



Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 45027

Entry Year 2018

Acreage: 1,284

County Mackinac

Management Area: Huron Patterned Outcrop

Revision Date: 2016-08-10

Stand Examiner: Josh Brinks

Legal Description:

T42N R1E, Sections 12, 13, 14, 23

Identified Planning Goals:

To develop an optimal age class distribution of aspen stands for sustainable forestry and wildlife values. There is currently a large aspen/birch sale that is under contract from 2010. Additional aspen/birch stand are being prescribed in order to salvage spruce and balsam fir affected by spruce budworm. Openings are being maintained as needed for diversity and enhancement of wildlife benefits. This compartment is home to rare and unique plants which are being protected along with their habitat. The recent purchase of an easement into this area will provide reasonable public access for multiple use benefits such as hunting, trail riding, camping, and hiking, while protecting the natural resources. Cedar stands will be retained in order to provide thermal cover for deer in the deer wintering area.

Soil and topography:

Shelter-Posen-Summerville: deep and shallow, level to steep, poorly drained and well drained, loamy soils on ground moraines and glacial lake benches. Topography is gently rolling to flat with lower wet areas and large openings with boulder fields.

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

Because of the timber sale in this compartment there is now a road built into the area which along with the new easement off of Prentiss bay road will provide access to the public into an area that was previously only accessed through private property. The compartment is surrounded by private land on all sides except part of the northeast bordering Compartment 26. Virtually all access is through private except on the new logging road. The area is used primarily for hunting, and timber and wildlife management. Private land bordering the compartment contains several hunting camps, and is primarily used for hunting and timber management as well. This is beneficial for landscape level management on State land. Much of the private land to the south and east is undeveloped Michigan Limestone quarry land.

Unique Natural Features:

Michigan Natural Features Inventory lists few species of concern here, but the potential for rare plants should be noted. See the MNFI website for details.

Archeological, Historical, and Cultural Features:

Possible old rail road grade exists along with remnants of logging camps.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Prentiss Creek, a designated trout stream, flows through this compartment. A buffer should be maintained along this stream for large woody debris recruitment, shade, and erosion control. The prescribed buffer is appropriate for the protection of this stream.

Wildlife Habitat Considerations:

This compartment is part of the Huron Patterned Outcrop Management Area where featured wildlife species include pileated woodpecker, ruffed grouse, snowshoe hare, and white-tailed deer. The compartment is largely comprised of aspen, birch and cedar stands. Most aspen and birch stands were scheduled for treatment during the last year of entry due to their age, the goal of maintaining these species rather than allowing conversions to later successional forest types, and access limitations at the time. The young early successional growth resulting will provide habitat for a myriad of species ranging from ruffed grouse, woodcock, and golden winged warbler to snowshoe hare, deer, and coyote. Remaining patches will benefit pileated woodpeckers and other species. Cedar was retained compartment-wide in all managed stands to preserve the wildlife values and cover properties of the stands for wintering deer and other wildlife.

Wildlife objectives for the next 10 years include allowing young early successional habitats to mature, maintaining cedar and other closed canopy conifer cover to provide winter cover for deer, protecting rare species and habitats, maintaining the diversity present, and promoting walk-in access for wildlife recreation. Some additional treatments in mature aspen stands may occur to avoid the loss of early successional forest through a type conversion. Public access to the compartment will be improved through connecting an existing road with a public road, allowing closer parking for walk-in access. Logging trails within the compartment may then be used for walking trails for hunters and other recreationists.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat and muck and lacustrine (lake) sand and gravel, sometimes thin or discontinuous over bedrock. There is insufficient data to determine the glacial drift thickness. The Silurian Manistique and Burnt Bluff Groups subcrop below the glacial drift. The Burnt Bluff is quarried for stone/limestone two miles to the west at Fiborn Quarry. Gravel pits are not located in the area, but there may be some potential on uplands. There is no current economic oil and gas production in the UP.

Vehicle Access:

The DNR recently purchased an easement along Prentiss Bay road which will allow vehicle access at least up to the compartment boundary in the northeast portion of the compartment. Because of the logging activity in this compartment a road was built through it which will provide some extra vehicle traffic into the compartment but most of it will be closed except for foot traffic. There are also privately owned roads that provide access into the west side of this compartment.

Survey Needs:

This compartment has corners almost all the way around it. There may be a need for some corners in section 23 if access is found into the prescribed stands.

Recreational Facilities and Opportunities:

No improvements or facilities in this compartment.

Fire Protection:

Access is the big issue with this compartment. Up until recently there was almost no roads into the area. The new logging road along with the road on the west side of the compartment provide decent access to a portion of the area but there is still not good way to get to the interior except on some old skid trails and 4-wheeler trails. There are now easily accessible water sources in this compartment.

Additional Compartment Information:

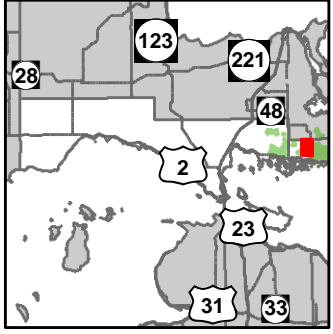
The following reports from the Inventory are attached:

- 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**

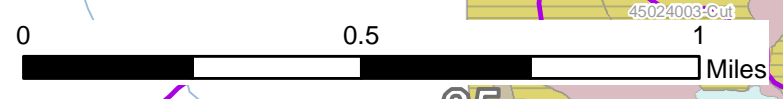
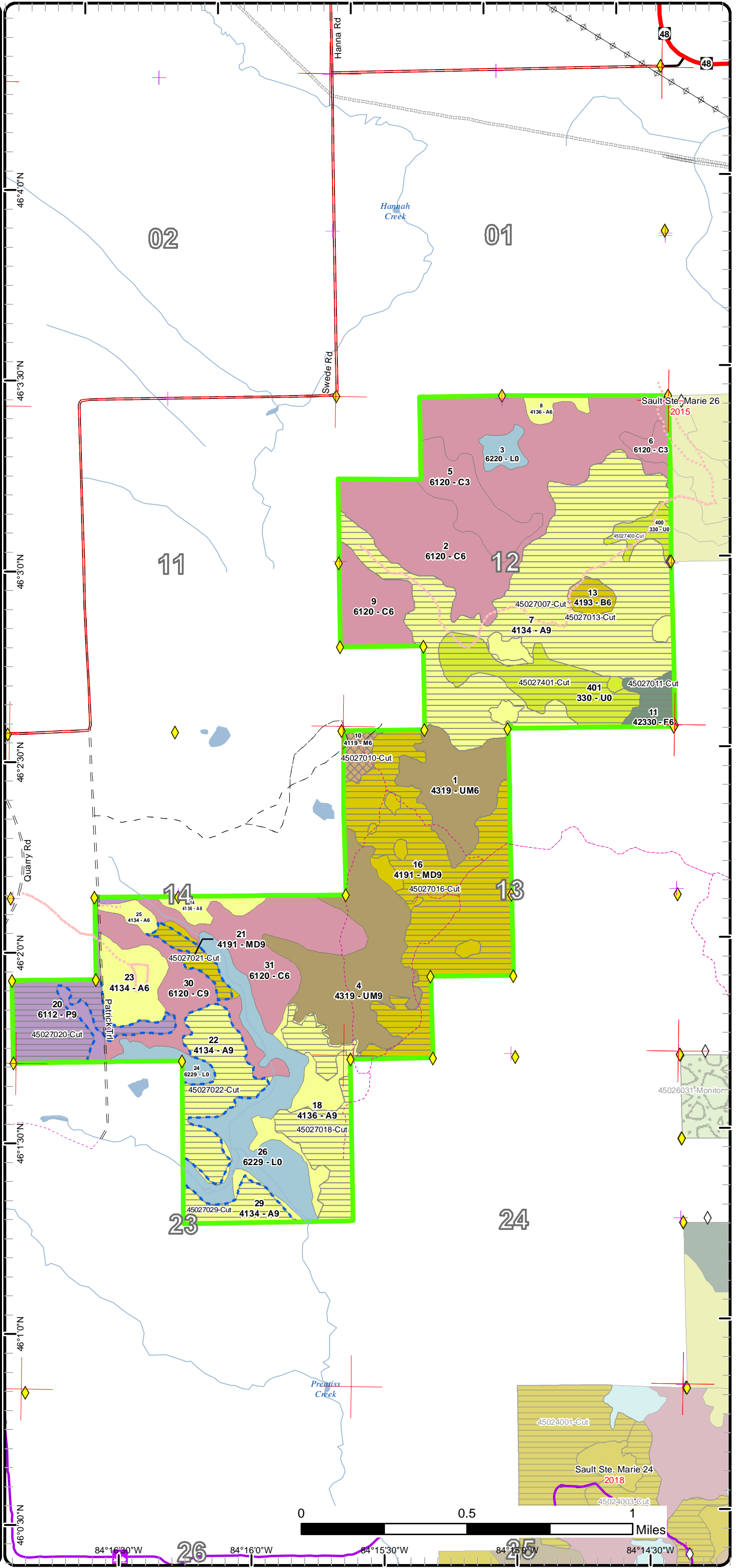
The following information is displayed, where pertinent, on the attached compartment maps:

- 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: 27
 T42N,R01E, Sec: 12-14, 23
 County: Mackinac
 Unit: Sault Ste. Marie
 Mgmt Area: Huron Patterned Outcrop
 YOE: 2018
 Acres: 1,284 GIS Calculated
 Examiner: Josh Brinks
 Map Revised: 12/6/2016
 Map Phase: Post Review



- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Snowmobile Trails
- Designated Snowmobile Trails
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- - - Trail (Non-Recreation)
- - - Closed Roads
- Rivers
- Pipeline
- Powerline
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 330 - Low Density Trees
- 622 - Lowland Shrub
- Lakes



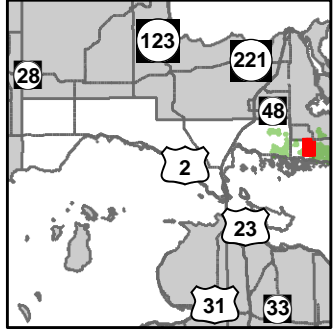
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84°16'30"W 84°16'0"W 84°15'30"W 84°15'0"W 84°14'30"W

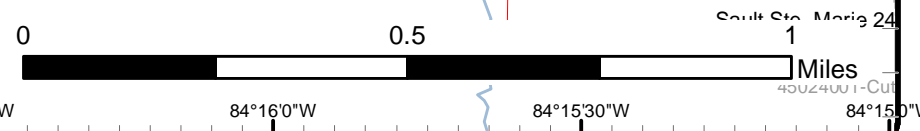
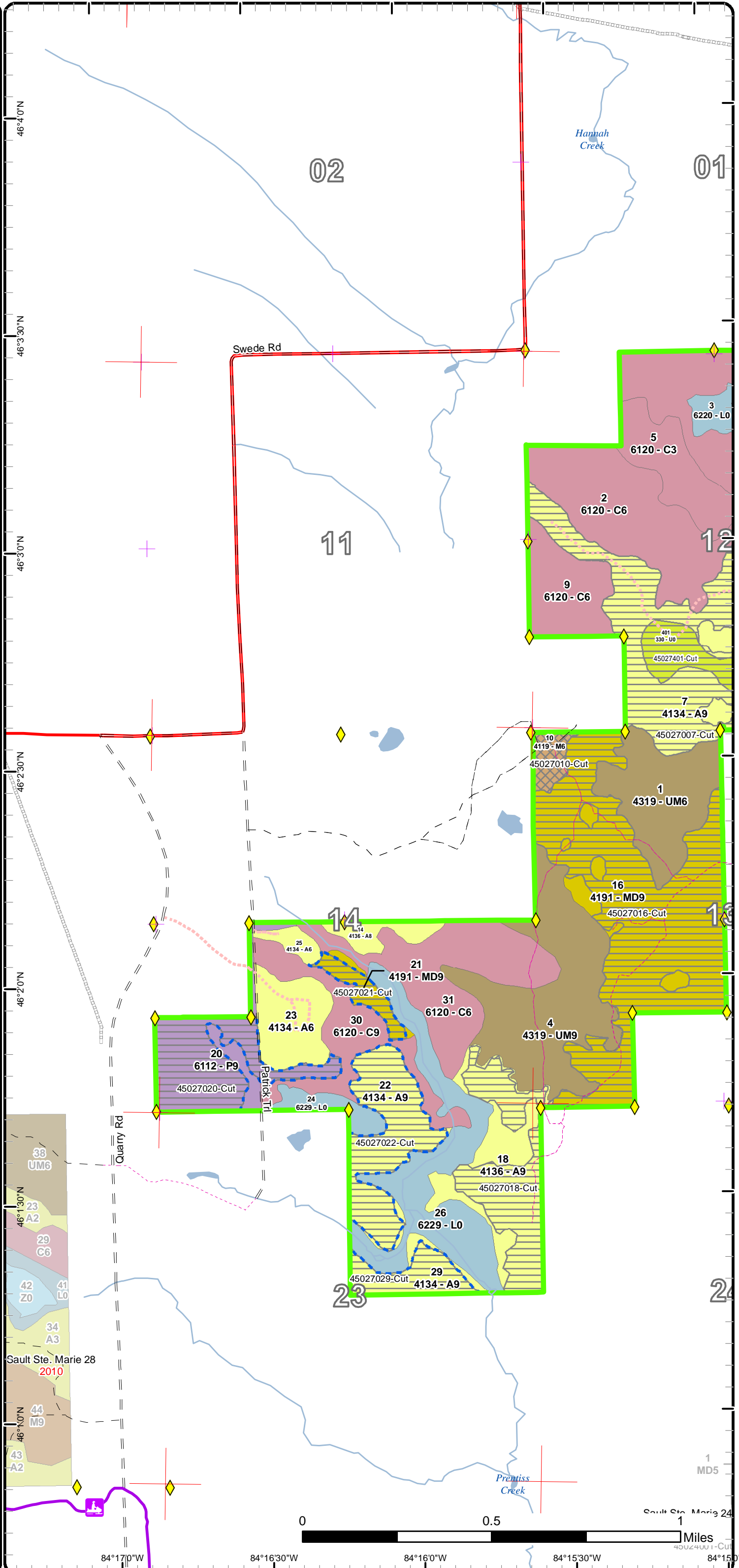
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Cover Type & Treatments Map

