

## **Compartment Review Presentation**

Sault Ste. Marie Forest Management Unit

Compartment 45199
Entry Year 2021
Acreage: 2,261
County Mackinac

Management Area: Lake Michigan Shoreline

Revision Date: 2019-08-02 Stand Examiner: Matt Edison

**Legal Description:** 

T41N-R11W Sections 2, 3, 4, 9, 10 & 11; and T42N-R11W Section 33; Newton Township

## **Identified Planning Goals:**

This compartment is located at the end of S. Gould City Road and follows the Lake Michigan shoreline to the east. It is within the Lake Michigan Shoreline Management Area. No active management is being considered in this corridor except for the possibility of exotic plant eradication efforts and curtailing illegal ORV problems. Hardwood and aspen stands north of this corridor have been actively managed to promote health and growth. The beech in the area has been hit by beech bark disease and has been salvaged where accessible. Maintaining the beech component within the hardwood stands is desirable.

#### Soil and topography:

Most of the proposed old growth corridor is rolling dune/swale complex consisting primarily of Leafriver-Croswell-Wainola complex. Other associated soils are Esau-Zela complex, Alpena gravelly loam, Markey and Carbondale mucks, and Eastport sand. The rest of the compartment is generally upland areas ranging from level terrain, to rocky outcrops, to rolling sandy ridges. Kalkaska sand, Amadon-Longrie sandy loam, and Springlake loamy coarse sand dominate this area, with minor components of Longrie-Battydoe, stony, complex; Eastport-Leafriver complex; Amadon-Rock outcrop complex; Paquin sand; Spot-Finch complex; Pickford silty clay loam; and Alcona fine sandy loam.

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

State land and LaPine farm adjoin the far north border. A mix of state land and private land are adjacent immediately to the west. State land presides to the east (part of the Simmons Woods purchase). Lake Michigan is the southern boundary of this compartment. A township park has been used for many years at the end of S. Gould City Road.

#### **Unique Natural Features:**

: Large boulders and rocky fissures are located within compartment. Walking fern has been found on some of the boulders. Two former Champion Trees are located in Section 33. The former Champion yellow birch was found on the ground in 2006. The former Champion showy mountain ash lost its status due to the lack of a recorded location. It is still present. MNFI has identified several threatened and endangered plant species along the lakeshore. Other lakeshore dependent T&E species may be located here too. Bald eagles and red-shouldered hawks have found the area to their liking.

#### **Archeological, Historical, and Cultural Features:**

Old foundation found by Cozy Point

## **Special Management Designations or Considerations:**

Special Conservation Areas (SCA's) include a deer wintering complex covering a majority of the compartment, a proposed old growth corridor linking lakeshore corridors to the east and west, and a non-dedicated Natural Area (Seiner's Point) following the shoreline and which continues to the east and west. A wooded dune and swale complex Ecological Reference Area (ERA) is found in the northern portion of Sections 2 and 3, and extends to the north and east. Known occurrences of walking fern and hawk nests will be protected appropriately within treatment areas.

#### **Watershed and Fisheries Considerations:**

This compartment contains Newton Creek, Point Patterson Creek, Cataract River and several unnamed waterbodies. Newton Creek is designated Type 1 trout streams less than 50' width which serve as a tributary to Lake Michigan. A 300' buffer is recommended for Newton Creek in riparian areas susceptible to Aspen. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices (specifically stands 40, 44, 50, and 56).

Point Patterson Creek is designated a Type 1 trout streams less than 50' width which serves as a tributary to Lake Michigan. A 300' buffer is recommended for Point Patterson Creek in riparian areas susceptible to Aspen regeneration (specifically stands 12, 13, 15, 37, 38, and 41). For areas not susceptible to Aspen regeneration, 100' plus 5' per 1%

increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices (specifically stands 5, 7, 36, 43, 45, 53, 60, 64, and 66).

The central region of this compartment contains several unnamed waterbodies. 100' plus 5' per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to these unnamed waterbodies in accordance with Best Management Practices (specifically stands 16, 17, 18, 19, 21, 23, 25, 26, 28, 29, 32, 33, 34, 35, 39, 40, 41, 43, 52, 53, 55, 57, 61, 62, and 70).

Cataract River is designated a Type 1 trout stream less than 50' width which serves as a tributary to Lake Michigan. A 300' buffer is recommended for the Cataract River in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices (specifically stand 51).

The southern region of this compartment borders Lake Michigan (specifically stands 58, 59, 63, 65, and 67).

#### Wildlife Habitat Considerations:

Compartment 199 is part of the Lake Michigan Shoreline MA where featured wildlife species include piping plover and white-tailed deer. This compartment is along the Lake Michigan shoreline and supports rare species and community types including a wooded dune and swale complex near the shoreline that is part of an environmental reference area (ERA). A dedicated habitat area (DHA) for core interior forest species is located in mostly the same area. Most of the compartment is also part of deer wintering complex. The southern end contains the wooded dune and swale complex and related conifer-dominated uplands and lowlands. The northern part is dominated by northern hardwoods. These stands were thinned over the last 10 years, one of which was primarily focused on harvesting diseased beech. A band of aspen and upland mixed forest separates these areas.

Wildlife objectives primarily involve maintaining the integrity of these systems. Areas in the ERA and DHA will be left to allow natural processes to occur. Deer, bear, bobcat, snowshoe hare, waterfowl, warblers, and eagles are a few of the wildlife that will benefit. This will also help to protect rare species like piping plover and Houghton's goldenrod. Hardwoods were recently treated and will be left to mature and allow for new growth to continue. This will encourage stand diversity, which will benefit species from bear to hawks.

### Mineral Resource and Development Concerns and/or Restrictions

No active sand/gravel pits exist in the area. There has been some limestone exploration within and around the northwest end of the compartment. Bethlehem Steel drilled several test wells in the late 1960s, but there was never any mining. There is good limestone potential within the compartment and bedrock is near the surface. Wetlands in the area, among other factors, could add significant cost to any potential surface mining operations. There is no known metallic mineral potential in this area, and there is no current economic oil and gas production in the UP. The state does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights. Based on interpretation of Michigan statute, most non-metallic minerals are considered part of the surface estate.

### **Vehicle Access:**

S. Gould City Road (county road) runs along western edge of compartment. Access to the north half is via two-tracks. There is no vehicle access in the proposed old growth area east of the Newton Township Park. However, there is still illegal ORV activity along the old lakeshore road and beach.

#### **Survey Needs:**

None needed.

#### **Recreational Facilities and Opportunities:**

Currently working with Newton Township to assume a long-term lease of Newton Township Park, a day use area, at the end of S. Gould City Road. This area was acquired in 1987 from the Nature Conservancy. Hunting activity occurs within the compartment, including deer, bear, small game, duck and goose hunting. A walk along the beach can be nice here without seeing anyone for miles.

#### **Fire Protection:**

Due to the isolated nature of the shoreline, there is little potential for human caused fires. The Newton Township Park harbors limited potential for wildfires due to the human influences. Lightning strikes probably have occurred within the compartment, but have burned themselves out before being detected. The interspersing of the lowland swales probably help deters any small fires from becoming larger ones. Access to any wildfires would be difficult over the southern part of the compartment, and a plan should be made to consider minimal impact suppression tactics if needed. The northern section of the compartment is generally northern hardwoods and has limited potential for fires. However, the private land to the north burn their fields in the spring. This could lead to a small slop-over onto state land.

#### **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

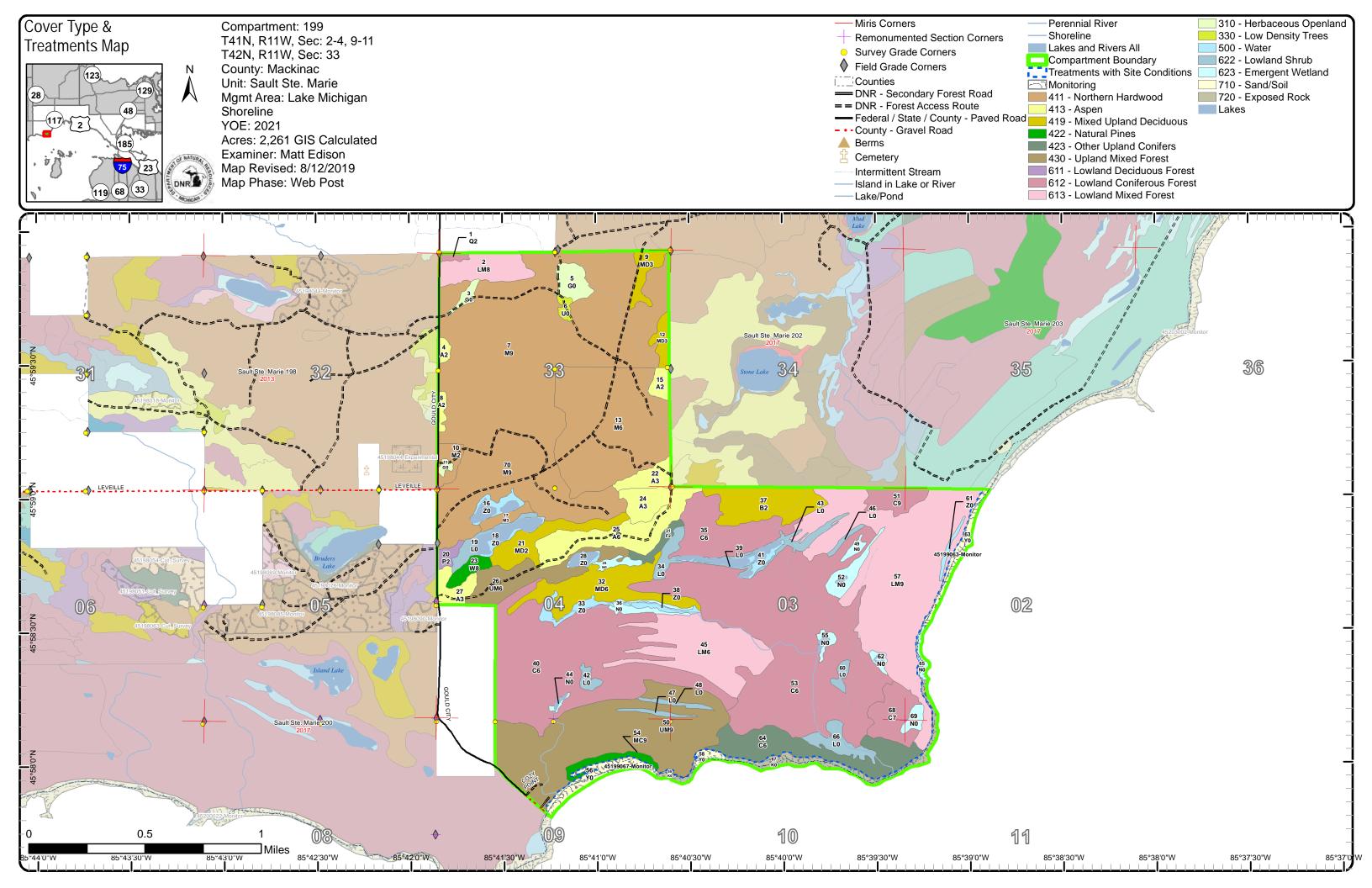
The following information is displayed, where pertinent, on the attached compartment maps:

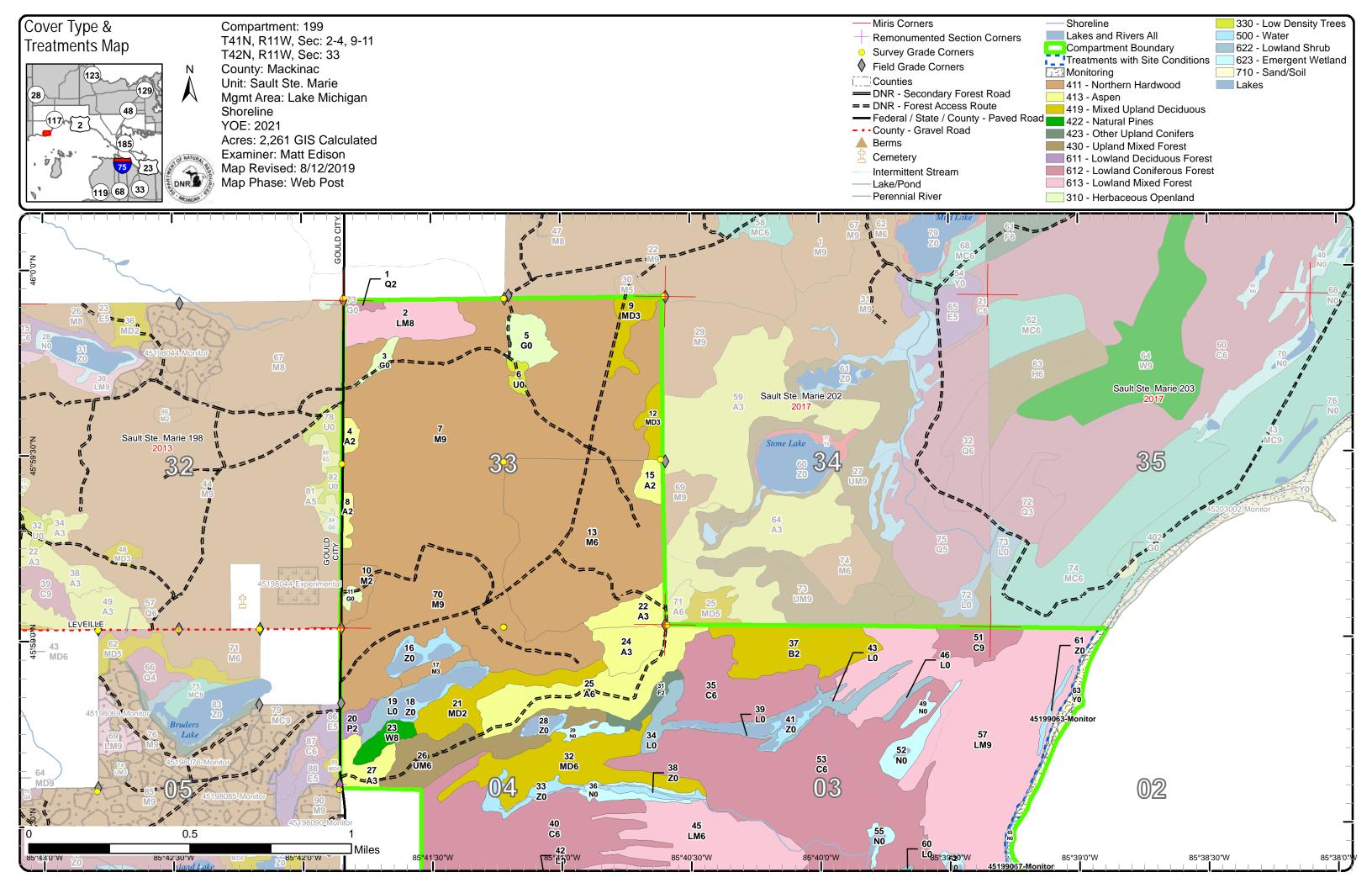
Base feature information, stand boundaries, cover types, and numbers

