



SAULT FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 190 ENTRY YEAR: 2011

Compartment Acreage: 1,901 County: Mackinac

Revision Date: August 6, 2009

Stand Examiner: Steve Crigier

Legal Description: T42N R12W Sections 10, 11, 12, 14, and 15; Newton Township

RMU (if applicable):

Management Goals: The compartment is within the Batty Doe Deer Yard Management Area. Plans for this Management Area are currently being written. The management in this area is geared towards maintaining the thermal cover in the lowland types. There are signs of cedar regeneration in the northern part of the compartment. Access into the compartment is fairly limited which has reduced harvest activities in many of the lowland aspen types. These areas are seeing significant mortality and harvesting will prompt some regeneration if access is practical. There are a few area of northern hardwoods in the compartment. In the lower quality hardwoods, some shelterwood cuts will create lots of stump sprouts and hopefully the deer will let them get established. The better quality hardwoods will be select cut to try and improve the stands form.

Soil and Topography: The Batty Doe Area is fairly low and level ground conditions with a slight variation to some higher ground. The lowland soils are mostly Markey and Carbondale Muck, Angellica Muck, and Leafriver Mucky Peat. The relatively higher ground is made up of Mattix Sandy Loam, Guardlake Fine Sandy Loam, Heinz Sandy Loam, Paquin- Finch Complex, Batty Doe Fine Sandy Loam.

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

The Forest Land Group owns most of the land that borders the compartment on the west side and a bit on the east side. The property to the north and east of the compartment is owned by private individuals along with some Forest Land Group property. The southern boarder of the compartment is adjacent to more state land.

Unique, Natural Features (include only non-site specific and non-sensitive information):

Eagle nest to the west of the compartment on Forest Land Group property

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): There are remnants of foundation for old homestead area.

Special Management Designations or Considerations: The compartment lies within a deer wintering area. Stands will require a winter cutting restriction.

Watershed and Fisheries Considerations: No fisheries concerns.

Wildlife Habitat Considerations: Compartment 190 is located a half mile southeast of Milakokia Lake approximately two miles west and three miles south of Gould City. The entire compartment is in the Batty Doe Lake deer yard where habitat critical for white-tailed deer is located. Closed-canopy conifer cover

offers shallower snow depths and some protection from the winter weather. Lowland coniferous forest, particularly cedar, dominates much of the landscape here as it did prior to European settlement. Historically, this area has received heavy use by deer when moderate to severe winter conditions persist. Some regeneration work has been done in the past, and more recent cutting has taken place on adjacent corporate or private land just northeast of this compartment. Regeneration needs to be accomplished in a manner which will ensure the continued existence of cedar in lowland conifer stands that are suitable cover for deer and other wildlife species that depend on this habitat. Monitoring these areas may be helpful for future management within this area. Higher areas historically supported northern hardwoods or aspen and birch, similar to current composition.

Access to and through the compartment is limited, which provides some benefit to wildlife. Much of the surrounding ownership is private, and roads within the compartment are limited.

Wildlife objectives include maintaining the closed canopy conifer cover, promoting diversity within hardwoods, and maintaining young early successional forest habitat where present. A component of mature trees will be left within or on the margin of final harvest stands to provide budding and roosting or perching trees, and to increase diversity. Retention of hard and soft mast bearing species, snags, den trees, and coarse woody debris is important. Cuts will take place in the winter such that remaining tops are available as late fall or winter browse. Hemlock and cedar will be retained except where access to a stand is needed. In that instance, the shortest route will be used to minimize the impact to lowland conifer stands. Wildlife species benefiting from the management goals include white-tailed deer, black bear, snowshoe hare, marten, and pileated woodpecker.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of peat & muck. There is insufficient data to determine the glacial drift thickness. The Silurian Manistique Group subgroups below the glacial drift. There is not a current economic use for these rocks. Gravel pits are not located in the area and potential appears to be limited. There is no current economic oil and gas production in the UP.

Vehicle Access: Access is limited in this compartment. The Buckeye road is the main truck line running north to south through the compartment. There are just a few wet woods roads that come off the Buckeye Road providing some more access to the compartment.