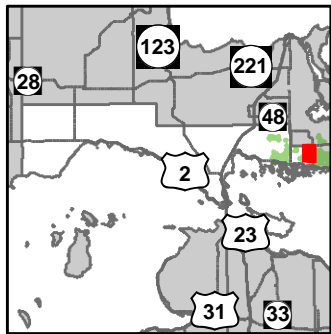
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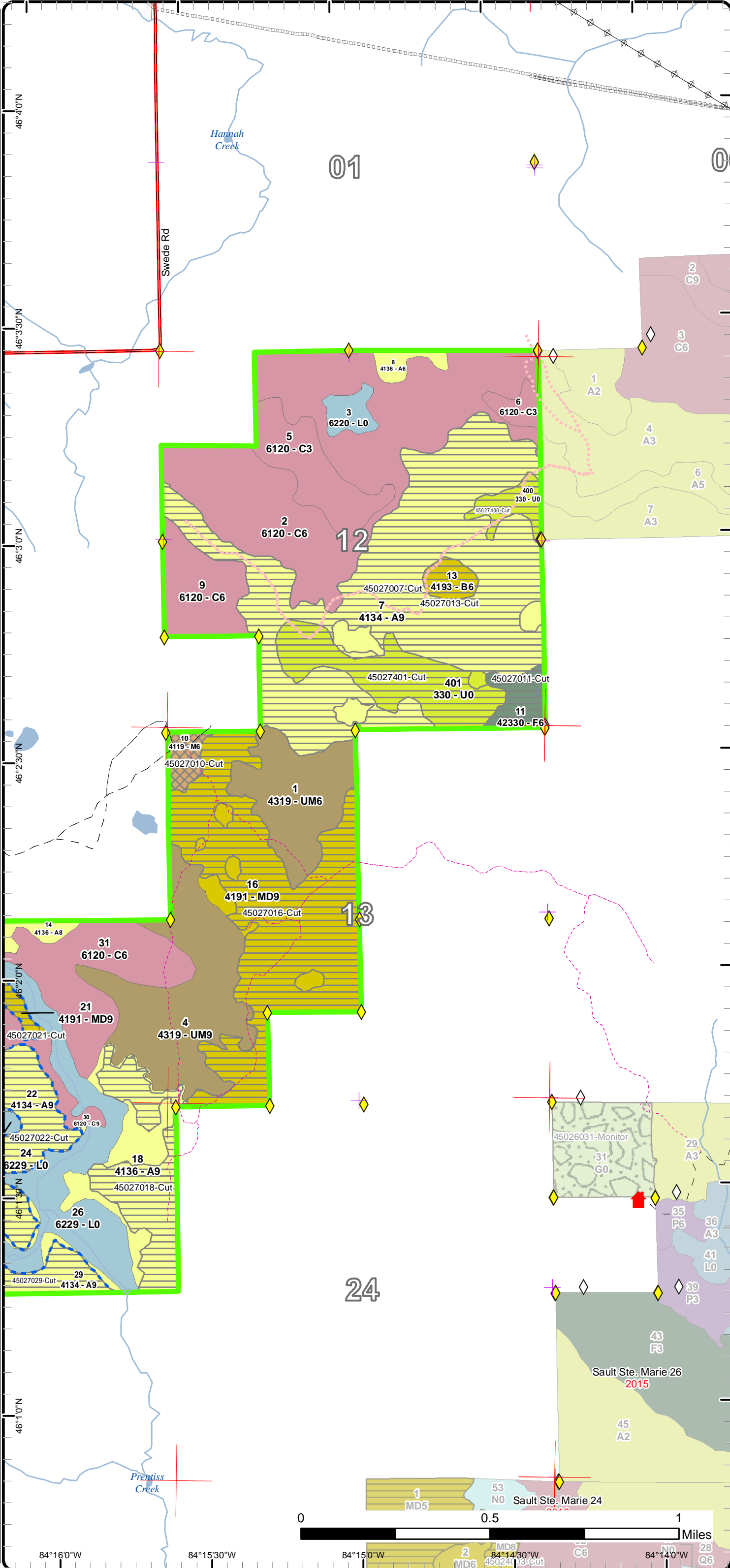
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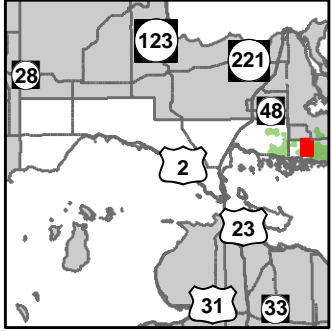