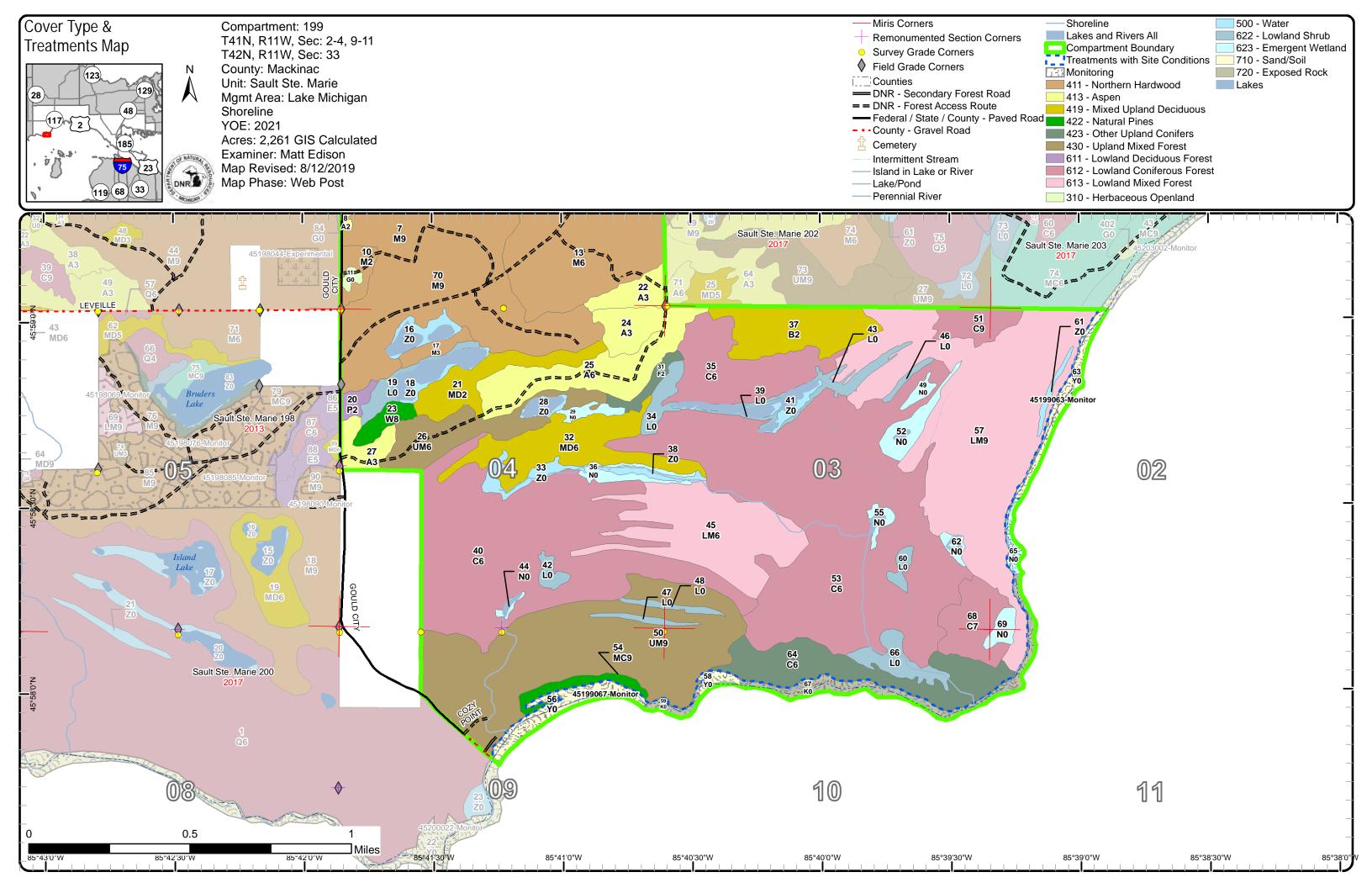
**Proposed treatments** 

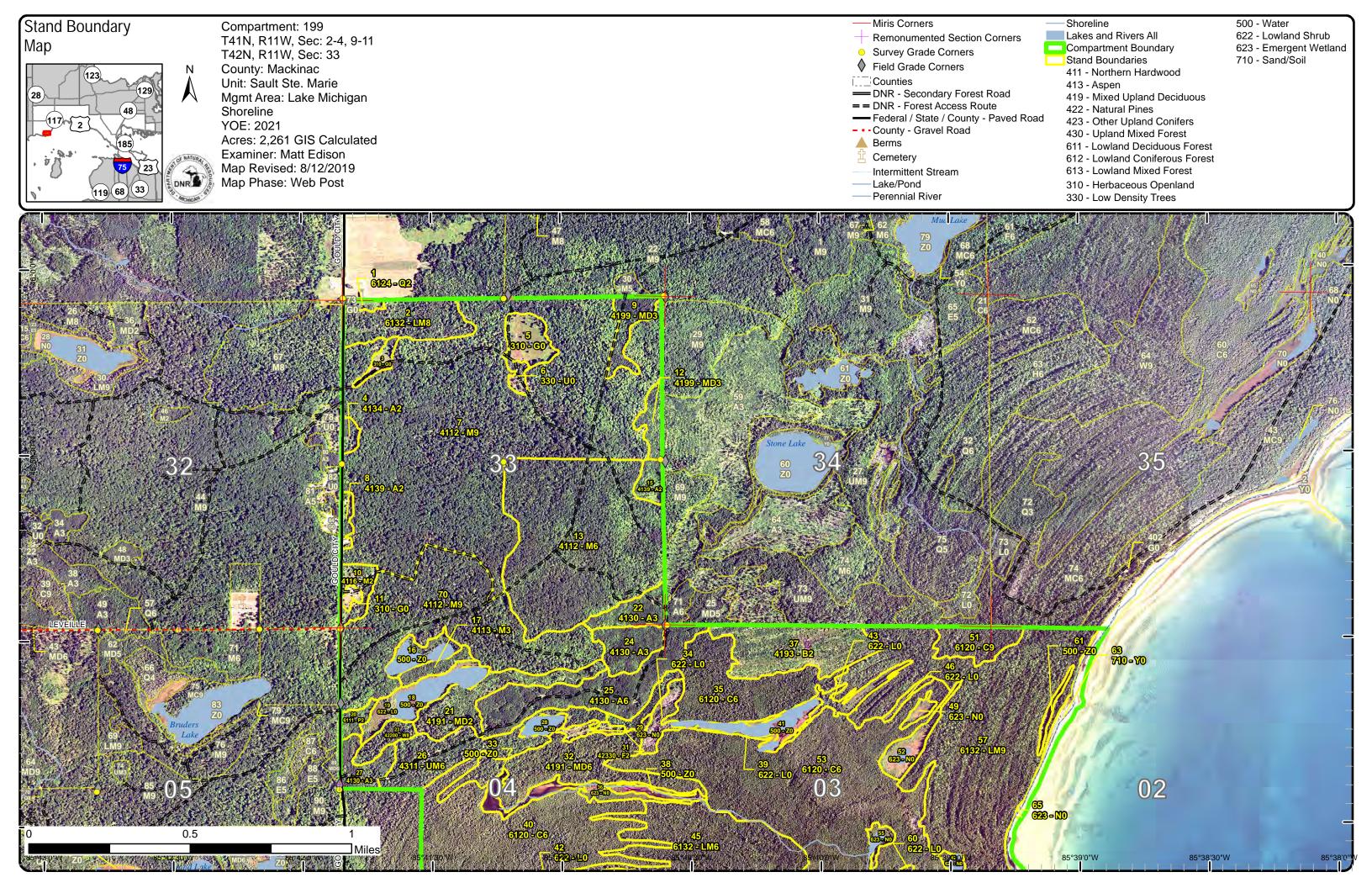
Site condition boundaries

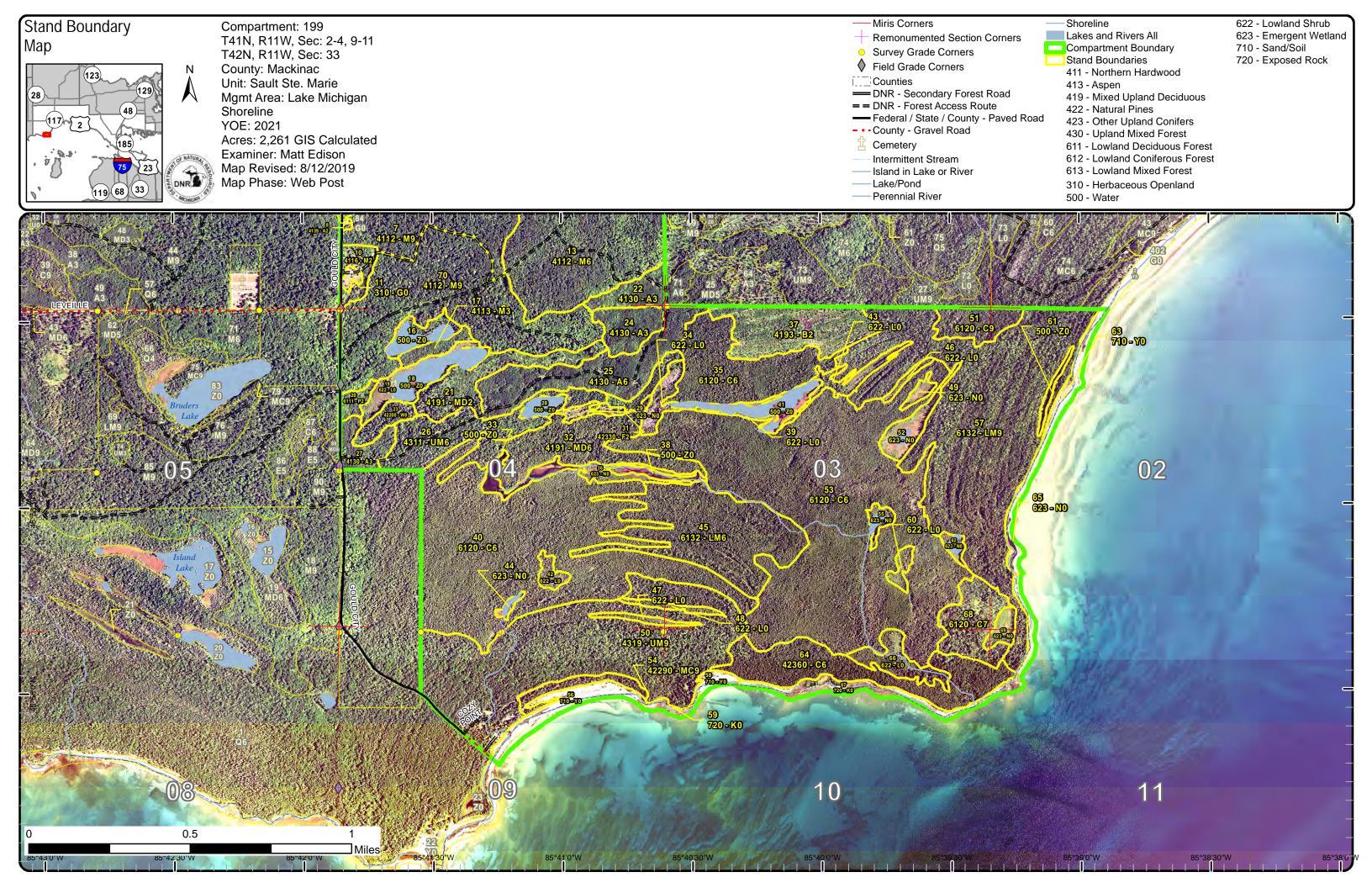
Details on the road access system

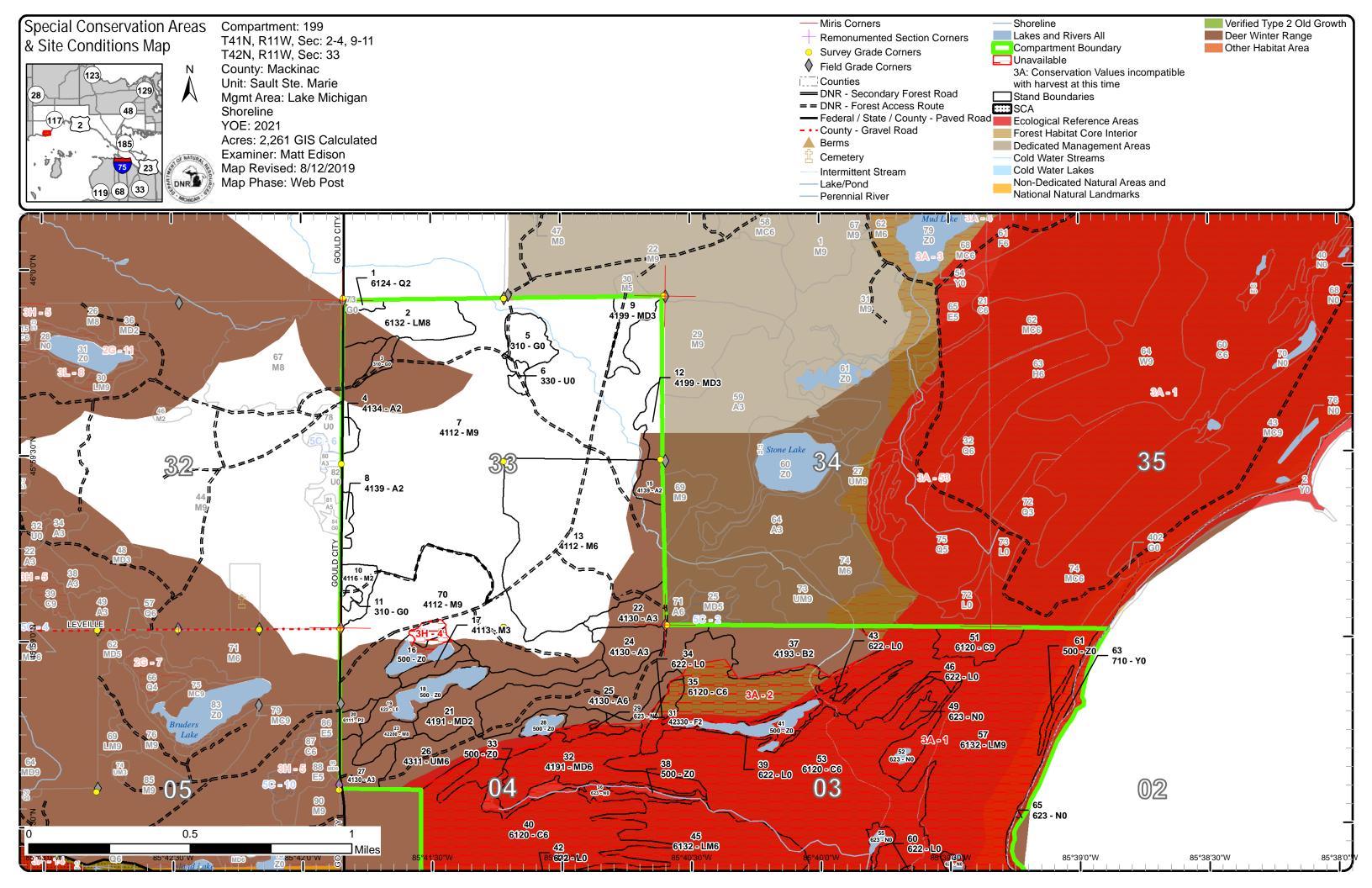


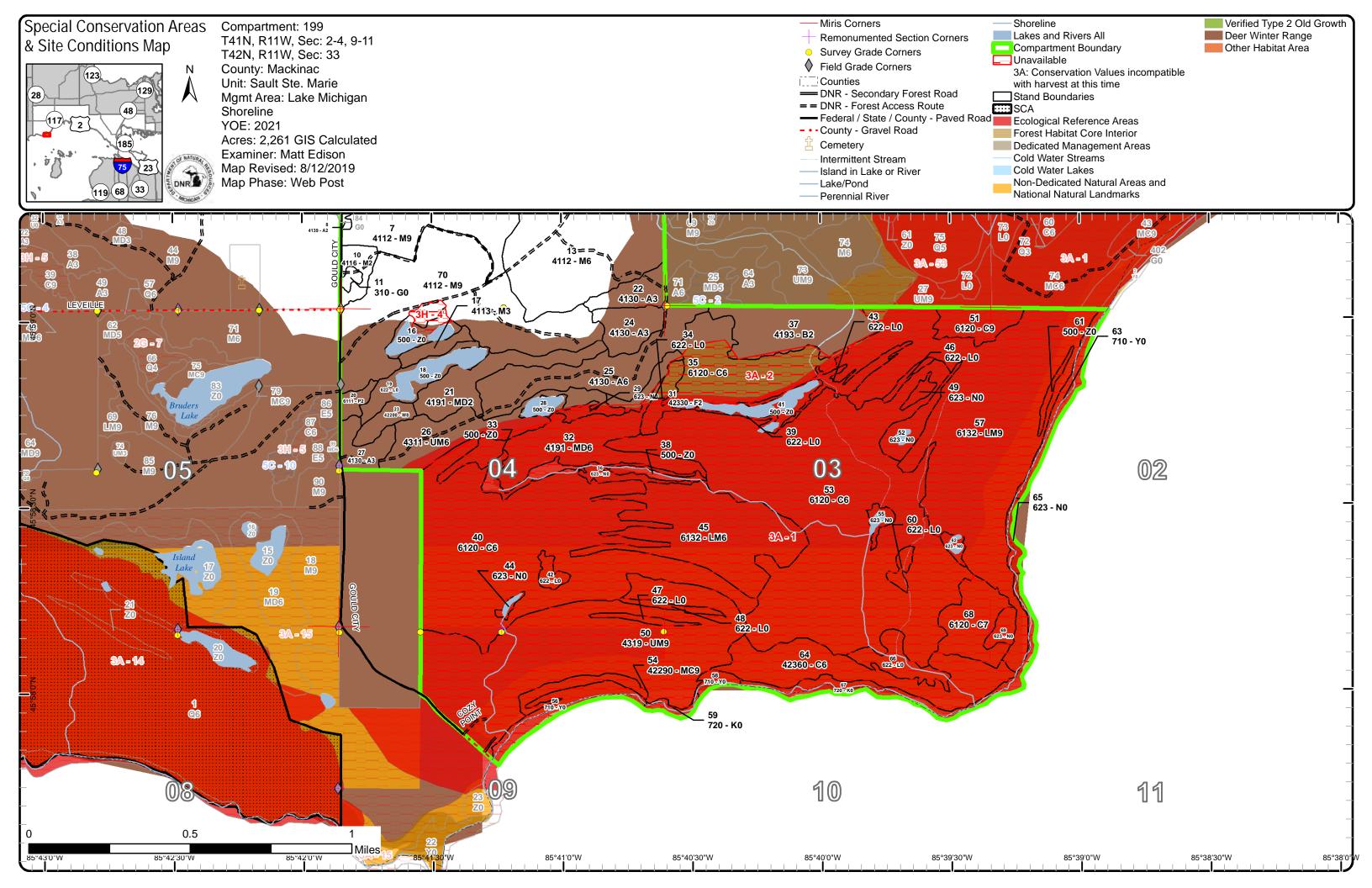












Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner



Age Class

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	$\leftarrow$	-																	
Aspen	0	0	25	27	48	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Cedar	0	0	0	0	0	0	0	0	0	0	194	54	377	0	0	0	0	0	625
Exposed Rock	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Herbaceous Openland	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Aspen/Balsam Poplar	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Conifers	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	230	78	0	0	0	0	0	308
Lowland Shrub	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Marsh	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Mixed Upland Deciduous	0	0	27	19	0	0	0	0	0	50	0	0	0	0	0	0	0	0	96
Natural Mixed Pines	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9
Northern Hardwood	0	0	9	0	6	0	0	0	0	0	0	0	117	0	0	0	0	491	623
Paper Birch	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Sand, Soil	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Upland Mixed Forest	0	0	0	0	36	0	0	0	0	0	0	170	0	0	0	0	0	0	206
Upland Spruce/Fir	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
White Pine	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8
Total	232	3	107	46	96	0	0	0	9	58	194	454	572	0	0	0	0	491	2262



## **Report 2 – Treatment Summary**

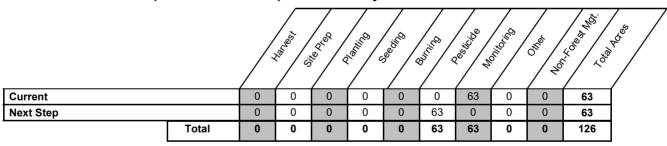
Sault Ste. Marie Mgt. Unit Year of Entry: 2021

#### **Acres of Harvest**

Compartment 199
Total Compartment Acres: 2,261

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

## **Proposed and Next Step Treatments by Method**



Sault Ste. Marie Mgt. Unit Report 3 -- Treatments Compartment: 199 s Year of Entry: 2021 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Method Objective Name Density Structure Status d CoverType Age Range Type 45199063-11.9 710 - Sand, Soil Nonstocked Herbicide Use 710 - Sand, Soil Draft Field 63 Unspec Monitoring Monitor ified Boundary **Habitat Cut: No** Site Condition: Conservation Values <u>Prescription</u> Monitor for phragmites and other invasives and spray if needed to remove. Specs: Next Step ; Pesticide, Hand Application **Treatments:** <u>Acceptable</u> Regen: Percent to Treat = 100% **Other** Comment: **Proposed Start Date:** 6 /27/2019 45199067-51.1 720 - Exposed Rock Nonstocked Unspec Monitoring Herbicide Use 720 - Exposed Draft Field Monitor ified Rock Boundary

Habitat Cut: No Site Condition: Conservation Values

<u>Prescription</u> Monitor for phragmites or other invasives and spray if needed to remove.

Specs:

Next Step ; Pesticide, Other - Specify

Treatments:

Acceptable native plants

Regen:

Other Percent to Treat = 100%

Comment:

Proposed Start Date: 6 /27/2019

**Total Treatment Acreage Proposed:** 

63.0

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner

Compartment: 199
Year of Entry: 2021

#### **Availability for Management** Total Acres Avail Acres Acres **Dominant Site Conditions** With Condition Not Available Acres Available 5C 3A 3H Aspen Cedar Exposed Rock Herbaceous Openland Low-Density Trees Lowland Aspen/Balsam Poplar **Lowland Conifers** Lowland Mixed Forest Lowland Shrub Marsh **Mixed Upland Deciduous Natural Mixed Pines** Northern Hardwood Paper Birch Sand, Soil **Upland Mixed Forest** Upland Spruce/Fir Water White Pine 1,310 2,261 Total Forested Acres 1,304

Relative Percent

58%

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

ite Dominant Site o. Cond Availabili	ty Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Unavailable	3A: Conservation Values incompatible with harvest at this time	1,256	Unspecified	Unspecified	Unspecified	Unspecified
Comments:	HA for pileated woodpecker, bla	ıckhurniar	n warbler, northern narula			

42%

0%

# Report 4 – Site Conditions

Compartment: 199

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner Year of Entry: 2021

2	Unavailable	3A: Conservation Values incompatible with harvest at this time	48	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: DHA for pileated w	oodpecker, blackburnian warble	er, norther	n parula			
4	Unavailable	3H: Deer Wintering Area -	6	Unspecified	Unspecified	Unspecified	Unspecified
		habitat is incompatible with harvest at this time					
(	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
Comments				

