Mixed Forest	Poletimber Well	19.9	139	51-80	No good access to the stand. Looks like an old skid road on the photos but could not find it on the ground. Access might be possible from the west in the adjacent compartment if cutting is allowed. A slightly higher ground level allowing for more red maple and bam to grow.
38	429 - Mixed Upland Conifers	Poletimber Well	25.2	143	81-110	Same stand that is found in compartment to the north. Part of the HCVA - Dune and Swale. Widely variable stand of sharp ridges and very wet lowland with tag alder. This is ridge and swale type stand. Not much viable opportunity from the limited access.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	629 - Mixed non-forested wetland	52.2	No	Ponds, low wet areas and acreage with stunted trees of RM, spruce, cedar, tamarack and bam. These areas will eventually get flooded out and die.
4	629 - Mixed non-forested wetland	24.1	No	
7	500 - Water	11.0	No	Crow Lake
9	622 - Lowland Shrub	4.5	No	Low areas between dune ridges.
12	622 - Lowland Shrub	3.7	No	
13	622 - Lowland Shrub	5.0	No	
15	500 - Water	2.9	No	Unnamed lake
16	629 - Mixed non-forested wetland	18.8	No	Very wet.
17	623 - Emergent Wetland	18.0	No	cedar, tamarack on the edges
18	623 - Emergent Wetland	1.6	No	low area between the ridges
19	500 - Water	2.3	No	Unnamed lake
25	500 - Water	23.2	No	Knob Lake
33	623 - Emergent Wetland	7.1	No	
37	6229 - Mixed lowland shrub	3.4	No	Low types found in the ridges that hold water a bit longer than the high sand ridge.