

Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 26 Entry Year 2015 Acreage: 1,323

County Chippewa

Management Area: Huron Patterned Outcrop

Revision Date: 06/27/2013

Stand Examiner: Jason Caron

Legal Description:

T42N-R2E, Sections 6,7,18 & 19

Identified Planning Goals:

Timber and wildlife are the main management objectives within this compartment. Aspen within the compartment has been targeted in past decades which makes for a young age class. One timber sale contract exists within the southern portion of the compartment that has not been finished yet while a few more will be prescribed during this inventory process. All in all there will be limited timber removal due a young age class within the compartment.

Soil and topography:

The entire compartment consists of the Shelter-Posen Summerville association. A somewhat shallow soil, it is a poorly to well drained loamy soil on ground moraines and glacial lake benches. The land is gently rolling with lowland cedar swamps and upland scenic hills of aspen.

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

A contiguous block of state land with a mix of private and state land ownership to the east and west of the compartment. A large block of quarry property (MLO Properties, LLC) exists to the west of this compartment. Developments along the Prentiss Bay road are a mix of seasonal and year round residences'.

Unique Natural Features:

A hill locally known as Birch Hill exists within this compartment and is one of the few hills east of I-75. MNFI data should be reviewed when planning management activities within this compartment.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

No special management in this year of entry.

Watershed and Fisheries Considerations:

This compartment is in the Beavertail Creek watershed, which flows into Lake Huron. Stand 42 gets close to W Br Beavertail Creek. Recommend a 150' no-clear-cut buffer adjacent to river (note: cut off the finger).

Wildlife Habitat Considerations:

Compartment 26 is located in the Huron Patterned Outcrop Management Area. Aspen and lowland conifer stands, particularly cedar, are common here. Aspen stands vary in age class, but many are young stands resulting from treatments to mature aspen since the last entry that are now or will be providing early successional habitat for ruffed grouse, woodcock, and other wildlife. Remaining types include northern hardwoods and upland mixed stands. The southern part of the compartment is located in deer wintering complex.

A stand with mature aspen will be treated to encourage aspen regeneration in the stand, providing another age class of aspen in the area for ruffed grouse, white-tailed deer, snowshoe hare, and other wildlife. Lowland conifer stands will be left to provide wintering cover for deer as well as cover for snowshoe hare, bobcat, and other species. Harvests in the southern part of the compartment involving aspen and other palatable species will be conducted during the winter months to provide a source of browse to wintering deer. Other species benefitting from management here include, but are not limited to, pileated woodpecker, northern goshawk, beaver, gray wolf, coyote, and pine siskin.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of thin to discontinuous glacial deposits over bedrock. The glacial drift thickness varies between 10 and 50 feet. The Silurian Engadine and Manistique Groups subcrop below the glacial drift. The Engadine is quarried for stone/dolomite three miles to the west. There is a gravel pit in section 19, and there should be potential. There is no

economic oil and gas production in the UP.

Vehicle Access:

Prentiss Bay Road is the main access to this compartment. Several two tracks on the southern end provide access into the compartment. The north end does have a two track off of the Prentiss Bay road but it is not accessible to the public due to a private strip of land on the west side of the road.

Survey Needs:

No survey needed at this time.

Recreational Facilities and Opportunities:

Deer, grouse and rabbit hunting are the main opportunities within the compartment. Mushroom picking is popular in the spring as well. The Birch Hill motorcycle trail is located within the center of the compartment.

Fire Protection:

Fire protection would be decent within this compartment due to the road layout. Structure protection is a concern but most cabins and houses are along the Prentiss Bay road.