Sault Ste. Marie Mgt. Unit

Compartment: 199 Year of Entry 2021



## 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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish speconditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	cies to persist from year to year. Suitable ney are relatively deep, have substantial f the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen constocked trout populations and those of other coldwater fish speryear to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	cies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Habitat Area	An area that provide some specific need for the life cycle of wild and Waterfowl Production Areas, deer wintering complexes in leading openings and savannas. Habitat areas are distinct from critical endangered or threatened species (such as Kirtland's warbler of general in nature, are not primarily associated with threatened covered by species recovery plans that are developed in cooper	owland conifer communities, grassland habitat designated for recovery of or piping plover areas) in that they are more or endangered species, and are not
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and W proposed for legal dedication, but for which legal dedication by nomination process is defined by Part 351, Wilderness and Nat Environmental Protection Act, 1994 PA 451. The program is ad require the submittal of a Natural Areas Nomination Packet to the proposed sites in various stages of review. Final dedication of races is accomplished through legislative action.	legislature has not occurred. The tural Areas, of the Natural Resources and ministered by the DNR. Nominations he DNR. This is an active program, with
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific man rules, as governed by Part 5, Department of Natural Resources 324.504). Section 38 of the Administrative Procedures Act (MC the promulgation of rules. This is an active program, with one p DNR.	, of the NREPA (MCL 324.502(2) and L 24.238) provides for public requests for
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and and Environmental Protection Act, 1994 PA 451. The program i require the submittal of a Natural Areas Nomination Packet to the proposed sites in various stages of review. Final dedication of races is accomplished through legislative action.	s administered by the DNR. Nominations he DNR. This is an active program, with
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Nature context of their natural community classification system. Elemen (Excellent) or B (Good) and a Global (G) or State (S) element (rethreatened (2), or rare (3) serve as an initial base of ERAs. The the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological submit recommendations for lands as ERAs using the DNR Communications.	ral Features Inventory (MNFI) within the nt Occurrences with viability ranks of A rarity) ranking of endangered (1), by may be located upon any ownership in sof natural community types that are processes and values. The public may



Stand	Level 4 Cover Type			•	Acres	Stand Age		Managed S		General Comments
1	6124 - Lowla	nd Spruce	-Fir \$	Sapling Medium	2.6	3	Immature	N/A		Part of old field to the north. Filling in with spruce.
	Canopy Species	% Cover	Size Class	DBH Age						
	Black Spruce	45	Sapling	2 3						
	Balsam Fir	20	Sapling	3						
	Pin Cherry	15	Sapling	2						
(	Quaking Aspen	15	Sapling	2						
2	6132 - Mixed Lov Ce	wland Fore edar	est with Sa	awtimber Mediur	n 27.7	101	51-80	N/A		Stand was shelterwood cut in 2005. Variable density residual over young saps. Heavier stocked residual areas are generally wetter.
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	
	Red Maple	10	Log/Pole	10	Re	ed Maple	Low	5 - 10 feet	Sapling	
	Yellow Birch	33	Log/Pole	11 101	Ye	llow Birch	Medium	5 - 10 feet	Sapling	
Nor	thern White Cedar	20	Log/Pole	12	Qual	king Aspen	High	5 - 10 feet	Sapling	
	Black Spruce	32	Pole	7	Bals	sam Poplar	Low	5 - 10 feet	Sapling	
					Stri	ped Maple	Low	10 - 20 feet	Sapling	
					Bla	ck Spruce	Low	5 - 10 feet	Sapling	
				L					1 0	
3	310 - Herbace	eous Open	ıland	Nonstocked	4.0			No		Opening with very few trees in the middle of it. Been used as a decking area for adjacent timber sales.
3	310 - Herbace	eous Open	ıland	Nonstocked	4.0 Cano	opy Species	Density	No Avg. Height	Size	Opening with very few trees in the middle of it. Been used as a decking area for adjacent timber sales.
3	310 - Herbace	eous Open	ıland	Nonstocked	4.0 Cano			No		Opening with very few trees in the middle of it. Been used as a decking area for adjacent timber sales.
3	310 - Herbace 4134 - Aspe	•		Nonstocked  Sapling Medium	4.0 Cano	opy Species	Density	No Avg. Height	Size	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in
4		n, Spruce/			4.0 Cano	ppy Species n Cherry	Density	No Avg. Height 10 - 20 feet	Size	area for adjacent timber sales.
4	4134 - Aspe	n, Spruce/	/Fir s	Sapling Medium	4.0 Cano	ppy Species n Cherry	Density	No Avg. Height 10 - 20 feet	Size	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in
4	4134 - Aspe Canopy Species	n, Spruce/	/Fir s	Sapling Medium  DBH Age	4.0 Cano	ppy Species n Cherry	Density	No Avg. Height 10 - 20 feet	Size	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in
4	4134 - Aspe Canopy Species Sugar Maple	n, Spruce/ % Cover	/Fir Size Class Sapling	Sapling Medium  DBH Age  3	4.0 Cano	ppy Species n Cherry	Density	No Avg. Height 10 - 20 feet	Size	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in
4	4134 - Aspe Canopy Species Sugar Maple Bigtooth Aspen	n, Spruce/ <b>% Cover</b> 10  50	/Fir Size Class Sapling Sapling	Sapling Medium  DBH Age  3 3 16 2	4.0 Cano	ppy Species n Cherry	Density	No Avg. Height 10 - 20 feet	Size	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in
4	4134 - Aspe  Canopy Species  Sugar Maple  Bigtooth Aspen  Balsam Poplar	n, Spruce/ % Cover 10 50 10 20	Fir Size Class Sapling Sapling Sapling Sapling Pole/Sapling	Sapling Medium  DBH Age  3 3 16 2	4.0 Cano	ppy Species n Cherry	Density	No Avg. Height 10 - 20 feet	Size	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in
4	4134 - Aspe  Canopy Species  Sugar Maple  Bigtooth Aspen  Balsam Poplar  White Spruce	n, Spruce/ % Cover 10 50 10 20	Fir Size Class Sapling Sapling Sapling Sapling Pole/Sapling	Sapling Medium  DBH Age  3 3 16 2 3 4	4.0 Cand Pi 3.2	ppy Species n Cherry	Density	No Avg. Height 10 - 20 feet N/A	Size	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in 2004 with Juneberry Island timber sale.
4	4134 - Aspe  Canopy Species  Sugar Maple  Bigtooth Aspen  Balsam Poplar  White Spruce	n, Spruce/ % Cover 10 50 10 20	Fir Size Class Sapling Sapling Sapling Sapling Pole/Sapling	Sapling Medium  DBH Age  3 3 16 2 3 4	4.0 Cano Pi 3.2	ppy Species n Cherry 16	Density Low	No Avg. Height 10 - 20 feet N/A	Size Pole	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in 2004 with Juneberry Island timber sale.
4	4134 - Aspe  Canopy Species  Sugar Maple  Bigtooth Aspen  Balsam Poplar  White Spruce	n, Spruce/ % Cover 10 50 10 20	Fir Size Class Sapling Sapling Sapling Sapling Pole/Sapling	Sapling Medium  DBH Age  3 3 16 2 3 4	4.0 Cano Pi 3.2	ppy Species n Cherry 16 ppy Species	Density Low Density	No Avg. Height 10 - 20 feet N/A  No Avg. Height	Size Pole	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in 2004 with Juneberry Island timber sale.
4	4134 - Aspe  Canopy Species  Sugar Maple  Bigtooth Aspen  Balsam Poplar  White Spruce	n, Spruce/ % Cover 10 50 10 20 eous Open	Size Class Sapling Sapling Sapling Sapling Pole/Sapling	Sapling Medium  DBH Age  3 3 16 2 3 4	4.0 Cand Pi 3.2 12.6 Cand Wh Pi 3.3	ppy Species n Cherry  16  ppy Species ite Spruce n Cherry	Density Low  Density Low	No Avg. Height 10 - 20 feet  N/A  No Avg. Height >20 feet 10 - 20 feet	Size Pole  Size Log	area for adjacent timber sales.  South end semi-open. North end thick saps. Cut through old opening in 2004 with Juneberry Island timber sale.
5	4134 - Aspe  Canopy Species  Sugar Maple  Bigtooth Aspen  Balsam Poplar  White Spruce  310 - Herbace	n, Spruce/ % Cover 10 50 10 20 eous Open	Size Class Sapling Sapling Sapling Sapling Pole/Sapling	Sapling Medium  DBH Age  3 3 16 2 3 4  Nonstocked	4.0 Canc Pi 3.2 12.6 Canc Wh Pi 3.3 Canc	popy Species n Cherry  16  popy Species ite Spruce n Cherry  popy Species	Density Low  Density Low Low	No Avg. Height 10 - 20 feet  N/A  No Avg. Height >20 feet 10 - 20 feet  No Avg. Height	Size Pole  Size Log Pole  Size	South end semi-open. North end thick saps. Cut through old opening in 2004 with Juneberry Island timber sale.  Old, once farmed (?) field. Scattered large open grown spruce.
5	4134 - Aspe  Canopy Species  Sugar Maple  Bigtooth Aspen  Balsam Poplar  White Spruce  310 - Herbace	n, Spruce/ % Cover 10 50 10 20 eous Open	Size Class Sapling Sapling Sapling Sapling Pole/Sapling	Sapling Medium  DBH Age  3 3 16 2 3 4  Nonstocked	4.0 Canc Pi 3.2 12.6 Canc Wh Pi 3.3 Canc	ppy Species n Cherry  16  ppy Species ite Spruce n Cherry	Density Low Low Low Unspecified Density Low	No Avg. Height 10 - 20 feet  N/A  No Avg. Height >20 feet 10 - 20 feet  No Avg. Height 10 - 20 feet	Size Pole  Size Log Pole  Size Tall Shrub	South end semi-open. North end thick saps. Cut through old opening in 2004 with Juneberry Island timber sale.  Old, once farmed (?) field. Scattered large open grown spruce.
5	4134 - Aspe  Canopy Species  Sugar Maple  Bigtooth Aspen  Balsam Poplar  White Spruce  310 - Herbace	n, Spruce/ % Cover 10 50 10 20 eous Open	Size Class Sapling Sapling Sapling Sapling Pole/Sapling	Sapling Medium  DBH Age  3 3 16 2 3 4  Nonstocked	4.0  Canc Pi  3.2  12.6  Canc Wh Pi  3.3  Canc	popy Species n Cherry  16  popy Species ite Spruce n Cherry  popy Species	Density Low Low Low Low Unspecified Density	No Avg. Height 10 - 20 feet  N/A  No Avg. Height >20 feet 10 - 20 feet  No Avg. Height	Size Pole  Size Log Pole  Size	South end semi-open. North end thick saps. Cut through old opening in 2004 with Juneberry Island timber sale.  Old, once farmed (?) field. Scattered large open grown spruce.