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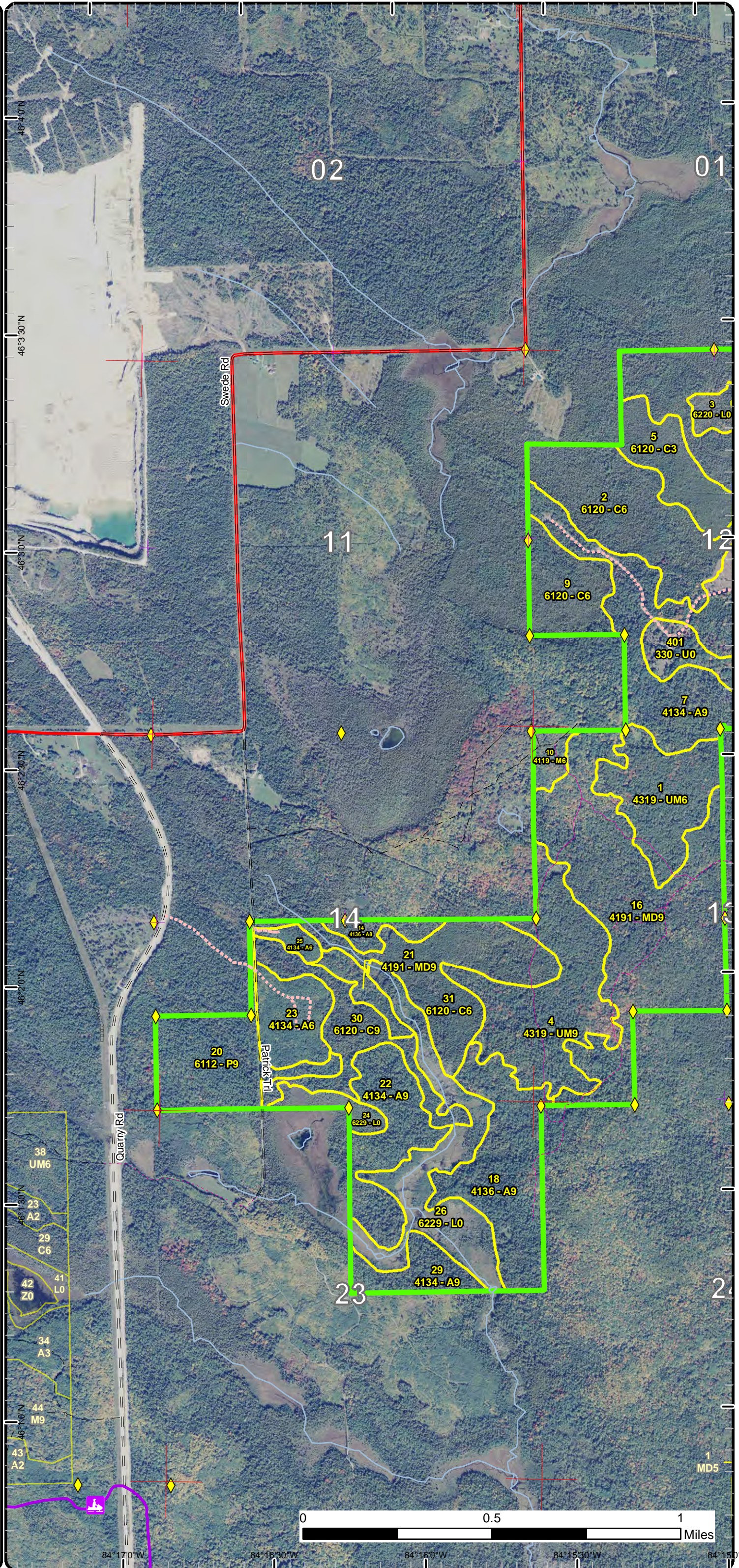


Stand Boundary Map

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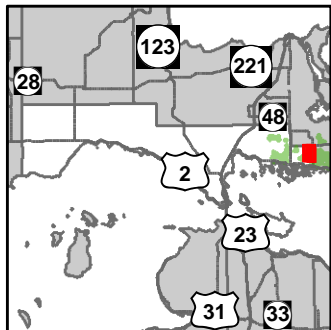
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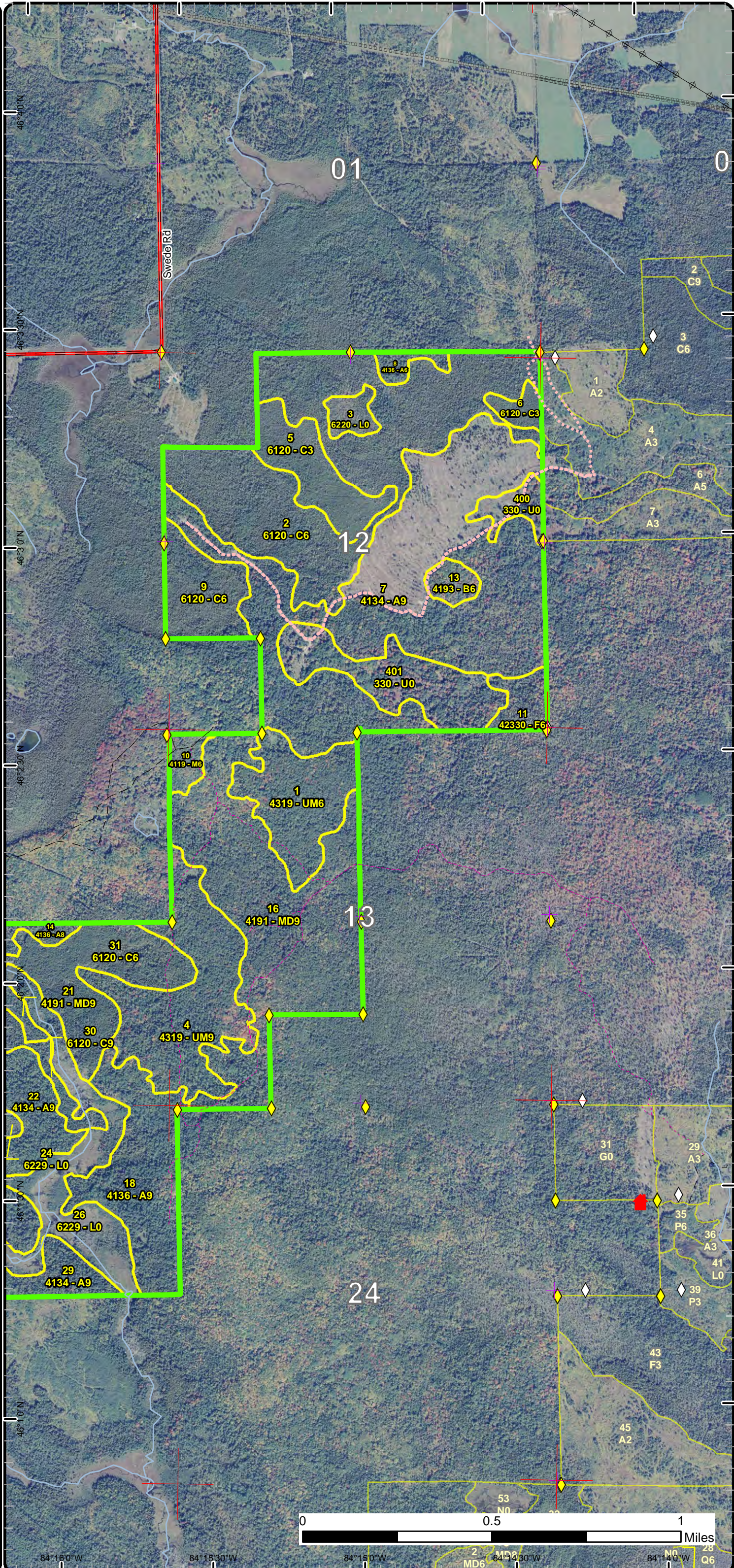
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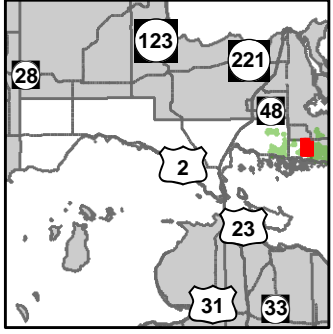