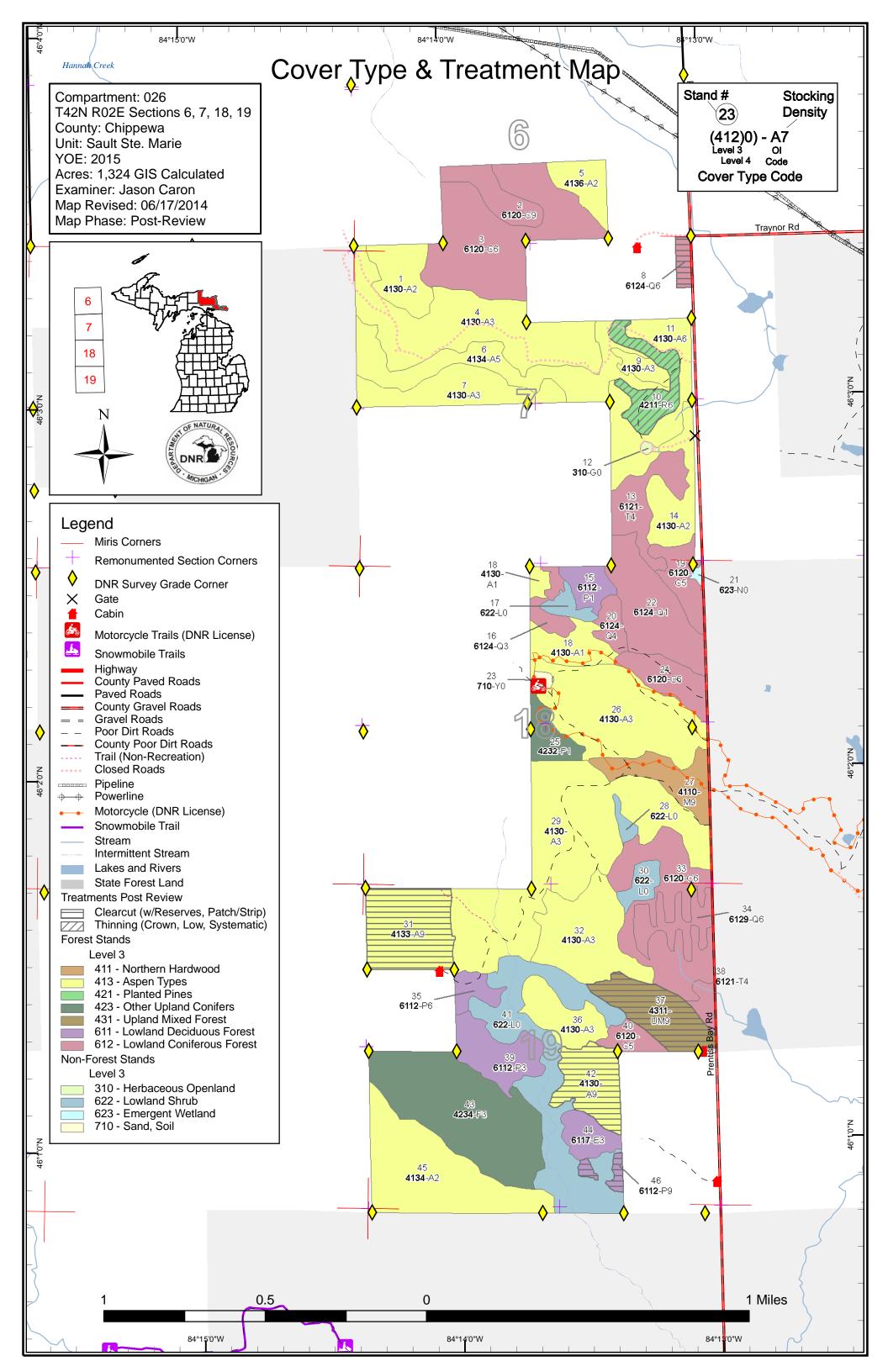
Additional Compartment Information:

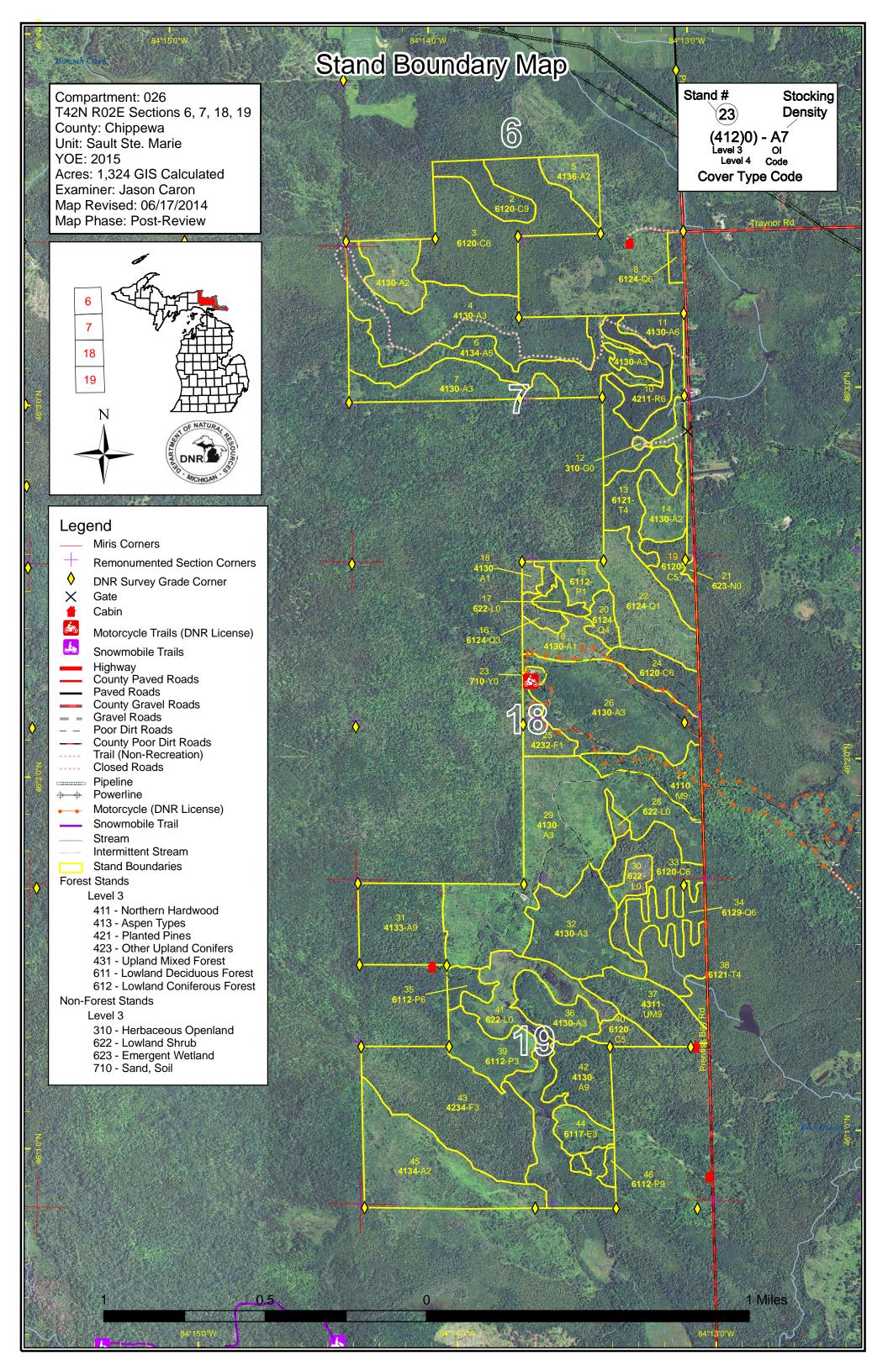
The following reports from the Inventory are attached:

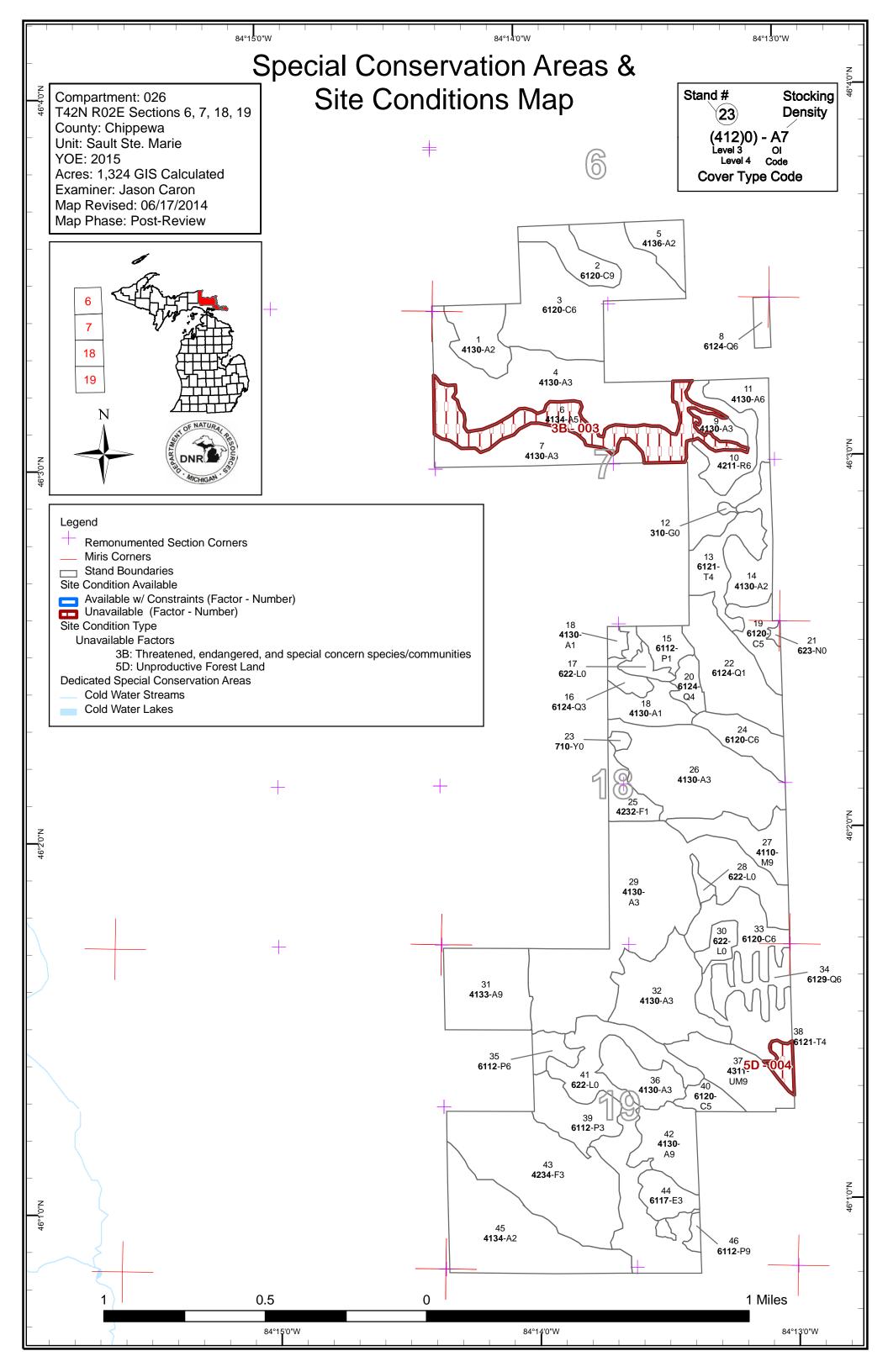
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

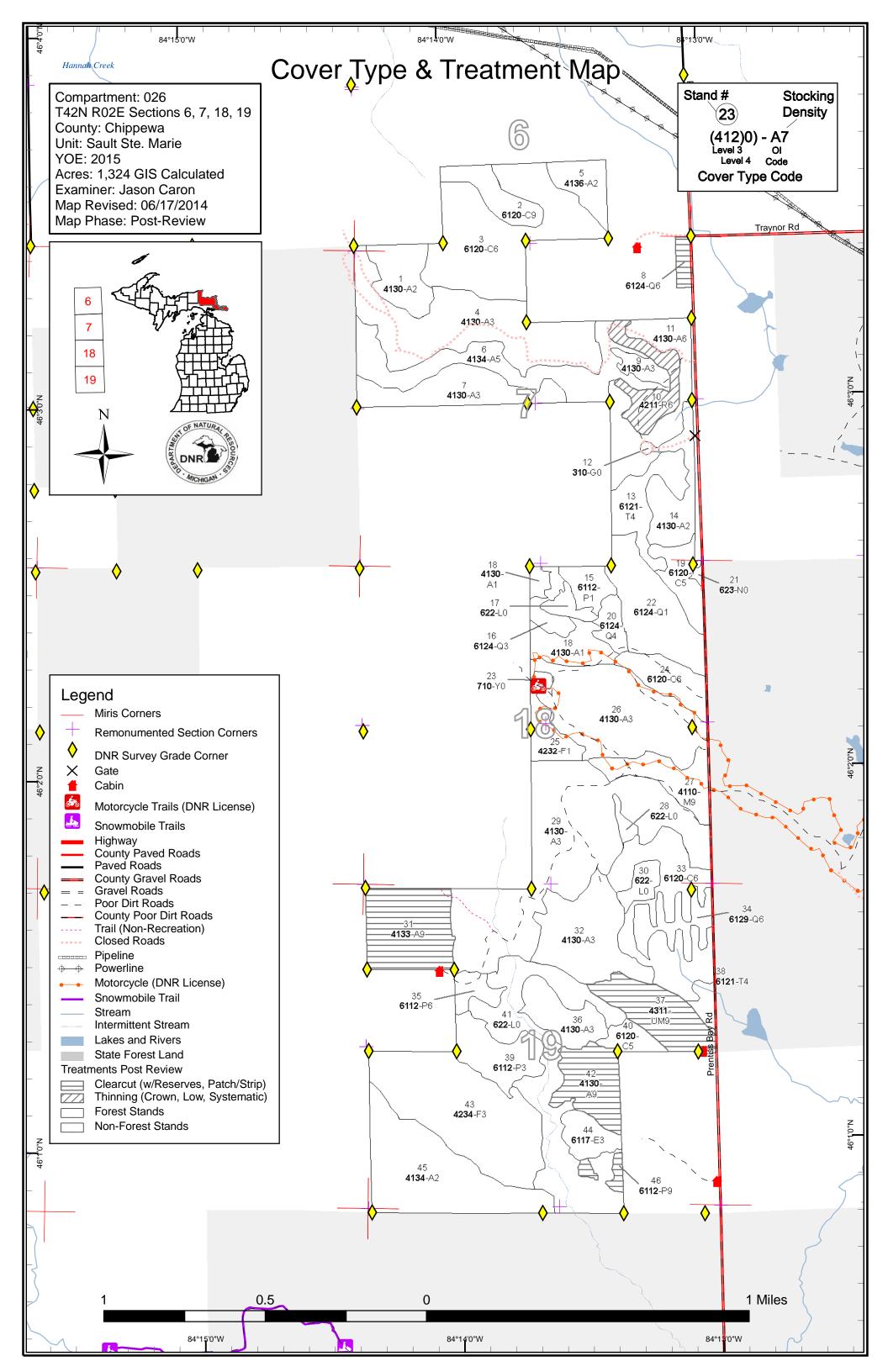
The following information is displayed, where pertinent, on the attached compartment maps:

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









Compartment 026 Year of Entry 2015

Sault Ste. Marie Mgt. Unit

Jason Caron: Examiner



Age Class 11.00 M 70,709 70,79 10,0 ⁶0, 20.25 % × × Aspen Cedar Herbaceous Openland Lowland Aspen/Balsam Poplar **Lowland Conifers** Lowland Deciduous Lowland Shrub Marsh Northern Hardwood Red Pine Sand, Soil Tamarack Upland Mixed Forest Upland Spruce/Fir

Total



Report 2 – Proposed Treatment Summaries

Sault Ste. Marie Mgt. Unit Year of Entry 2015

Compartment 026 Total Compartment Acres: 1,323

Acres by Treatment Type

Other - 0

Commercial Harvest - 128 Tree Planting - 0

Habitat Cut - 0 Opening Maintenance - 0

Cover Type by Harvest Method

							Cint. Off.	*** / ***
Aspen Types		69	0	0	0	0	0	69
Lowland Coniferous Forest		5	0	0	0	0	0	5
Lowland Deciduous Forest		4	0	0	0	0	0	4
Planted Pines		0	0	0	0	20	0	20
Upland Mixed Forest		30	0	0	0	0	0	30
	Total	109	0	0	0	20	0	128

Sault Ste. Marie Mgt. Unit

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 026
Year of Entry 2015

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
10	Stand 10-Cut	19.6	42110 - Planted Red Pine	High Density Pole	28	200+	Harvest	Systematic Thinning	4211 - Planted Red Pine	Fld. Tr. Bdy Incomplete

<u>Prescription</u> Remove every third row of red pine within the plantation. Some rows may be hard to follow due to irregularities. Some rows may be very narrow. <u>Specs:</u> Use equipment width specification if forester feels it is justifiable. Leave any deciduous trees where feasible.

Other Comments:

No follow up is needed within this stand. No regeneration is expected within the understory of pine.

Next Steps:

S

<u>Proposed</u>

Start Date: 10/01/2014

31 Stand 31-Cut 42.8 4133 - Aspen, High 71 Harvest Clearcut with 413 - Aspen Fld. Tr. Bdy. Mixed Pine Density Log Reserves

Prescription Stand is already under contract. Brush Mansion Mix 45-009-11-01

Specs:

Other Comments:

Next Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, yellow and paper Steps: birch, ironwood, balsam fir, white spruce and white pine.

Proposed Start Date: 07/17/2012

37 Stand 37-Cut 30.3 4311 - Pine, Aspen High 96 Harvest Clearcut with 4136 - Aspen, Fld. Tr. Bdy. Mix Density Log Reserves Mixed Conifer Incomplete

<u>Prescription</u> Clearcut with reserves. Do not cut white pine or red pine within the stand. Due to scattered aspen within the stand cut all stems to promote

Specs: suckering to benefit deer and ruffed grouse. Cut in winter only to provide palatable browse for wintering deer.