Stand	Level 4 C	over Type	er Type Size Density Acres Stand Age BA Ra		BA Range	Managed S	Site	General Comments			
7	4112 - Maple, Asso	, Beech, Ch ociation	nerry Sa				Stand was beech salvaged in 2015. Generally lower basal areas of large diameter maple. Hold for the next cycle and check in 10 years for next treatment. Bedrock at or pear surface. Many boulders stream throughout				
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	treatment. Bedrock at or near surface. Many boulders strewn throughout stand. Most not big enough to harbor walking fern, but there are some
	Sugar Maple	60	Log/Pole	14	110	Sug	ar Maple	Medium	Variable	Sapling	documented in the area. Some scattered softwood in the stand, including
	Red Maple	15	Log/Pole	14		Red	d Maple	Medium	Variable	Sapling	cedar, white pine, etc. Most of stand has thick understory. Champion
	Yellow Birch	15	Log/Pole	13		Е	Beech	High	Variable	Sapling	showy mountain ash is within the stand. Former champion yellow birch presided within the stand before it succumbed to its tragic demise in
	Black Cherry	10	Log/Pole	12		Strip	ed Maple	High	Variable	Tall Shrub	2015.
				_		Servicebe	rry (Juneberry	) Low	Variable	Tall Shrub	
						Mou	ntain Ash	Low	Variable	Tall Shrub	
8	4139 - Aspen,	Mixed Deci	duous Sa	apling I	Medium	1 3.7	14		N/A		Very south end was an old borrow pit (gravel) - starting to fill in. Middle is
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	thick saps. North end is semi-open. Was cut in 2004 as part of Juneberry Island timber sale.
	Sugar Maple	20	Sapling	1		Hazeln	ut (Beaked)	Low	< 5 feet	Tall Shrub	
	Bigtooth Aspen	58	Sapling	1	14						
	White Spruce	6	Sapling/Pole	3							
	White Spruce Black Cherry	6 10	Sapling/Pole Sapling	3							
9	Black Cherry 4199 - Other Mixe	10 ed Upland D	Sapling Deciduous	1 Saplino		11.3		Immature	N/A	Q:	Some saps were left when cut, so some larger diameter trees present.
	Black Cherry 4199 - Other Mixe Canopy Species	10 ed Upland D % Cover	Sapling Deciduous Size Class	1 Saplino	y Well	Cano	py Species	Density	Avg. Height	Size	Some saps were left when cut, so some larger diameter trees present.
	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple	ed Upland D  **Cover** 20	Sapling Deciduous Size Class Sapling/Pole	1 Sapling <b>DB</b> H		Cano	<b>py Species</b> Beech	<b>Density</b> High	Avg. Height 10 - 20 feet	Sapling	Some saps were left when cut, so some larger diameter trees present.
9	A199 - Other Mixe  Canopy Species  Sugar Maple  White Ash	10  ed Upland D  % Cover 20 15	Sapling Deciduous Size Class Sapling/Pole Sapling/Pole	Sapling  DBH  3		Canor E Blac	py Species Beech ck Cherry	Density High Medium	Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	
9	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen	10  ed Upland D  % Cover 20 15 8	Sapling Deciduous Size Class Sapling/Pole Sapling/Pole Sapling	Sapling  DBH  3 3 2	I Age	Canor E Blac	<b>py Species</b> Beech	<b>Density</b> High	Avg. Height 10 - 20 feet	Sapling	
9	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar	10  ## Cover  20  15  8  40	Sapling Deciduous Size Class Sapling/Pole Sapling/Pole Sapling Sapling	1 Sapling  DBH  3 3 2 2		Canor E Blac	py Species Beech ck Cherry	Density High Medium	Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	
9	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen	10  ed Upland D  % Cover 20 15 8	Sapling Deciduous Size Class Sapling/Pole Sapling/Pole Sapling	Sapling  DBH  3 3 2	I Age	Canor E Blac	py Species Beech ck Cherry	Density High Medium	Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	
9	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar	10  Cover 20 15 8 40 10  Hardwood	Sapling Deciduous Size Class Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling Sapling	1 Saplino DBH 3 3 2 2 2	I Age	Canol E Blac Hazeln	py Species Beech ck Cherry ut (Beaked)	Density High Medium	Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	Opening that was cleaned up with timber sale (Juneberry Island) in 2004.
9	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar  Black Cherry	10  Cover 20 15 8 40 10  Hardwood	Sapling  Deciduous  Size Class  Sapling/Pole  Sapling/Pole  Sapling  Sapling  Sapling  Sapling	DBH 3 3 2 2 2 2 appling I	Age 24	Canol E Blac Hazeln	py Species Beech ck Cherry ut (Beaked)	Density High Medium Medium	Avg. Height 10 - 20 feet 10 - 20 feet < 5 feet	Sapling Sapling	
9	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar  Black Cherry  4116 - Mixed N.	10  Cover 20 15 8 40 10  Hardwood	Sapling Deciduous Size Class Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling Sapling	DBH 3 3 2 2 2 2 appling I	Age 24	Canol E Blac Hazeln	py Species Beech ck Cherry ut (Beaked)	Density High Medium Medium	Avg. Height 10 - 20 feet 10 - 20 feet < 5 feet	Sapling Sapling	Opening that was cleaned up with timber sale (Juneberry Island) in 2004.
9	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar  Black Cherry  4116 - Mixed N.  Canopy Species	10  Cover 20 15 8 40 10  Hardwood	Sapling Deciduous Size Class Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling Sapling Sapling	DBH 3 3 2 2 2 apling I	Age 24	Canol E Blac Hazeln	py Species Beech ck Cherry ut (Beaked)	Density High Medium Medium	Avg. Height 10 - 20 feet 10 - 20 feet < 5 feet	Sapling Sapling	Opening that was cleaned up with timber sale (Juneberry Island) in 2004.
9	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar  Black Cherry  4116 - Mixed N.  Canopy Species  Sugar Maple	10  Cover 20 15 8 40 10  Hardwood % Cover	Sapling  Deciduous  Size Class  Sapling/Pole  Sapling	DBH 3 3 2 2 2 politing I	Age 24 Medium	Canol E Blac Hazeln	py Species Beech ck Cherry ut (Beaked)	Density High Medium Medium	Avg. Height 10 - 20 feet 10 - 20 feet < 5 feet	Sapling Sapling	Opening that was cleaned up with timber sale (Juneberry Island) in 2004.
10	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar  Black Cherry  4116 - Mixed N.  Canopy Species  Sugar Maple  Red Maple	10  Cover 20 15 8 40 10  Hardwood  Cover 15 10	Sapling  Size Class Sapling/Pole Sapling	1 Sapling DBH 3 3 2 2 2 2 DBH 1 1	Age 24 Medium	Canol E Blac Hazeln	py Species Beech ck Cherry ut (Beaked)	Density High Medium Medium	Avg. Height 10 - 20 feet 10 - 20 feet < 5 feet	Sapling Sapling	Opening that was cleaned up with timber sale (Juneberry Island) in 2004.
10	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar  Black Cherry  4116 - Mixed N.  Canopy Species  Sugar Maple  Red Maple  Beech	10  Cover 20 15 8 40 10  Hardwood  Cover 15 10 10	Sapling  Deciduous  Size Class  Sapling/Pole  Sapling  Sapling  Sapling  Sapling  - Aspen  Size Class  Sapling  Sapling  Sapling  Sapling  Sapling  Sapling  Sapling  Sapling	1 Sapling  DBH 3 3 2 2 2 2 DBH 1 1 1 1	Age 24 Medium	Canol E Blac Hazeln	py Species Beech ck Cherry ut (Beaked)	Density High Medium Medium	Avg. Height 10 - 20 feet 10 - 20 feet < 5 feet	Sapling Sapling	Opening that was cleaned up with timber sale (Juneberry Island) in 2004.
10	Black Cherry  4199 - Other Mixe  Canopy Species  Sugar Maple  White Ash  Quaking Aspen  Balsam Poplar  Black Cherry  4116 - Mixed N.  Canopy Species  Sugar Maple  Red Maple  Beech  Quaking Aspen	10  ## Cover  20 15 8 40 10  Hardwood  **Cover  15 10 10 10	Sapling  Deciduous  Size Class  Sapling/Pole  Sapling  Sapling  Sapling  - Aspen  Size Class  Sapling  Sapling  Sapling  Sapling  Sapling  Sapling  Sapling  Sapling  Sapling  Sapling	1 Sapling  DBH  3 3 2 2 2 2  DBH  1 1 1 1 1 1 1	Age 24 Medium	Canol E Blac Hazeln	py Species Beech ck Cherry ut (Beaked)	Density High Medium Medium	Avg. Height 10 - 20 feet 10 - 20 feet < 5 feet	Sapling Sapling	Opening that was cleaned up with timber sale (Juneberry Island) in 2004.