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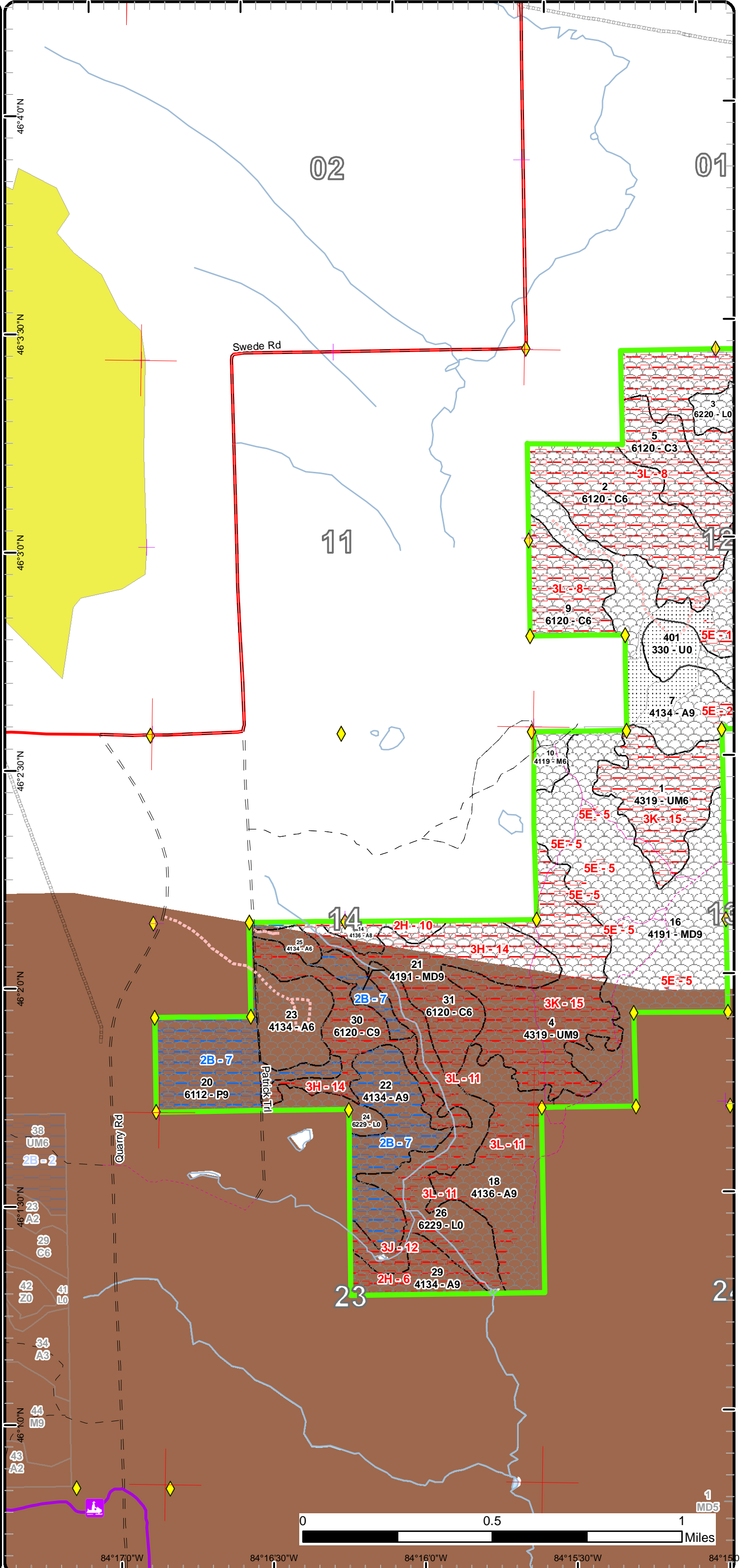


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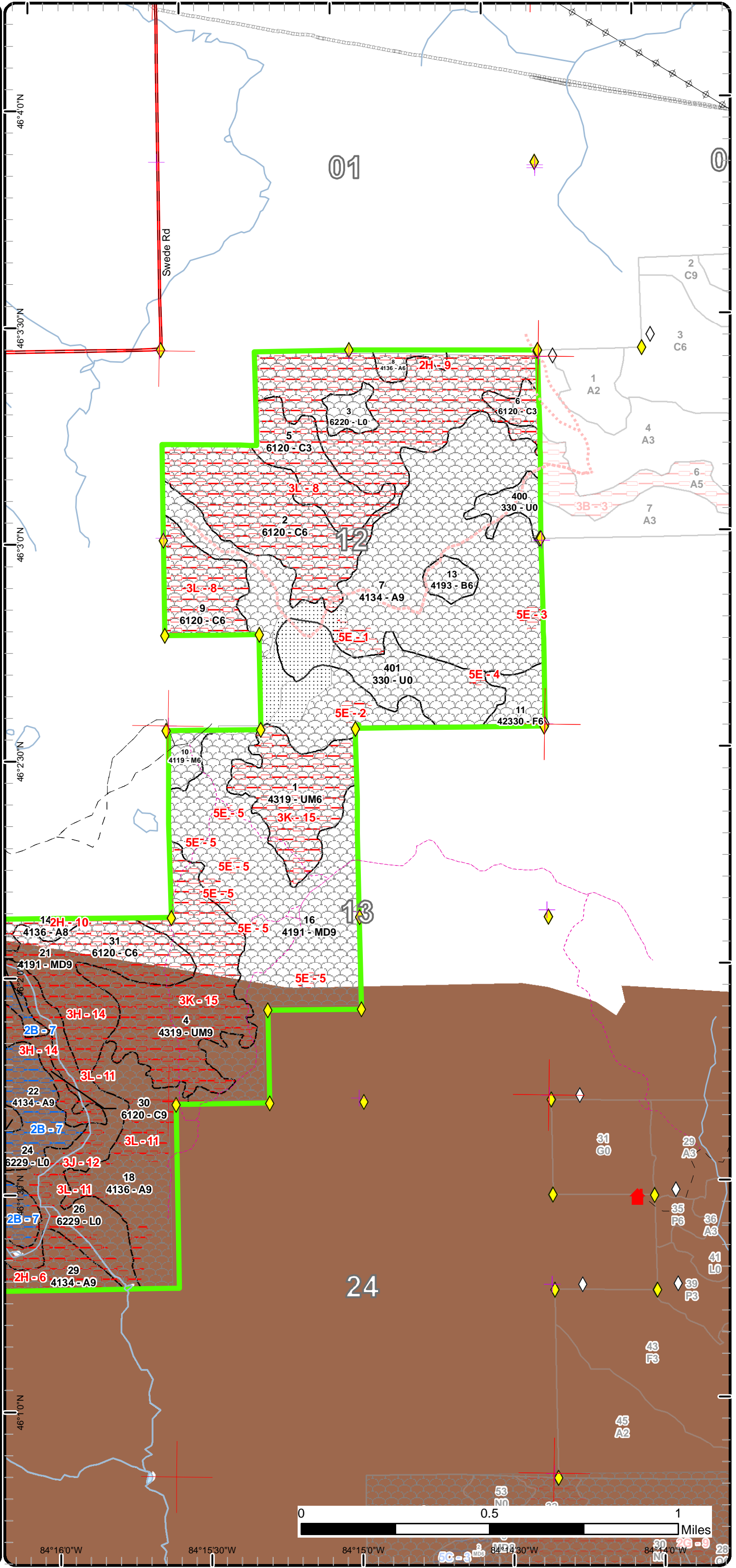
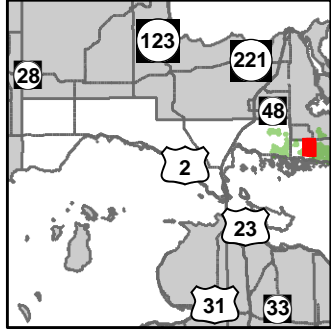
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- Available w/ Constraints
- Unavailable
- 2B: Unknown if access through adjacent landowner(s) is possible
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3H: Deer Wintering Areas
- 3J: Water quality / BMPs (stream, river, or lake)
- 3K: Rare or unique landforms
- 3L: Other wildlife concerns
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- Deer Winter Range
- Limestone or Dolomite