Other Comments:

Next Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, yellow and paper Steps: birch, ironwood, balsam fir, white spruce, red pine and white pine.

<u>Proposed</u>

Start Date: 10/01/2014

42 Stand 42-Cut 26.3 4130 - Aspen High 66 Harvest Clearcut with 4134 - Aspen, Fld. Tr. Bdy. Density Log Reserves Spruce/Fir

Prescription Stand is already on contract. Brush Mansion Mix 45-009-11-01

Specs:

Other Comments:

Next Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, yellow and paper

Steps: birch, ironwood, balsam fir, white spruce, red and white pine.

Proposed

Start Date: 07/17/2012

46 Stand 46-Cut 4.1 6112 - Lowland High 66 Harvest Clearcut with 6112 - Lowland Fld. Tr. Bdy.
Aspen Density Log Reserves Aspen

Prescription Stand is already under contract. Brush Mansion Mix 45-009-11-01

Specs:

Other Comments:

Next Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, yellow and paper

<u>Steps:</u> birch, ironwood, balsam fir, white spruce and white pine.

Proposed

Start Date: 07/17/2012

Sault Ste. Marie Mgt. Unit

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 026 Year of Entry 2015

t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
8	Stand 8-Cut	5.1	6124 - Lowland Spruce-Fir	High Density	61	81-110	Harvest	Clearcut with Reserves	6130 - Fir, Aspen, Maple	Fld. Tr. Bdy Incomplete

Prescription Clearcut with reserves. Do not cut red or white pine, cedar and tamarack. Cut all white spruce as it has alot of budworm damage. Cut all aspen and white birch to promote regeneration. Specs:

<u>Other</u> Comments:

s

Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, yellow and paper

<u>Next</u> Steps: birch, ironwood, balsam fir, white spruce and white pine.

Proposed

10/01/2014 Start Date:

Total Treatment

128.1 **Acreage Proposed:**

Sault Ste. Marie Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 026 a Site Condition s Year of Entry 2015 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Objective Method Status Name Range Density Age Type #Type! #Type! **Prescription** Specs: **Other** Comment: <u>Next</u> Steps: <u>Proposed</u> #Type! Start Date:

Total Treatment

Limiting Factor

Acreage Proposed: 0.0

Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit

Compartment 026 Year of Entry 2015 Jason Caron: Examiner

Availability for Management Total Acres Acres **Dominant Site Conditions** Acres Available Not Available No 5D 3B 50 647 50 697 647 Aspen

• • • • • • • • • • • • • • • • • • • •	•		7.000	•		
192	192		Cedar	192		
48	48		Lowland Aspen/Balsam Poplar	48		
82	82		Lowland Conifers	82		
12	12		Lowland Deciduous	12		
23	23		Northern Hardwood	23		
20	20		Red Pine	20		
29	23	6	Tamarack	23	6	
30	30		Upland Mixed Forest	30		
97	97		Upland Spruce/Fir	97		
1,228	1,173	55	Total Forested Acres	1,173	6	50
	95%	5%	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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition		
003 Not Available 3B: Threatened, endangered, and specia concern species/communities		50	3K: Rare or unique landforms						
	Comments: Stand contains rocky outcrops throughout. Too rocky to operate and high probablility of T & E species within it.								
004	Not Available	5D: Unproductive Forest Land	6	2G: Too wet (sensitive soils, does not include access issues)					
	omments:								

Sault Ste. Marie Mgt. Unit

Compartment: 026
Year of Entry: 2015



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
Comments				

Sault Ste. Marie Mgt. Unit Compartment: 026
Year of Entry 2015



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.