Sault Ste. Marie Mgt. Unit



Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
11	310 - Herbac	eous Open	land	Nonst	ocked	2.1			No		New stand added. Stand swapped from Forested to Non-Forested.  Mainly open piece within old opening which was harvested and has
						Cano	py Species	Density	Avg. Height	Size	regenerated.Patches of club moss found under few scattered trees.
						Blac	ck Cherry	Trace	5 - 10 feet	Tall Shrub	
						Wh	hite Pine	Low	Unspecified	Pole	
						Whit	te Spruce	Low	Unspecified	Pole	
						Unlisted -	See Commer	nts Medium	< 5 feet	Non-Wood	
						J	Juniper	Low	5 - 10 feet	Tall Shrub	
12	4199 - Other Mixe	d Upland D	eciduous	Saplin	g Well	8.0	24	Immature	N/A		Shallow to bedrock. Several forested rock outcroppings. Very rocky!
	Canopy Species	% Cover	Size Class	DBI	H Age	Cano	py Species	Density	Avg. Height	Size	
	Sugar Maple	10	Sapling/Pole	e 3		WI	hite Ash	Medium	5 - 10 feet	Sapling	
	White Ash	20	Sapling	3		Ва	lsam Fir	Low	10 - 20 feet	Sapling	
	Quaking Aspen	30	Sapling	3	24	Iro	onwood	Medium	10 - 20 feet	Sapling	
	Balsam Poplar	30	Sapling	3	24	Hazeln	nut (Beaked)	Medium	< 5 feet	Tall Shrub	
	Black Cherry	7	Sapling	2		<u>,                                      </u>					
13	4112 - Maple, Asso	, Beech, Ch ociation	nerry	Poletimb	oer Wel	l 143.1	86	51-80	N/A		Stand was thinned in 2014. Rocky in spots. More pole sized stand still lower basal area with beech dropped out. Check in 10 years. for A lone
	Canopy Species	% Cover	Size Class	DBI	H Age	Cano	py Species	Density	Avg. Height	Size	large healthy cedar near center of stand.
	Sugar Maple	53	Pole/Log	8	86	Sug	gar Maple	Medium	Variable	Sapling	
	Red Maple	21	Pole/Log	8		E	Beech	Medium	Variable	Sapling	
	Yellow Birch	6	Pole/Log	7		Ва	lsam Fir	Low	Variable	Sapling	
	Quaking Aspen	8	Log/Pole	12		Whit	te Spruce	Low	Variable	Sapling	
	Black Cherry	10	Pole/Log	8		Iro	onwood	Low	5 - 10 feet	Sapling	
15	4139 - Aspen,	Mixed Deci	duous	Sapling	Medium	n 6.4	13	Immature	N/A		Sugar maple saps are mainly residual saps from cutting. Regen is
	Canopy Species	% Cover	Size Class	DBI	H Age						patchy. More level than stand to the north. Not as much rock
	Sugar Maple	6	Sapling	2							
	Quaking Aspen	50	Sapling	3	13						
	Balsam Poplar	40	Sapling	3	13						
16	500 -	- Water		Nonst	ocked	10.3			No		Pond with fluctuating water table.
17	4113 - R.N	laple, Conif	er	Saplin	g Well	6.3	36	81-110	N/A		Long narrow strip between 2 ponds. Cedar and ash are mostly along the
	Canopy Species	% Cover	Size Class	DBI	H Age	Cano	py Species	Density	Avg. Height	Size	edges.
	Sugar Maple	6	Sapling	3			lsam Fir	Low	5 - 10 feet	Sapling	
	Red Maple	54	Sapling	3	36			1			•
	White Ash	7	Sapling	4							
	Balsam Fir	13	Sapling/Pole	e 4							
	Daisaili Fii	13	Caping/i Oil	- 4							



Stand	Level 4 Co	over Type	:	Size Dens	ty .	Acres	Stand Age	BA Ran	ge	Managed S	ite	General Comments
18	500 -	- Water		Nonstock	ed	10.8				No		Pond with fluctuating water table.
19	622 - Low	vland Shrub	)	Nonstock	ed	9.4				No		
20	6111 - Lowland	d Balsam F	Poplar S	Sapling Med	lium	4.7	13			N/A		Cut in 2005. Red maple heavily browsed. Lowland/upland.
	Canopy Species	% Cover	Size Class	DBH A	ge							
	Red Maple	11	Sapling	1								
	Bigtooth Aspen	10	Sapling	1								
	Balsam Poplar	75	Sapling	1 1	3							
21	4191 - Mixed Upla Co	and Decidu	ous with S	Sapling Med	lium	26.8	13	Immatu	ıre	N/A		Cut in 2006. Big steep sand ridge! Was difficult to log in places. Several patches of overstory trees left pretty much intact. Some open sand still
	Canopy Species	% Cover	Size Class	DBH A	ge							open from skid trails, but are regenerating in places. Regen mainly pin cherry.
	Red Maple	7	Sapling	3								
	Bigtooth Aspen	30	Sapling	3 1	3							
	Balsam Fir	25	Pole/Sapling									
	Pin Cherry	20	Sapling	3 1	3							
22		- Aspen		Sapling W		12.4	14	Immatu	ıre	N/A		Has regenerated nicely! More rock than adjacent aspen stands to the south.
	Canopy Species	% Cover		DBH A			py Species	Den		Avg. Height	Size	
	Red Maple	7	Sapling	2		Hazelnu	ıt (American)	Lo	OW	< 5 feet	Tall Shrub	
	Quaking Aspen	10	Sapling	3								
	Bigtooth Aspen	73	Sapling	3 1	4							
23	42200 - Natu	ıral White F	Pine Sa	wtimber Me		7.6	80	81-110	0	N/A		Nice white pine stand. On flat between marsh and ridge. More poles to the east. Thinned in 2005.
	Canopy Species		Size Class	DBH A			py Species	Den	sity	Avg. Height	Size	the east. Hillined in 2005.
	White Pine	80	Log/Pole/XLog	g 14 8	0		d Maple		OW	5 - 10 feet	Sapling	
							oth Aspen		igh	5 - 10 feet	Sapling	
						Bal	Isam Fir	Med	dium	5 - 10 feet	Sapling	
24	4130	- Aspen		Sapling W		15.4	25	Immatu	ıre	N/A		Another nice aspen stand.
	Canopy Species		Size Class	DBH A	ge		py Species	Den		Avg. Height	Size	
	Red Maple	10	Sapling	2			d Maple		dium	5 - 10 feet	Sapling	
	Quaking Aspen	15	Sapling	2		Blac	k Cherry	Lo	OW	5 - 10 feet	Sapling	
	Bigtooth Aspen	65	Sapling	2 2	5							



Stand	d Level 4 Co	over Type	5	Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
25	4130 -	Aspen	P	oletimb	er Well	47.7	36	201+	N/A		Aspen stand. Entering good merchantable size, but still averaging
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	smaller daimeter. Check in 10 years for harvest. Some semi open areas - some low ground, some high ground. Small borrow pit at curve in
	Quaking Aspen	10	Pole/Sapling	7		Re	ed Maple	Low	10 - 20 feet	Sapling	road from E-W to N-S.
	Bigtooth Aspen	72	Pole/Sapling	7	36		Beech	Low	5 - 10 feet	Sapling	
						Ba	ılsam Fir	High	>20 feet	Sapling	
						Bla	ck Cherry	Low	>20 feet	Sapling	
						Hazeln	ut (American)	Low	< 5 feet	Tall Shrub	
						Bla	ck Spruce	Low	>20 feet	Sapling	
26	4311 - Pine	e, Aspen M	ix P	oletimb	er Well	36.4	35	111-140	N/A		Mixed stand of aspen and white pine and balsam. White pine is of varying age and size - mostly saplings and small poles. White pine
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	mostly on west half. Balsam is on east half. Nice variable stand.
	Red Maple	10	Sapling	3		W	hite Pine	Medium	5 - 10 feet	Sapling	,
	Quaking Aspen	15	Sapling	3							
	Bigtooth Aspen	25	Pole/Sapling	6	25						
	Balsam Fir	20	Pole/Sapling	6							
	White Pine	30	Pole	6	35						
27	4130 -	Aspen		Saplin	g Well	11.7	25	Immature	N/A		Stand split from adjacent stand - more aspen than white pine. Some
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	semi-open areas. Nice aspen stand.
	Quaking Aspen	16	Sapling	2		Ва	ılsam Fir	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	66	Sapling	2	25	W	hite Pine	Medium	5 - 10 feet	Sapling	
	White Pine	12	Pole/Log/Sap	8		Bla	ck Cherry	Low	10 - 20 feet	Sapling	
28	500 -	Water		Nonst	ocked	4.3			No		Pond with fluctuating water table.
29	623 - Emerç	gent Wetla	nd	Nonst	ocked	4.0			No		
31	42330 - 1	Jpland Fir	S	apling l	Medium	6.3	36	111-140	N/A		Small strip stand of residual from adjacent previous harvests.
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	
	Balsam Fir	80	Sapling	3	36	Bals	am Poplar	Low	5 - 10 feet	Sapling	
	White Spruce	20	Sapling	3		Bla	ck Cherry	Low	5 - 10 feet	Sapling	
32	4191 - Mixed Upla Co	nd Decidu	ous with P	oletimb	er Well	49.6	88	111-140	N/A		Transition buffer between younger stand and lower ground This is a good buffer left along ponds and seeps.
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	
	Red Maple	23	Pole/Log	8		Ва	ılsam Fir	High	Variable	Sapling	
	Paper Birch	48	Pole/Log	8	88						_
	-	4.4	L = =/D=l=	4.0							
	White Spruce	11	Log/Pole	10							



Stand	l Level 4 Co	ver Type		Size Der	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
33	500 - 1	Water		Nonsto	cked	7.9			No		Pond. Heard loons calling. Headwaters of Patterson Creek.
34	622 - Lowl	and Shrub		Nonsto	cked	8.4			No		Old beaver flooded area.
35	6120 - Low	land Ceda	r	Poletimbe	er Well	50.6	112	Unspecified	N/A		Intermittant creek flows through eastern tip.
	Canopy Species	% Cover	Size Class	DBH	Age	Canor	py Species	Density	Avg. Height	Size	
	Paper Birch	10	Pole/Log				sam Fir	Low	5 - 10 feet	Sapling	
No	rthern White Cedar	70	Pole/Log	8	112	Northern	White Ceda	r Medium	>20 feet	Sapling	
			<u>_</u>			,	Alder	Low	5 - 10 feet	Tall Shrub	
36	623 - Emerg	jent Wetlar	nd	Nonsto	cked	6.8			No		Patterson Creek flows through.
37	4193 - Bir	ch, Aspen		Sapling M	ledium	40.7	13	Immature	N/A		Sand ridges and low swales. Mixed regeneration, some ground is very wet with little regen. Intermittant stream flows (north to south) through
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	stand on east end.
	Paper Birch	38	Sapling	1	13	A	Alder	Low	< 5 feet	Tall Shrub	
	Bigtooth Aspen	34	Sapling	1	13						
	Balsam Fir	8	Sapling	1							
	Pin Cherry	20	Sapling	1							
38	500 - 1	Water		Nonsto	cked	4.2			No		Pond. Patterson Creek flows through stand.
39	622 - Lowl	and Shrub		Nonsto	cked	2.0			No		May have lowland shrubs here. Edges around pond.
40	6120 - Low	land Ceda	r	Poletimbe	er Well	194.3	95	141-170	N/A		Large stand of cedar with varying ground. Ridge and swale over parts of
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	the stand.
	Paper Birch	8	Pole	1		Bal	sam Fir	Low	10 - 20 feet	Sapling	
	Black Spruce	20	Pole	8		Blac	k Spruce	Medium	Variable	Sapling	
No	rthern White Cedar	50	Pole/Log	8	95	Northern	White Ceda	ar Low	Variable	Sapling	
	White Pine	20	Log/Pole	12							
41	500 - 1	Water		Nonsto	cked	11.0			No		Pond with fluctuating water table.
42	622 - Lowl	and Shrub		Nonsto	cked	4.0		Unspecified	No		
43	622 - Lowl	and Shrub		Nonsto	cked	10.0			No		Fluctuating water table.
44	623 - Emerg	ent Wetlar	nd	Nonsto	cked	1.6			No		Half water, half emergent wetland. Headwaters of Newton Creek.