Survey Needs: If access is obtained the isolated 40 acres parcels in section 15 will need some corners. Section 11 will also need quarter corners placed if private access is obtained.

Recreational Facilities and Opportunities: There are no facilities in the compartment. But there are lots of opportunities for deer and small game hunting, berry picking, and riding ORVs.

Fire Protection: Fire protection is not a major concern due to the low ground conditions but access could be an issue if a fire were to start.

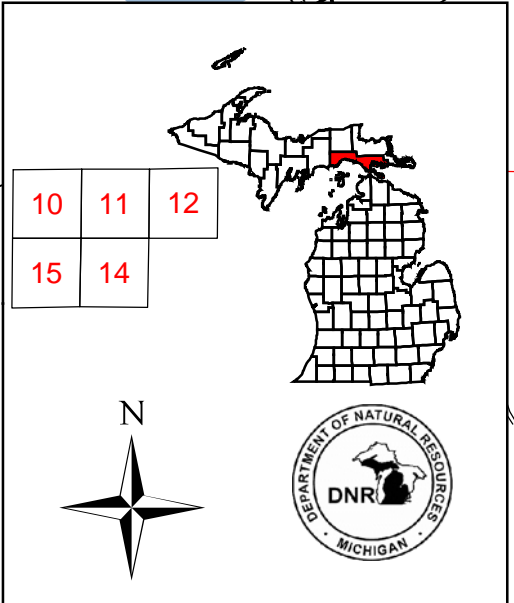
Additional Compartment Information:

- **Cover Type details, Proposed Treatments, and Stand listings are listed in the attached reports:**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**
 - ◆ **Stand Listing – Forested**
 - ◆ **Stand Listing – Non Forested**
 - ◆ **Special Conservation Area (SCA) Details**

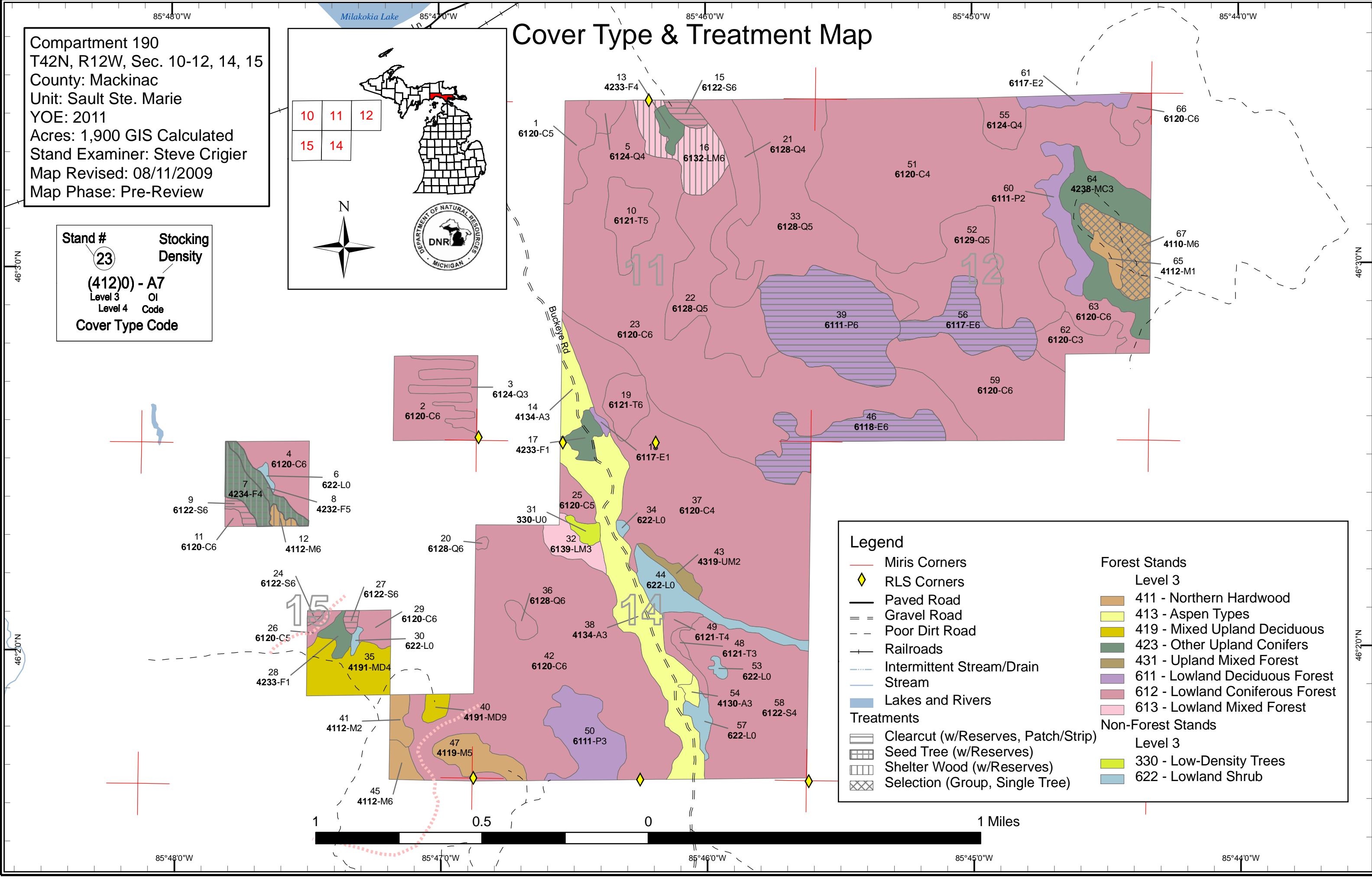
- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **SCA – Special Conservation Areas**