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Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	0	0	34	0	0	0	52	327	0	0	0	0	0	0	0	0	413
Cedar	0	0	0	0	0	0	0	0	0	0	63	0	0	39	33	212	0	0	347
Low-Density Trees	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	0	0	0	52
Lowland Shrub	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	11	0	155	0	0	0	0	0	0	0	165
Northern Hardwood	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	8
Paper Birch	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	134	0	0	0	0	0	0	0	134
Upland Spruce/Fir	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Total	143	0	0	0	47	0	0	0	124	335	289	63	0	0	39	33	212	0	1283



Report 2 – Treatment Summary

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

Acres of Harvest

Compartment 27
Total Compartment Acres: 1,284

Commercial Harvest - 496
Harvests with Site Condition - 114
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	326	0	0	0	0	0	0	0	0	326
Low-Density Trees	58	0	0	0	0	0	0	0	0	58
Lowland Aspen/Balsam Poplar	43	0	0	0	0	0	0	0	0	43
Mixed Upland Deciduous	154	0	0	0	0	0	0	0	0	154
Northern Hardwood	0	8	0	0	0	0	0	0	0	8
Paper Birch	8	0	0	0	0	0	0	0	0	8
Upland Spruce/Fir	13	0	0	0	0	0	0	0	0	13
Total	602	8	0	0	0	0	0	0	0	610

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	610	0	0	0	0	0	0	0	0	610
Next Step	0	0	0	0	0	610	0	0	0	610
Total	610	0	0	0	0	610	0	0	0	1221



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
7	45027007-Cut	219.0	4134 - Aspen, Spruce/Fir	Sawtimber Well	86	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Clearcut with reserves leaving all cedar, oak, pine, hemlock and yellow birch. Watch for walking fern on boulders. Some areas of the sale will be cut in winter because of deer wintering area.

Next Step Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Acceptable regen includes aspen, birch, maple, spruce, fir cedar, pine.

Other Comment: This treatment is a combination of old OI treatments that are being carried forward into MiFI. Stands and treatments were combined and the treatment shape was updated to match the new stands.

Proposed Start Date: 10/01/2009

10	45027010-Cut	8.3	4119 - Mixed Northern Hardwoods	Poletimber Well	79	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to 80 to 90 Basal Area. Retain large wolfy, wildlife trees. Remove all aspen, fir and spruce from the stand. Some larger canopy gaps may be desirable around the oak if possible to attempt to regenerate oak. Work with wildlife to ensure there is no impact to T&E species.

Next Step Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Acceptable regen includes maple, oak, birch, aspen, pine, and cedar.

Other Comment: Add this on to Ruffed grouse Regatta sale.

Proposed Start Date: 10/04/2016

11	45027011-Cut	12.7	42330 - Upland Fir	Poletimber Well	37	51-80	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Follow the same specs as the adjacent sale and clearcut with retention. Leave all oak, cedar, hemlock and pine. Watch for T&E species on the boulders.

Next Step Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Acceptable regen includes spruce, fir, maple, birch, aspen and pine.

Other Comment: Being prescribed because of high or very high concern of SBW damage.

Proposed Start Date: 10/04/2016

13	45027013-Cut	8.1	4193 - Birch, Aspen	Poletimber Well	86	81-110	Harvest	Clearcut with Retention	4193 - Birch, Aspen	Even-Aged	Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Clearcut with reserves. Manage with stand 7. Do not cut cedar, yellow birch, pine, oak and hemlock. Watch for walking fern on boulders.

Next Step Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Acceptable regen includes birch, aspen, maple, spruce, fir, oak, pine.

Other Comment: Old OI treatment that was carried forward.

Proposed Start Date: 10/01/2009



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
16	45027016-Cut	145.0	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	90	111-140	Harvest	Clearcut with Retention	4193 - Birch, Aspen	Even-Aged	Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Clearcut with reserves. Leave all cedar, pine, oak, hemlock and yellow birch. Watch for walking fern on boulders.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: Acceptable regeneration includes birch, aspen, fir, spruce, maple, cedar, oak, pine.

Other

This treatment is a combination of two old OI treatments.

Comment:

Proposed Start Date: 10/01/2009

18	45027018-Cut	44.8	4136 - Aspen, Mixed Conifer	Sawtimber Well	86	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Clearcut with reserves. Reserve pine, oak, cedar, hemlock and yellow birch. Watch out for walking fern on boulders.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventor)

Treatments:

Acceptable Regen: Aspen with species presently on site.

OtherComment:

Proposed Start Date: 10/01/2017

20	45027020-Cut	43.4	6112 - Lowland Aspen	Sawtimber Well	75	111-140	Harvest	Clearcut with Retention	6112 - Lowland Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition: Unknown Access**

Prescription Cut all deciduous 2" or more and conifer 4" or more. Stay out of patches of thick cedar and drainages. Do not cut any oak, pine hemlock, cedar or yellow birch. Leave the strip along the road because of the safety hazards associated with the power line. Winter cut (Dec. 1 - Mar. 31) so tops are available as browse to wintering deer.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: Acceptable regen includes aspen, birch, fir, spruce, pine, cedar and maple.

Other

Comment: Treatment acres will most likely be reduced once red line is ran and the cedar patches and wet areas are lined out of the sale. I did a quick guess of what it might look like based on what I saw on the ground. T/E survey may be necessary prior to any harvest.

Proposed Start Date: 10/01/2017

21	45027021-Cut	9.1	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	77	111-140	Harvest	Clearcut with Retention	4137 - Aspen, Birch	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition: Unknown Access**

Prescription Cut all deciduous 2" or more and conifer 4" or more. Stay out of patches of thick cedar, do not cut cedar, pine, oak, hemlock or yellow birch. Buffer creek by 150'. Winter cut (Dec. 1 - Mar. 31) so tops are available as browse to wintering deer. Avoid impacts to rare species. If boulders are present, conduct a T/E survey.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: Acceptable regen includes birch, aspen, maple, cedar, pine, fir and spruce.