Conservatio Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA Archaeological Site		An aquatic or terrestrial area of the State that contains physical r sites of cultural and historical significance that may occur upon to bottomlands. They include thousands of Native American settlen and British outposts, nineteenth century logging camps, mines at the Great Lakes, there are shipwrecks and other remains docum be identified by Natural heritage data from the State Historic Prethis compartment will be implemented in such a manner as to mathe sensitive nature of this information, no further detail about local	errestrial areas and Great Lakes nents and burial sites, as well as French and homesteads. Beneath the waters of enting the maritime trade. Such sites may servation Office. Proposed treatments in aintain the integrity of these sites. Due to
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildl and Waterfowl Production Areas, deer wintering complexes in loopenings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperation.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more endangered species, and are not

S				Report 8	– Forested	Stands Compartment: 026 Year of Entry: 2015
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Medium Density	20.8	4		A few oak scattered within the stand as well as a few patches of non merchantable balsam the logger went around. Regeneration looks good!
2	6120 - Lowland Cedar	High Density Log	16.2	86		Stand varies from adjacent stand in that it's on better soil and maybe a little higher ground? Cedar is better quality and larger diameter, Lots of old stumps within stand from a long ago cut. Found a small intermittent stream within the stand.
3	6120 - Lowland Cedar	High Density Pole	80.1	116		Stand of poor quality cedar, trees are stubby and cow-horned. Balsam fir understory is thick.
4	4130 - Aspen	High Density Sapling	80.4	14		Stand of fully stocked aspen with scattered red oak and white pine left. Conifer is coming in underneath. Excellent regeneration for a 13 year old cut!
5	4136 - Aspen, Mixed Conifer	Medium Density	14.8	3		Stand cut in 2010, sale # 004-06. nice aspen regeneration. Should fill in by next YOE.
6	4134 - Aspen, Spruce/Fir	Medium Density Pole	49.8	62		Stand is a mix of big tooth and quaking aspen with a mix of sugar maple, red maple, paper birch and oak. Rock outcrops are throughout the entire stand. I wouldn't be surprised to find walking fern in this stand.
7	4130 - Aspen	High Density Sapling	33.8	14		Stand is a mix of big tooth and quaking aspen. White spruce and balsam fir is filling in underneath the aspen. Some of the former openings have filled in thick w/ white spruce!
8	6124 - Lowland Spruce- Fir	High Density Pole	5.1	61	81-110	Small white spruce plantation along the Prentiss Bay Road. Budworm damage throughout the stand .
9	4130 - Aspen	High Density Sapling	6.7	28		Stand is suprisingly on a big rocky hill. Aspen regeneration is nice, fully stocked.
10	42110 - Planted Red Pine	High Density Pole	19.6	28	200+	Stand of short stubby red pine. 3-4 sticks tall. Lower branches have died and crowns are getting thin. Basal area is high enough to support a third row thinning. Stand was planted with alot of trees per acre therefore a third row thinning should be done to open up the canopy.
11	4130 - Aspen	High Density Pole	36.0	28		Nice stand of aspen. For a 27 year old stand the aspen looks great, Site Index must be really good!
13	6121 - Tamarack	Low Density Pole	23.1	51		Swamp stand with scattered tamarack and a few cedar. Standing water throughout the stand. Looks like adjacent stands slope into this one hence the water.
14	4130 - Aspen	Medium Density	23.3	7		Cut in 2007, sale # 009-05. Aspen is regenerating back nicely. Southwest edge of stand is slow to regenerate but should fill in with conifer or deciduous by next YOE.

S t				Report 8	– Forested	Stands Compartment: 026 Year of Entry: 2015		
a n d	Level 4 Cover Type	Size Density Acres		Stand Age	BA Range	General Comments:		
15	6112 - Lowland Aspen	Low Density Sapling	10.7	3		Cut in 2010. Sale # 009-05. Regeneration is coming back but deer browse is heavy on the aspen! Small conifer left during cut is scattered throughout the stand.		
16	6124 - Lowland Spruce- Fir	High Density Sapling	8.5	47		Stand is on a slope, wet but rocky ground, seeps within it. This part of stand was not cut due to low merchantability and wet ground. White spruce is in very tough shape and mostly dead, due to budworm damage. Most of the merchantable trees are dead or close to it.		
18	4130 - Aspen	Low Density Sapling	20.5	3		Cut in 2010. Sale # 009-05. Regeneration is coming back but is patchy is some areas. Some 2-4" balsam left during the cut.		
19	6120 - Lowland Cedar	Medium Density Pole	15.5	73		Stand of younger cedar. Central part of stand contains a small intermittent stream and some decent cedar regeneration within the wet ground. South part of stand contains better quality pole sized cedar.		
20	6124 - Lowland Spruce- Fir	Low Density Pole	8.0	55		Small lowland area that was not harvested due to excessively wet ground. Timber is very poor, some appears to be dead due to wet ground. Nearby ridges drain into this low ground.		
22	6124 - Lowland Spruce- Fir	Low Density Sapling	42.8	4		Cut in 2009. Sale # 009-05. Ground is wet, numerous seeps coming out of hillside. Aspen regen is patchy. Ground is wet within the stand even though most of it is on a hill.		
24	6120 - Lowland Cedar	High Density Pole	18.1	69		Nice and very dense stand of pole sized cedar. Quality of cedar appears to be good. Water flowing through west corner of stand.		
25	42320 - Upland Spruce	Low Density Sapling	12.9	38		Small diameter white spruce and balsam fir. Stand is growing on rock. Budworm damage on white spruce. South half of stand contains 3-5' white spruce.		
26	4130 - Aspen	High Density Sapling	72.4	27		Stand of nice aspen regeneration, looks healthy!		
27	4110 - Sugar Maple Association	High Density Log	22.9	71	51-80	Low basal area of sugar maple, add in the pole sized balsam fir in the stand and the basal area would be better. Sugar maple is ok quality. Westernmost corner of stand contains better quality hardwood and better density but it is very small in size.		
29	4130 - Aspen	High Density Sapling	131.4	5		Sale cut from 2007-2009, sale # 010-05. Aspen regenerating back quite well despite shallow soils in some areas.		
31	4133 - Aspen, Mixed Pine	High Density Log	42.8	71		Stand is currently under contract. Aspen and birch are old. Birch is falling out fast. Nice large white pine within the stand.		