Cover Type & Treatment Map

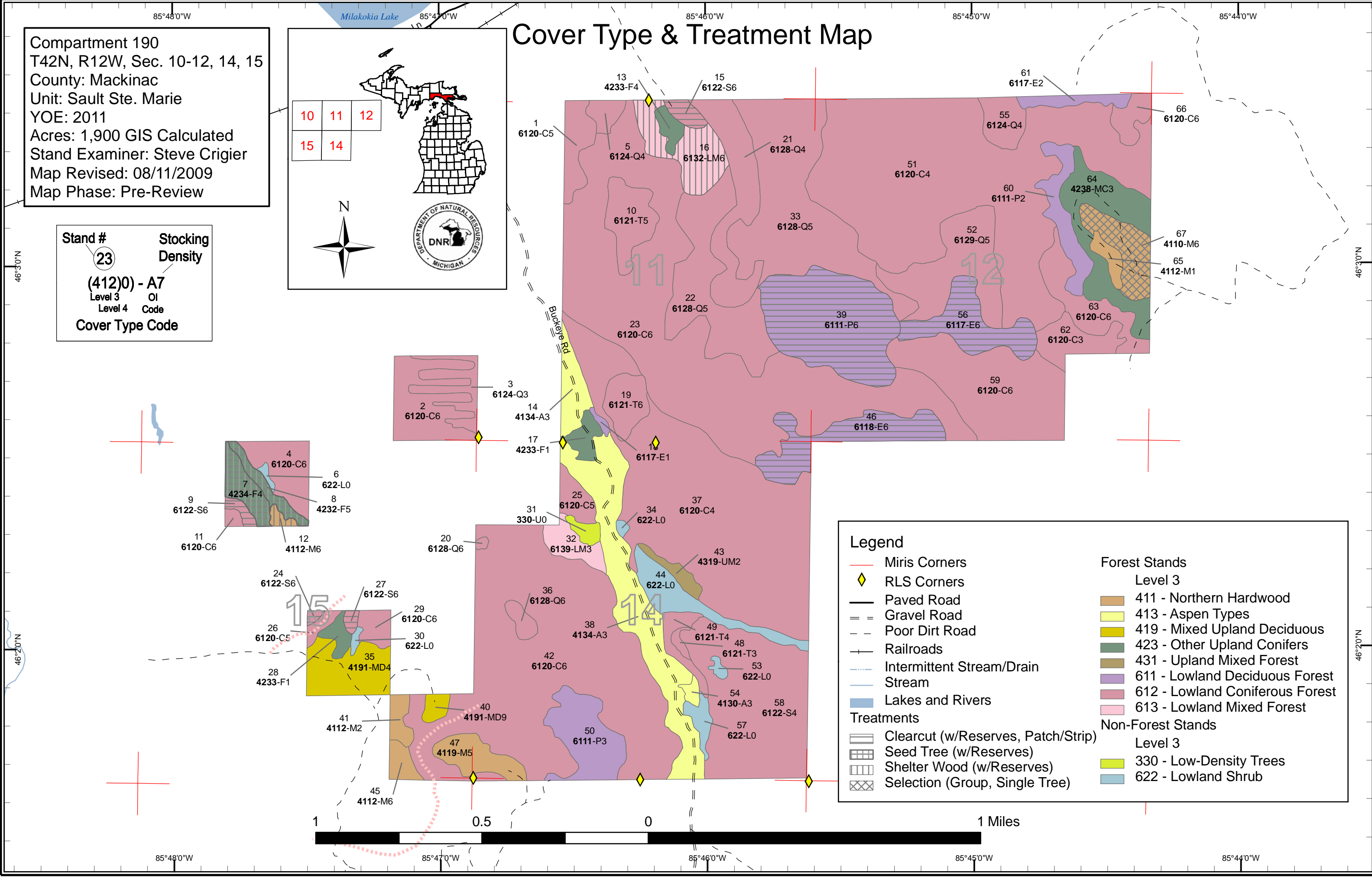
Compartment 190
 T42N, R12W, Sec. 10-12, 14, 15
 County: Mackinac
 Unit: Sault Ste. Marie
 YOE: 2011
 Acres: 1,900 GIS Calculated
 Stand Examiner: Steve Crigier
 Map Revised: 08/11/2009
 Map Phase: Pre-Review



Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

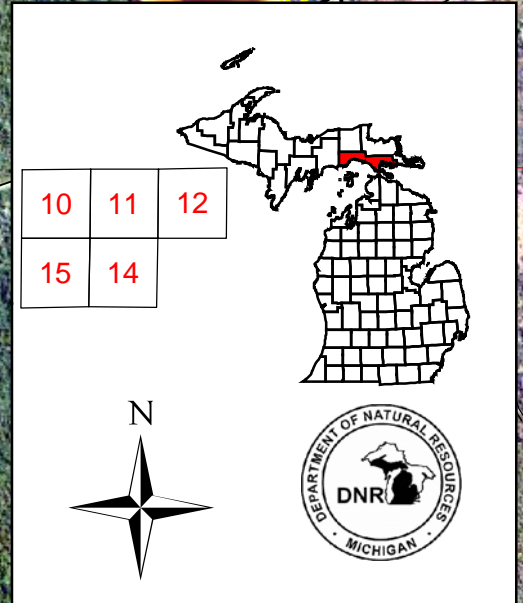


Legend	
	Miris Corners
	RLS Corners
	Paved Road
	Gravel Road
	Poor Dirt Road
	Railroads
	Intermittent Stream/Drain
	Stream
	Lakes and Rivers
	Clearcut (w/Reserves, Patch/Strip)
	Seed Tree (w/Reserves)
	Shelter Wood (w/Reserves)
	Selection (Group, Single Tree)
Forest Stands	
Level 3	
	411 - Northern Hardwood
	413 - Aspen Types
	419 - Mixed Upland Deciduous
	423 - Other Upland Conifers
	431 - Upland Mixed Forest
	611 - Lowland Deciduous Forest
	612 - Lowland Coniferous Forest
	613 - Lowland Mixed Forest
Non-Forest Stands	
Level 3	
	330 - Low-Density Trees
	622 - Lowland Shrub