Stand	Level 4 Co	Level 4 Cover Type Size Density		ensity	sity Acres Stand Age BA Range				Site	General Comments		
45		6132 - Mixed Lowland Forest with Poletimber W		oer Well	77.5	112	141-170	N/A		In between upland and lowland. Basically low ridges interspersed with transition ground cedar. Some tag alder swales here too.		
	Canopy Species	% Cover	Size Class	DBI	H Age	Cano	py Species	Density	Avg. Height	Size		
	Red Maple	20	Log/Pole	10		Ва	lsam Fir	Medium	10 - 20 feet	Sapling		
	Paper Birch	29	Pole	8	103	Northerr	White Cedar	Medium	>20 feet	Sapling		
	Balsam Fir	6	Pole	8							-	
	White Spruce	10	Pole	8								
No	rthern White Cedar	31	Pole	7	112							
46	622 - Low	land Shrub	)	Nonst	ocked	2.3			No		Swale between ridges.	
47	622 - Low	land Shrub	)	Nonst	ocked	3.2			No		Swale between ridges.	
						Cano	py Species	Density	Avg. Height	Size		
						Та	ig Alder	Full	5 - 10 feet	Tall Shrub		
48	622 - Low	land Shrub	)	Nonst	ocked	3.5			No		Swale between ridges.	
							py Species	Density	Avg. Height	Size		
						Ta	ıg Alder	Full	5 - 10 feet	Tall Shrub		
49	623 - Emerç	gent Wetla	nd	Nonst	ocked	2.8			No		Fluctuating water table.	
50	4319 - Mixed			Sawtimb		169.7	108	141-170	N/A		Ridge and swale. Mainly upland. Nice spruce. WP supercanopy. Variable	
	Canopy Species		Size Class		H Age		py Species	Density	Avg. Height	Size	-	
	Red Maple	20	Pole/Log				lsam Fir	High	10 - 20 feet	Sapling		
	Yellow Birch	6	Log	12			te Spruce	Low	10 - 20 feet	Sapling		
	Paper Birch	20	Log/Pole				White Cedar		>20 feet	Sapling		
	White Spruce	27	Log/Pole			Ta	ıg Alder	Low	>20 feet	Tall Shrub		
	White Pine	20	XLog/Log	18								
51	6120 - Lov	vland Ceda	ar	Sawtimb	oer Well	15.0	113	141-170	N/A		Nice looking stand along Catarac River. Doesn't appear too wet. Old fence still evident in places along north section line (from Bethlehem	
	Canopy Species	% Cover	Size Class	DBI	H Age	Cano	py Species	Density	Avg. Height	Size	Steel days).	
	Paper Birch	20	Pole/Log	8		Ва	lsam Fir	High	10 - 20 feet	Sapling		
	White Spruce	10	Pole/Log	7		Northerr	White Cedar	Medium	>20 feet	Sapling		
No	rthern White Cedar	67	Log/Pole	10	113						-	
52	623 - Emerç	gent Wetla	nd	Nonst	ocked	10.3			No		Fluctuating water table.	



Stand	Level 4 Co	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments
53	6120 - Low	vland Ceda	ar (	Poletimber Well	286.1	112	141-170	N/A		Low cedar stand. Small areas of blow down. Is less dense along southern stand boundary, and with more windthrown or windblown trees
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	and more tag alder.
	Black Spruce	6	Pole	7	Ва	alsam Fir	Medium	5 - 10 feet	Sapling	
No	rthern White Cedar	80	Pole/Log	9 112	Northerr	n White Ceda	ar Low	10 - 20 feet	Sapling	
	Tamarack	9	Pole	8	Ta	ag Alder	Medium	>20 feet	Tall Shrub	
54	42290 - Natu	ral Mixed F	Pine S	Sawtimber Well	8.9	78	111-140	N/A		Sandy ridges with some steep ridges. Includes first several ridges from lakeshore.
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	lakestiole.
	White Spruce	24	Pole	8	Re	ed Maple	Low	>20 feet	Sapling	
No	rthern White Cedar	8	Pole/Log	8	Ва	alsam Fir	High	5 - 10 feet	Sapling	
	White Pine	23	Log/Pole	12	Whi	ite Spruce	Low	10 - 20 feet	Sapling	
	Red Pine	40	Log/Pole	12 78	Northern	n White Ceda	ar Low	>20 feet	Pole	
55	623 - Emerç	gent Wetla	nd	Nonstocked	3.6			No		Fluctuating water table. Creek(s) flow through here.
56	710 - Sa	and, Soil		Nonstocked	17.5		Unspecified	No		Open sand beach and dunes. Includes part of Newton Township park.
57	6132 - Mixed Lov Ce	wland Fore edar	est with	Sawtimber Well	202.0	105	141-170	N/A		White birch over cedar. Ridge and swale. Blowdown here and there. Pine more to the north. White birch hanging in there for its age.
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	
	Paper Birch	43	Log/Pole	10 105	Ва	alsam Fir	High	Variable	Sapling	
	White Spruce	10	Log/Pole	12	Whi	ite Spruce	Low	Variable	Sapling	
No	rthern White Cedar	35	Log/Pole	10 104						
	White Pine	8	Log/Pole/XLo	og 14						
58	710 - Sa	and, Soil		Nonstocked	3.9			No		Sandy beach.
59	720 - Exp	osed Rock	(	Nonstocked	3.3			No		Cobble beach. Cozy Point.
60	622 - Lowland Shrub			Nonstocked	3.6			No		Intermittant stream flows through.
61	<b>61</b> 500 - Water			Nonstocked	2.6			No		Swale between old beach ridges close to the shore. Fluctuating water table.
62	623 - Emergent Wetland			Nonstocked	2.9			No		Fluctuating water table. Stream flows out of to the east.
63	710 - Sand, Soil			Nonstocked	11.9	11.9 Unspecific		No		Sandy beach and dunes.



Stand	Level 4 C	over Type		Size Den	sity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
64	42360 - Upland Cedar		r	Poletimber Well		53.9	109	141-170	N/A		Upland cedar with spruce and white birch overstory. Variable density of
	Canopy Species	% Cover	Size Class	DBH .	Age	Cano	py Species	Density	Avg. Height	Size	balsam understory.
	Paper Birch	15	Pole	7		Ва	lsam Fir	Medium	5 - 10 feet	Sapling	
	White Spruce	25	Log/Pole	11		Northern	White Ced	ar Low	>20 feet	Sapling	
No	thern White Cedar	60	Pole/Log	8	109						
65	623 - Emergent Wetland			Nonstoc	ked	4.4		Unspecified	No		needed to switch to forested then back to non-forested to change the level 3 call
66	622 - Lowland Shrub Nonstocked		ked	13.2			No		Tag alder area of Patterson Creek.		
67	720 - Exp	oosed Rock		Nonstoc	ked	22.0		Unspecified	No		Cobble, rocky, sandy beach. Includes Point Patterson.
68	6120 - Lowland Cedar		Sawtimber Poor		25.1 110		1-50	N/A		Stand has been flooded out. Most of the deciduous trees are dead ar	
	Canopy Species % Cover Size Cla		Size Class	s DBH Age		Canopy Species		Density	Avg. Height	t Size	gone.
	White Spruce	20	Pole	8		Balsa	am Poplar	Medium	>20 feet	Sapling	
No	thern White Cedar	80	Log/Pole	10	110	Ва	lsam Fir	Low	5 - 10 feet	Sapling	
		1		1 1		Alder		Medium	>20 feet	Tall Shrub	
69	623 - Emer	Nonstoc	ked	4.9			No		Low, wet area. Flucuating water table. Not too wet, suprisingly, for ear May. Adjacent ash stand shows water marks up to 2' on the trees.		
70	4112 - Maple, Beech, Cherry Association			Sawtimber	r Well	117.0	110	51-80	N/A		Areas of log/pole, and areas of pole/log. Bedrock at or near surface. Most of stand has beech understory. Overall lower basal areas after the
	Canopy Species	% Cover	Size Class	DBH .	Age	Cano	py Species	Density	Avg. Height	Size	beech has dropped out. Some clump areas. Best to leave for next te years and evaluate then for potential harvest.
	Sugar Maple	60	Log/Pole	12	110	Sug	ar Maple	Medium	Variable	Sapling	yours and evaluate then for potential harvest.
	Red Maple	15	Log/Pole	12		Re	d Maple	Medium	Variable	Sapling	
	Yellow Birch	15	Log/Pole	13		Е	Beech	High	Variable	Sapling	
	Black Cherry	10	Log/Pole	12		Strip	ed Maple	High	Variable	Tall Shrub	
					'	Servicebe	rry (Junebe	rry) Low	Variable	Tall Shrub	
						Mou	ntain Ash	Low	Variable	Tall Shrub	