Other

Comment: Being prescribed because of high or very high concern of SBW Damage. T/E survey may be necessary prior to any harvest.

Comment:

Proposed Start Date: 10/01/2017

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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
22 45027022-Cut	44.3	4134 - Aspen, Spruce/Fir	Sawtimber Well	77	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Unknown Access**

Prescription Specs: Cut all deciduous 2" or more and conifer 4" or more. Stay out of patches of thick cedar, do not cut oak, hemlock, pine, yellow birch or cedar. Buffer the lowlands by at least a tree length. Buffer the creek by 150'. Winter cut (Dec. 1 - Mar. 31) so tops are available as browse to wintering deer. Leave some retention patches near the center of the stand to provide a travel corridor. Avoid impacts to rare species. If boulders are present, conduct a T/E survey.

Next Step Treatments: Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Acceptable regeneration includes aspen, birch, maple, spruce, fir, pine, and cedar.

Other Comment: Being prescribed because of high or very high concern of SBW damage. T/E survey may be necessary prior to any harvest.

Proposed Start Date: 10/01/2017

29 45027029-Cut	17.5	4134 - Aspen, Spruce/Fir	Sawtimber Well	89	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition: Blocked by Obstacle**

Prescription Specs: Cut all deciduous trees 2" or more and conifer 4" or more. Stay out of patches of thick cedar. Do not cut oak, hemlock, pine, yellow birch or cedar. Buffer the lowlands by at least a tree length. buffer creek by 150'. Winter harvest after Dec. 1st. Avoid impacts to rare species. If boulders are present, conduct a T/E survey.

Next Step Treatments: Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Acceptable regeneration includes aspen, birch, maple, spruce, fir, fine and cedar.

Other Comment: Stand has SBW. Access is an issue. Need access from private individual or from the quarry. If boulders are found in the stand a survey for T&E species should be done.

Proposed Start Date: 10/01/2017

400 45027400-Cut	10.8	330 - Low-Density Trees	Nonstocked	Unspec ified	Harvest	Clearcut with Retention	310 - Herbaceous Openland			Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Specs: Clearcut with reserves. No harvesting or dropping tops into areas of concentrated boulders. Stand needs opening maintenance and can be managed with the adjacent stand.

Next Step Treatments: Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Acceptable regen includes limited amounts of aspen, spruce and fir but we are trying to maintain a grassy opening.

Other Comment: Stand was carried forward from an old OI treatment. The treatment method was updated from strip/patch/gap cut to clearcut with retention to match the prescription specs and more closely reflect what is happening on the ground.

Proposed Start Date: 10/01/2009

401 45027401-Cut	47.3	330 - Low-Density Trees	Nonstocked	Unspec ified	Harvest	Clearcut with Retention	310 - Herbaceous Openland			Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Specs: Clearcut with reserves. Do not harvest or drop tops into areas with boulders. Stand is filling in and needs some opening maintenance done with adjacent timbersale.

Next Step Treatments: Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Limited regeneration of spruce aspen and maple is acceptable but we want to maintain a grassy opening.

Other Comment: Stand was carried forward from an old OI treatment. The treatment method was updated from strip/patch/gap cut to clearcut with retention to match the prescription specs and more closely reflect what is happening on the ground.

Proposed Start Date: 10/01/2009

Total Treatment Acreage Proposed: 610.3

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit

Josh Brinks : Examiner

Compartment: 27

Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Available With Condition	Acres Not Available
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Dominant Site Conditions

	Total Acres	Acres Available	Acres Available With Condition	Acres Not Available	Dominant Site Conditions						
					2B	2H	3H	3J	3K	3L	5E
413	298	44	70	Aspen	44	34		5		21	10
347	0	0	346	Cedar			92	10		245	
59	58	0	1	Low-Density Trees							1
52	0	52	0	Lowland Aspen/Balsam Poplar	52						
84	41	0	43	Lowland Shrub				43			
165	145	9	11	Mixed Upland Deciduous	9			1			9
8	8	0	0	Northern Hardwood							
8	8	0	0	Paper Birch							
134	0	0	134	Upland Mixed Forest					134		
13	13	0	0	Upland Spruce/Fir							
1,284	572	106	605	Total Forested Acres	106	34	92	60	134	266	21
	45%	8%	47%	Relative Percent							

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit

Josh Brinks : Examiner

Compartment: 27

Year of Entry: 2018

4	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	5E: Long-Term Retention	9	3B: Threatened, endangered, and special concern species/communities	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	18	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
Comments: Currently there is no access to this stand but if the adjacent landowner agrees we may be able to go through her property.							
7	Available	2B: Unknown if access through adjacent landowner(s) is possible	106	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Landowner at the north end of the road was on the fence but said no at this time. There is also the possibility that the quarry may let us cut across their property to reach this timber. That is how we got in 40 years ago.							
8	Unavailable	3L: Other wildlife concerns	245	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Leave for cover for during break out and early winter yards. Standing and flowing water was present in these stands during inventory.							

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit

Josh Brinks : Examiner

Compartment: 27

Year of Entry: 2018

9	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	6	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
Comments: No access across the cedar swamp and don't know if adjacent landowners would give us access.							
10	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	9	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
Comments: From the state side this is blocked by a cedar swamp with a stream running through it. Unknown if adjacent landowner would give access.							
11	Unavailable	3L: Other wildlife concerns	21	3H: Deer Wintering Areas	2G: Too wet (sensitive soils, does not include access issues)	5E: Long-Term Retention	Unspecified
Comments: These areas were left out of the stand for a buffer along the wetland and because they contained a greater amount of cedar. They will serve as long term retention.							
12	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	60	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 150' buffer as per Neil Godby.							
14	Unavailable	3H: Deer Wintering Areas	92	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Unavailable	3K: Rare or unique landforms	134	3H: Deer Wintering Areas	Unspecified	Unspecified	Unspecified
Comments: This stand is very rocky and boulder making most of the stand inoperable. There is a decent amount of cedar in the stand so it will be left for the deer yard.							



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	1225
Comments				
Portion is already in deer wintering SCA. The rest does not meet current SCA criteria.				