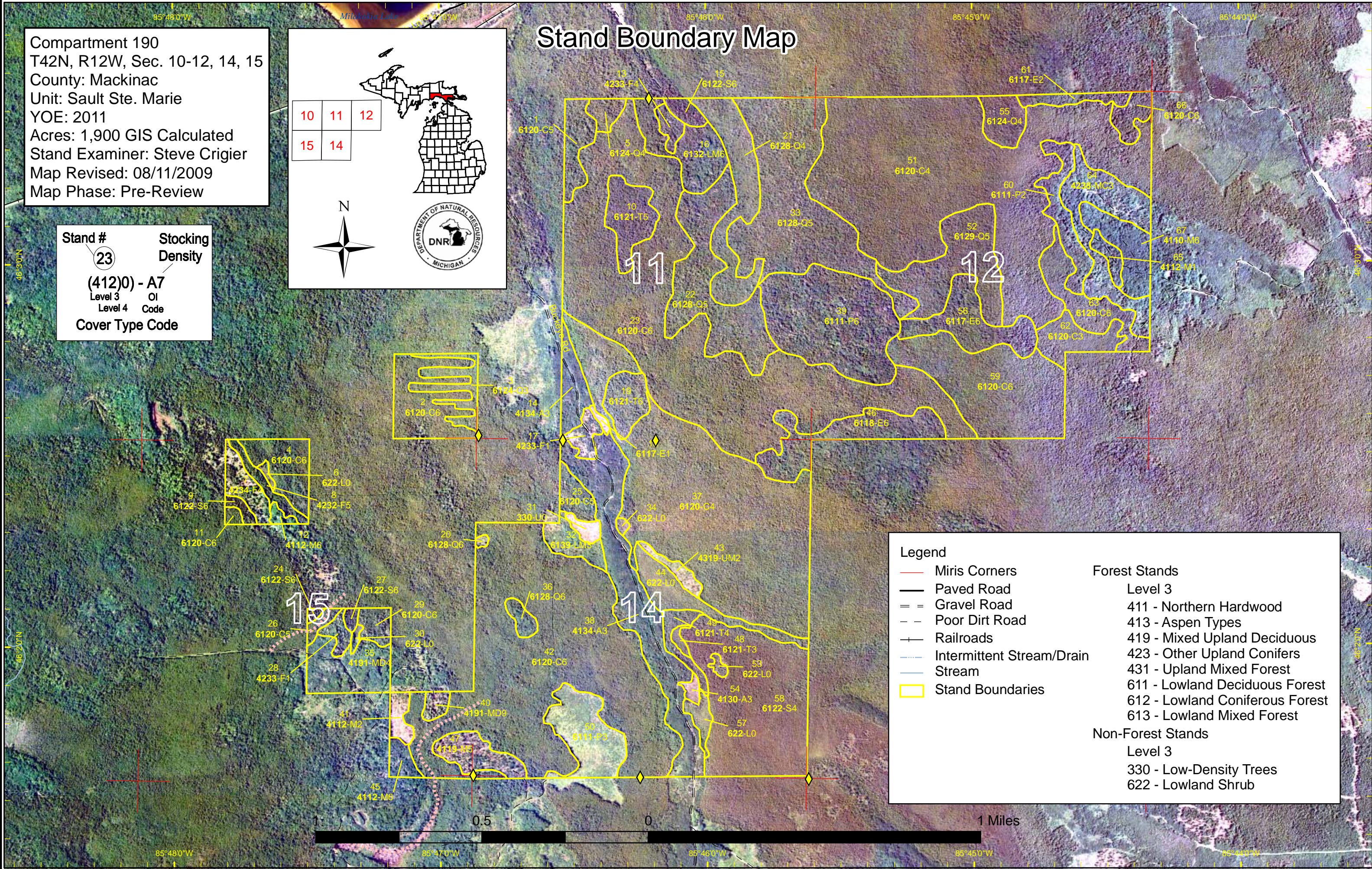


Stand Boundary Map

Compartment 190
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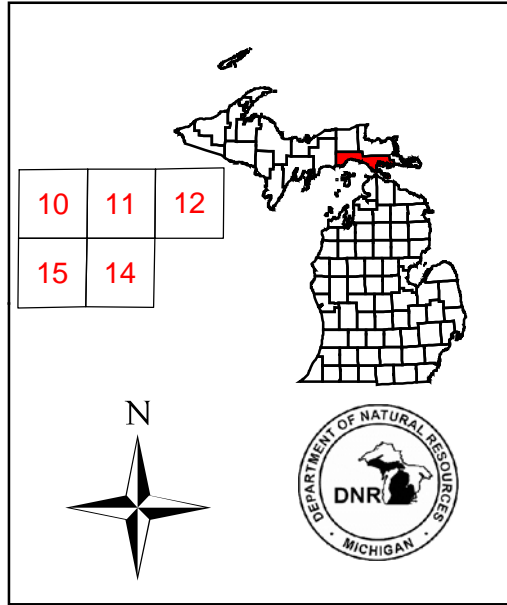
Legend	
	Miris Corners
	Paved Road
	Gravel Road
	Poor Dirt Road
	Railroads
	Intermittent Stream/Drain
	Stream
	Stand Boundaries
Forest Stands	
Level 3	
411	Northern Hardwood
413	Aspen Types
419	Mixed Upland Deciduous
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Level 3	
330	Low-Density Trees
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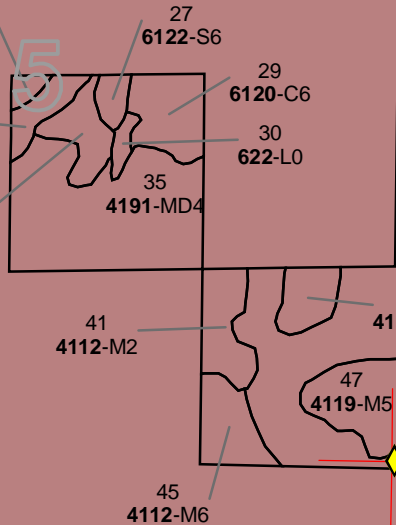
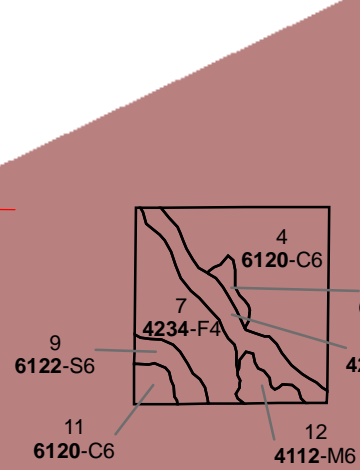
85°48'0"W 85°47'0"W 85°46'0"W 85°45'0"W 85°44'0"W

Dedicated & Proposed Special Conservation Area Map

Compartment 190
 T42N, R12W, Sec. 10-12, 14, 15
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 Map Revised: 08/11/2009
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Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- Stand Boundaries
- Dedicated Special Conservation Areas
- Deer Wintering Areas
- Forest Stands
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands
 - Level 3
 - 330 - Low-Density Trees
 - 622 - Lowland Shrub

46°30'N

46°20'N

46°30'N

46°20'N