4130 - Aspen

32

High Density Sapling

47.2

29

Stand of decent quality young aspen. A few wet areas exist within the stand. Walked through one cedar clump in the central part of stand, too small to delineate however.

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Compartment: 026 Year of Entry: 2015



t						Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
33	6120 - Lowland Cedar	High Density Pole	53.5	106		Stand of pole sized cedar mixed with tamarack, black spruce and white pine.
34	6129 - Mixed Coniferous Lowland Forest	High Density Pole	17.2	48		Old strip cuts which have filled back in with a mix of species. Nice cedar regeneration within the understory!
35	6112 - Lowland Aspen	High Density Pole	8.1	28		Stand of very nice young aspen. stand is dense!
36	4130 - Aspen	High Density Sapling	20.9	29		Nice stand of young aspen. Density is thick!
37	4311 - Pine, Aspen Mix	High Density Log	30.3	96		Stand of old aspen mixed with white spruce and natural red and white pine. Red pine is impressive!
38	6121 - Tamarack	Low Density Pole	5.6	96		Stagnant stand of tamarack due to a very high water table, The larger diameter tamarack have dead tops probably due to high water. A small stream is flowing in the NE corner of stand. Cedar and tamarack regeneration is coming in very nicely within the understory! Very impressive!
39	6112 - Lowland Aspen	High Density Sapling	24.9	8		Cut in 2006, sale # 003-99. Regeneration is nice. Main skid trail has not regenerated back but should in time.
40	6120 - Lowland Cedar	Medium Density Pole	8.3	95		High water table, poor quality timber.
42	4130 - Aspen	High Density Log	26.3	66		Stand is currently under contract. Brush Mansion Mix, 009-11. South half of stand is low ground, North half is higher with a few red pine mixed in.
43	42340 - Upland Spruce/Fir	High Density Sapling	84.3	37		Stand is a mix of young balsam fir and white spruce of varying ages. Merchantable white spruce, balsam fir and aspen exist here and there but it in very tough shape due to bud worm damage and shallow soils. Some parts of stand are wet but most of it is on rocky ground.
44	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	12.4	5		Stand cut in 2009. Aspen regeneration is coming back nicely. Large white pine scattered within the stand.
45	4134 - Aspen, Spruce/Fir	Medium Density	69.3	4		Stand cut in 2010, sale 002-08. Rocky areas within the stand. Regeneration looks great, some older (2-3" dbh) conifer patches throughout the stand. Even saw some white birch regeneration, stump sprouts.
46	6112 - Lowland Aspen	High Density Log	4.1	66		Stand under contract. Brush Mansion Mix, 009-11.

Compartment: 026 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
12	3105 - Mixed Upland Herbaceous	1.0	No	Unspecified	
17	6220 - Alder/willow	5.7	No	Unspecified	
21	623 - Emergent Wetland	1.1	Unspecified	Unspecified	
23	710 - Sand, Soil	2.0	No	Unspecified	
28	6220 - Alder/willow	3.1	Unspecified	Unspecified	
30	6220 - Alder/willow	7.3	No	Unspecified	
41	6220 - Alder/willow	74.9	No	Unspecified	