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	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.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4319 - Mixed Upland Forest	Poletimber Well	50.0	90	171-200	A mixed stand of mostly cedar with birch and aspen. This stand is very rocky. There is very little in the understory of this stand.
2	6120 - Lowland Cedar	Poletimber Well	170.9	187	171-200	This stand varies from areas of thick cedar and no understory to areas that are more open and have a lot of fir filling in. This stand was very wet. There are patches of sapling size cedar in the interior of this stand.
4	4319 - Mixed Upland Forest	Sawtimber Well	84.1	90	111-140	This stand has a higher concentration of cedar with birch and aspen. Fir can be very thick in the understory. There are some really rocky areas in this stand that probably make it inoperable. Lots of SBW.
5	6120 - Lowland Cedar	Sapling Well	33.9	187	81-110	Stand of stunted cedar that is very wet.
6	6120 - Lowland Cedar	Sapling Well	7.2	187	81-110	A patch of sapling size cedar in the larger cedar stand. This area is very wet.
7	4134 - Aspen, Spruce/Fir	Sawtimber Well	229.5	86	111-140	This is an aspen/birch stand that is currently on contract. a greater concentration of birch is in the higher rocky areas. When you get down closer to the swamp edge there is more cedar mixed in. Scattered boulders and boulder fields exist in this stand. at the time of inventory about half of this stand has been cut and is regenerating very nicely to aspen, some of which is 7' tall. There is scattered oak, cedar and white pine in the stand. Lots of SBW sign.
8	4136 - Aspen, Mixed Conifer	Poletimber Well	6.3	77	111-140	Did not make it to this stand the cedar swamp was to wet to get across. From the clearcut I could see a stand of aspen. I am assuming that is aspen with a mix of spruce, fir and cedar.
9	6120 - Lowland Cedar	Poletimber Well	32.8	144	141-170	Stand is mostly cedar, tamarack and black spruce. There is a ridge in the NW corner of the stand that is upland with aspen, paper birch and white spruce. The cedar is larger and of better quality along the edges of the upland stand. This stand was very wet when it was inventoried.
10	4119 - Mixed Northern Hardwoods	Poletimber Well	8.3	79	111-140	Stand of mixed hardwoods. There is a decent amount of aspen mixed in along the edges. You will find a few scattered log size oak trees. The stand is dominated by red and sugar maple. There are some rocky areas and boulders.
11	42330 - Upland Fir	Poletimber Well	12.7	37	51-80	It looks like that aspen has died out of the stand and is being replaced by balsam fir. There are scattered larger spruce and birch. The stand is poor quality over all with shallow soils and a lot of SBW sign. Along the edges of the stand there is a little better quality aspen, birch and red maple.
13	4193 - Birch, Aspen	Poletimber Well	8.1	86	81-110	This stand has already been harvested and when the treatment is closed it will be merged into the surrounding aspen stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4136 - Aspen, Mixed Conifer	Sawtimber Medium	10.0	81	111-140	This stand is a combination of an 2 old OI stands that did not meet mapping standards. The west 1/3 of the stand is a decent aspen/ birch/ cedar stand. The middle 1/3 is more open and looks like the aspen has died out of the canopy leaving scattered aspen over aspen, tag alder and fir. The east 1/3 is a rocky knob of birch aspen and red maple over thick fir. There are some access issues in this stand. the west edge of the stand is bordered by a stream and a strip of cedar. there was also at least one other flow running through the middle of the stand.
16	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	154.5	90	111-140	This is a birch/aspen mixed stand that is under contract. There are some rocky areas with T and E species which have been buffered out of the sale. The understory is fairly open. In the north end of the stand near the M6 there is a patch of sugar maple poles mixed in with this stand. Lots of SBW
18	4136 - Aspen, Mixed Conifer	Sawtimber Well	67.3	86	111-140	This stand has more aspen and less birch than stand 16 to the north. There are a few drainages running through the stand with tag alder and cedar. Lots of SBW sign in this stand.
20	6112 - Lowland Aspen	Sawtimber Well	52.5	75	111-140	This is a stand of old aspen and birch that is showing signs of its age. The ground is a little weird in here. It looked like it should be upland ground but my feet found water under the snow in many locations. There appears to be a drainage that runs from NW to SE through the stand. I saw running water in a few different locations. There are some rocky areas also. The wetter ground is growing cedar with aspen over top of it. Cedar is quite thick in places. Thick understory of fir in most of the stand.
21	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	10.6	77	111-140	Nice ridge of birch and aspen. The south end of the stand has a more open canopy and a wall of fir in the understory. I did find some cedar patches in the middle of the stand. It is rocky but I believe it is operable. The stand is in decline and needs treatment.
22	4134 - Aspen, Spruce/Fir	Sawtimber Well	45.8	77	81-110	Stand of mature aspen that need to be treated soon. It was already put off once during the last entry year. You will find some cedar mixed in the stand along the swamp edges. There are some high ridges of mixed hardwood with little understory in the southern part o the stand.
23	4134 - Aspen, Spruce/Fir	Poletimber Well	28.0	38	81-110	Stand was cut in 1978. It is similar to the stand to the north but the aspen is a little larger in DBH. This is aspen/fir over lots of balsam fir. There were a few scattered log size maple and spruce. Lots of SBW damage in this stand.
25	4134 - Aspen, Spruce/Fir	Poletimber Well	5.7	38	81-110	Stand was cut in 1978. Very nice aspen over balsam fir stand. There is still some sapling size aspen holding on in the understory. This stand has just changed to a pole size stand. A lot of SBW damage in the fir.
29	4134 - Aspen, Spruce/Fir	Sawtimber Well	20.5	89	111-140	I did not make it to this stand but assume it is similar to the others in this area, old aspen that is ready for treatment. This stand would make a good retention area because of its access issues. The only chance to get to this stand would be through private or a bridge across the drainage.

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Report 7 – Forested Stands

Compartment: 27
Year of Entry: 2018



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	6120 - Lowland Cedar	Sawtimber Well	38.8	130	171-200	Very nice cedar stand separating the aspen stands. You will find some aspen and birch mixed in especially on the edges of this stand. Most of the stand has an open understory but there are portions of thick fir. This stand was quite wet when inventoried and had flowing water running the length of the stand.
31	6120 - Lowland Cedar	Poletimber Well	63.1	107	171-200	This is a decent stand of cedar. It has some rocky areas but there is also standing and flowing water in the stand. The far west side of the stand is larger in dbh and a little more mixed. There are a few pockets of aspen with spruce/ fir understory.



Stand	Cover Type	Acres	Managed Site	General Comments:
3	6220 - Alder/willow	8.3	No	OPIC - FMD: Tag Alder with scatterd Balm and W. Spuce, was previously typed as P5.
24	6229 - Mixed lowland shrub	10.7	No	OPIC - FMD: Some Cedar and Balsam but mostly Tag Alder.
26	6229 - Mixed lowland shrub	64.8	No	This stand is mostly alder/willow with some dead cedar. There are many beaver ponds and dams along the main drainage.
400	330 - Low-Density Trees	10.8	No	This stand was typed as a g during OI. It is filling in with aspen, fir, spruce and maple. It is on contract with the surrounding stands. After completion of the sale it will be merged in with adjacent stand except for areas that are truly openings.
401	330 - Low-Density Trees	48.5	No	This stand is an old opening filling in with spruce, fir, aspen and maple. It was typed as a G stand in OI but has enough canopy closure to be called a forested stand. It is currently on contract to be clearcut with the surrounding stands. After harvest is complete this stand will be merged in with surrounding aspen stand except for a few small areas that are truly openings.