85°48'0"W

85°47'0"W

85°46'0"W

85°45'0"W

85°44'0"W

85°48'0"W

85°47'0"W

85°46'0"W

85°45'0"W

85°44'0"W

Sault Ste. Marie Mgt. Unit

Covertypes, Acres, and Age summary
(Level 3 Cover Type)

Compartment 190 Year of Entry 2011

Report Date: 08/11/2009



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen Types	0	2	0	73	0	0	0	0	0	0	0	0	0	0	0	75
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Coniferous Forest	0	0	0	0	2	27	0	0	189	199	15	266	313	424	0	1435
Lowland Deciduous Forest	0	24	27	0	0	0	0	0	0	0	96	0	31	0	0	179
Lowland Mixed Forest	0	0	10	0	0	0	0	0	0	23	0	0	0	0	0	33
Lowland Shrub	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	27
Northern Hardwood	0	10	0	0	0	0	0	2	5	0	18	0	0	0	14	50
Other Upland Conifers	0	4	0	41	0	14	0	0	6	0	0	0	0	0	0	66
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Total	31	41	37	114	2	41	0	2	200	222	129	266	344	424	46	1901

**PROPOSED TREATMENTS
NO LIMITING FACTORS**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
67 45190067-Cut	18.1	4110 - Sugar Maple Association	High Density Pole	95	Harvest	Single Tree Selection	Sugar Maple Association

Rev Cmnt: Access if through Kellers property and through TFG. East blue line is in but faded.

Rev Spec: Thin stand to 80 sqft/ac.

WLD: Winter cut. Leave any cedar, hemlock, and white pine. Leave 3-5 beech per acre where present.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regen is maple, beech, birch and fir.

**Total Treatment
Acreage Proposed: 18.1**

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**



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Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
56 45190056-Cut	26.8	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	99	Harvest	Clearcut with Reserves	Lowland Deciduous, Mixed Coniferous

Limiting Factor and Comment: 2D: Road needed tough access.

Rev Cmnt: Access through private or through south unit of Frozen Tundra??

Rev Spec: Clearcut stand. Leave cedr and hemlock.

WLD: Winter cut. Leave any cedar, hemlock, and leave a component of mature aspen and birch. Use the shortest route possible to access stands, if possible access from the south off private road if it continues onto state land.

Next Steps: Regen check 4 yrs after harvest. Acceptable regen is popple, cedar, birch, fir and spruce.

No Treatment Reason: tough access.

46 45190046-Cut	30.9	6118 - Lowland Deciduous with Cedar	High Density Pole	114	Harvest	Clearcut with Reserves	Lowland Deciduous with Cedar
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Limiting Factor and Comment: 2G: Blocked by physical obstacle Harvest when and if private to the south has a harvest

Rev Cmnt: If EJ Watson cuts his property then we'd have access to stand. Real wet ground.

Rev Spec: Clearcut stand. Leave any cedar, white pine and hemlock..

WLD: If cut, winter cut. Leave cedar and hemlock and leave a component of mature aspen and birch. Use the shortest route possible to access stands, if possible access from the south off private road if it continues onto state land.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regen is popple, maple, birch, cedar, fir, and spruce.

No Treatment Reason: Harvest when and if private to the south has a harvest

39 45190039-Cut	69.2	6111 - Lowland Balsam Poplar	High Density Pole	99	Harvest	Clearcut with Reserves	Lowland Balsam Poplar
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Limiting Factor and Comment: 2D: Road needed tough access.

Rev Cmnt: tough access. Could maybe access through southern unit of Frozen Tundra. Check for access during winter or dry summer.

Rev Spec: Clearcut stand. Leave all cedar and some scattered birch.

WLD: If cut, winter cut. Leave cedar and hemlock and leave a component of mature aspen and birch. Use the shortest route possible to access stands, if possible access from the south off private road if it continues onto state land.

Next Steps: Regeneration check after harvest according to work instructions. Acceptable regeneration is aspen, balm, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

No Treatment Reason: tough access.

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**



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Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
27 45190027-Cut	1.7	6122 - Black Spruce	High Density Pole	77	Harvest	Clearcut with Reserves	Black Spruce

Limiting Factor 4D: Low volume (small acreage)
and Comment: Cut if TFG has a nearby harvest

Rev Cmnt: Cut stand if TFG has a sale near by this stand.

Rev Spec: Clear cut stand, leave any cedar, white pine and hemlock.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regen is spruce, maple, aspen, cedar and pine.

No Treatment Reason Cut if TFG has a nearby harvest

24 45190024-Cut	1.0	6122 - Black Spruce	High Density Pole	87	Harvest	Clearcut with Reserves	Black Spruce
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Limiting Factor 4D: Low volume (small acreage)
and Comment: Cut if TFG has a near by timber sale.

Rev Cmnt: Harvest stand if TFG has timber sale in the area.

Rev Spec: Clearcut stand, leave all white pine, cedar and hemlock.

WLD: Access from TFG land on north or west side to avoid road through stand 26.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regen is spruce, fir, cedar and pine.

No Treatment Reason Cut if TFG has a near by timber sale.

15 45190015-Cut	4.3	6122 - Black Spruce	High Density Pole	98	Harvest	Clearcut with Reserves	Black Spruce
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Limiting Factor 2G: Blocked by physical obstacle
and Comment: Need private access and railroad xing.

Rev Cmnt: Will need private access from the north and railroad xing. Blue line is not in.

Rev Spec: Clearcut stand. Leave any white pine and cedar for retention.

Next Steps: Regeneration check after harvest according to work instructions. Acceptable regeneration is spruce, pine, cedar, popple.

No Treatment Reason Need private access and railroad xing.

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**



S t a n d	Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 3 of 4
9	45190009-Cut	2.5	6122 - Black Spruce	High Density Pole	97	Harvest	Clearcut with Reserves	Mixed Coniferous Lowland Forest	

Limiting Factor 2G: Blocked by physical obstacle
and Comment: Need TFG to build road.

Rev Will need TFG to continue plum creeks road project. Will also need line work done, no corners or blue line.
Cmnt:

Rev Clear cut stand. leave any white pine and hemlock.

Spec: WLD: If cut, leave cedar, hemlock, and white pine, and winter cut prior to March 15.

Next Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regen is spruce, fir, cedar, hemlock and pine.
Steps:

No Treatment Need TFG to build road.
Reason

8	45190008-Cut	6.2	42320 - Upland Spruce	Medium Density Pole	70	Harvest	Seed Tree	Upland Spruce/Fir
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Limiting Factor 2G: Blocked by physical obstacle
and Comment: Need TFG to build road.

Rev Need TFG to continue road project to harvest. Will also need line work done, no blue or corners present.
Cmnt:

Rev Cut all spruce, balsam and redmaple. Leave white pine for seed.

Spec:
Next Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regen include red maple, spruce, fir and pine.
Steps:

No Treatment Need TFG to build road.
Reason

7	45190007-Cut	10.0	42340 - Upland Spruce/Fir	Low Density Pole	46	Harvest	Seed Tree	Upland Spruce/Fir
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Limiting Factor 2G: Blocked by physical obstacle
and Comment: Cut if TFG continues with road project. Otherwise there is no access.

Rev Manage with adjacent stands. Will need TFG to continue road project. Sale will also require some line work, no blue line or corners present.
Cmnt:

Rev Cut all balsam and spruce. Leave white pine for seed.

Spec:
Next Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regen is white pine, spruce, balsam fir and red maple.
Steps:

No Treatment Cut if TFG continues with road project. Otherwise there is no access.
Reason

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**



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Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
16 45190016-Cut	23.1	6132 - Mixed Lowland Forest with Cedar	High Density Pole	81	Harvest	Shelterwood	Lowland Coniferous, Mixed Deciduous

Limiting Factor and Comment: 2G: Blocked by physical obstacle
Need to cross private and get across the RR tracks

Rev Cmnt: Will need to obtain access through private to the north and get a rail crossing??

Rev Spec: Shelterwood stand. Leave cedar along with some birch for seed.

WLD: If cut, winter cut. Leave cedar and hemlock and leave a component of mature aspen and birch.

Next Steps: Regeneration check after harvest according to work instructions. Acceptable regen is cedar birch, popple, and fir.

No Treatment Reason: Need to cross private and get across the RR tracks

12 45190012-Cut	1.9	4112 - Maple, Beech, Cherry Association	High Density Pole	69	Harvest	Shelterwood	Maple, Beech, Cherry Association
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Limiting Factor and Comment: 2G: Blocked by physical obstacle
Need TFG new road to be built.

Rev Cmnt: Need TFG to continue with road project. Will also need line work done, no blue line or corners.

Rev Spec: Shelterwood stand. Leave 30-40sqft/ac of redmaple poles.

WLD: Winter cut prior to March 15. Leave all conifers for cover.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regen is maple, beech, cherry, fir and pine.

No Treatment Reason: Need TFG new road to be built.

**Total Treatment
Acreage Proposed: 177.6**



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.

Inventory Method: IFMAP

Stand	SCA Name	Acres	Comments



DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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

Conservation Area	Type	Description
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
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.