



**Shingleton Forest Management Unit
Compartment Review Presentation
Compartment #89 Entry Year: 2012
Compartment Acreage: 1,802 County: Delta**

Revision Date: 7/15/2010

Stand Examiner: Adam Petrelius

Legal Description: T40N R18W, Sections 9, 10, 11, 12

Identified Planning Goals ('Management Area' or 'RMU', if applicable): Compartment 89 lies within the Garden/Thompson Plains Management Area.

Management Goals: The main goal of this compartment is to conduct multiple resource management for current and future generations.

Soil and Topography: The topography within the compartment is mostly flat with a few steeper ridges. Elevation values range between 600-748 feet. Most of the compartment is forested with only a few stands classified as marsh or treed bog. Aspen is the dominant cover type. Other abundant cover types include lowland cedar, mixed northern hardwood, lowland aspen, and lowland deciduous forest. Numerous soil types are located in this compartment. A few of the most abundant soils are Roscommon Mucky Sand, Kalkaska Sand, and Carbondale/Rifle/Lupton Soils. Major habitat types within the compartment, in order of abundance, are Unclassified Lowland, ATFD, PVE, and PArV.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State land within this compartment was acquired between 1907 and 1970. Most of the land was acquired around 1940. The compartment boundary borders private and state land. The southern boundary and northern boundaries border state land. The eastern and western boundary borders private land. A few camps are located on the private parcels adjacent to the boundary. Permanent residences border the western edge. The compartment is used mostly by hunters, ORV users, and snowmobile riders.

Unique, Natural Features: Bald Eagle (*Haliaeetus leucocephalus*, state threatened) are known from the general area and there is potential for these raptors to occur within this compartment. In addition, **Osprey** (*Pandion haliaetus*, state threatened) are known from the general area and there is potential for these raptors to occur within this compartment. There is also potential for nesting [red-shouldered hawk](#) (*Buteo lineatus*, state threatened) to occur throughout this compartment in stands of northern hardwoods, mixed swamp conifer, and mature aspen.

Archeological, Historical, and Cultural Features: None.

Special Management Designations or Considerations: A large portion of the lowland cedar covertype in the west is classified as potential old growth. The small piece in the northeast is also classified as potential old growth.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: This compartment lies at the top of the Garden Peninsula within the Escanaba/Door Peninsula ecological sub-subsection. The growing season is approximately 140 days. Extreme minimum winter temperature is -30° F. Snowfall in this area is relatively light averaging about 60

inches/year. Prior to European settlement, the lowland forest cover was dominated by cedar, but also contained tamarack, red maple, paper birch, black spruce, aspen, balsam fir, and balsam poplar. Uplands were primarily covered with hemlock, white pine, or a mixture of the two. Due to the shallow soils and proximity to Lake Michigan, windthrow appeared to be the primary natural disturbance factor. Beaver ponding no doubt occurred along the Little Fishdam River and its tributaries, which run through this compartment. Current lowland forest composition appears to be similar to presettlement conditions with cedar being the dominant tree species. Upland forest composition has shifted heavily toward aspen. Wildlife habitat management objectives for this compartment are diverse. A large portion of the lowland forest has been designated as potential oldgrowth. Hemlock is being withheld from cutting to provide an upland conifer component. Aspen and white birch will be managed to provide age and structural diversity within the early successional forest types. Oak will be managed to maintain maximum mast production. Wildlife species of interest that inhabit this compartment include turkey, white-tailed deer, ruffed grouse, black bear, phoebe, and evening grosbeak.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel. There is between 10 and 50 feet of glacial drift. The Silurian Cabothead Shale and Burnt Bluff subcrop below the glacial drift. The Burnt Bluff is used for stone. The nearest gravel pit is 3 miles to the northeast. There is limited gravel potential on State lands.

Vehicle Access: Except for the areas containing low ground, the compartment has a decent system of forest roads that can be driven during the snow free months. The Cooks/Garden grade is the main access road.

Survey Needs: No major survey projects will be needed. Some minor help may be requested if corners depicted in the records do not exist.

Recreational Facilities and Opportunities: The Cooks/Garden grade snowmobile trail travels through the middle of the compartment and receives moderate use by ORV riders also.

Fire Protection: Response time to fires within this compartment from the Thompson field office will be moderate to fast. The fire office is located 8 miles to the east, and travel would be along US-2. The compartment receives moderate use throughout fire season and human caused fires are a concern. Both spring and summer fires are likely to occur here. Mixed fuel types and higher humidity values make this area less conducive to a large wildfire. Water sources are abundant and include Lake Michigan, Little Fishdam River, and a small lake adjacent to the MDOT rest area. In 2007 a 41 acre fire burned in this compartment through a recently harvested aspen stand.

➤ **The following reports from the Inventory are attached:**

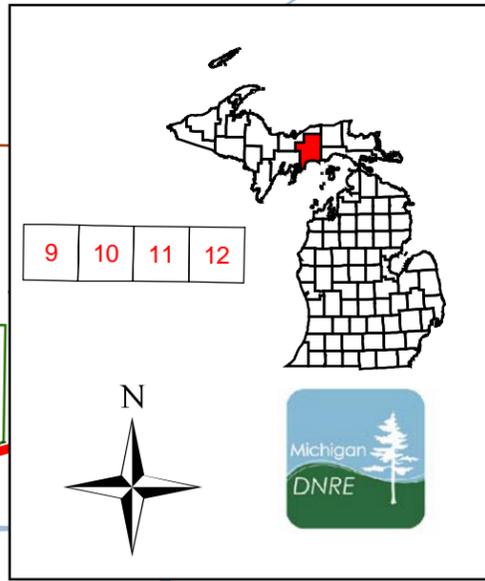
- ◆ **Total Acres by Cover Type and Age Class**
- ◆ **Proposed Treatment Summary**
- ◆ **Proposed Treatments – No Limiting Factors**
- ◆ **Proposed Treatments – With Limiting Factors**
- ◆ **Stand Details (Forested and Nonforested)**
- ◆ **Dedicated and Proposed Special Conservation Areas**

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

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

Cover Type & Treatment Map

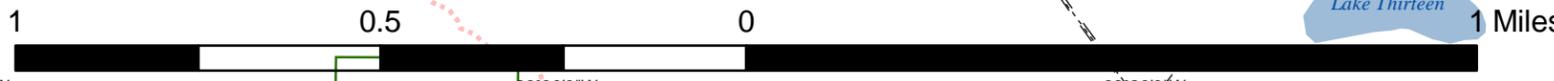
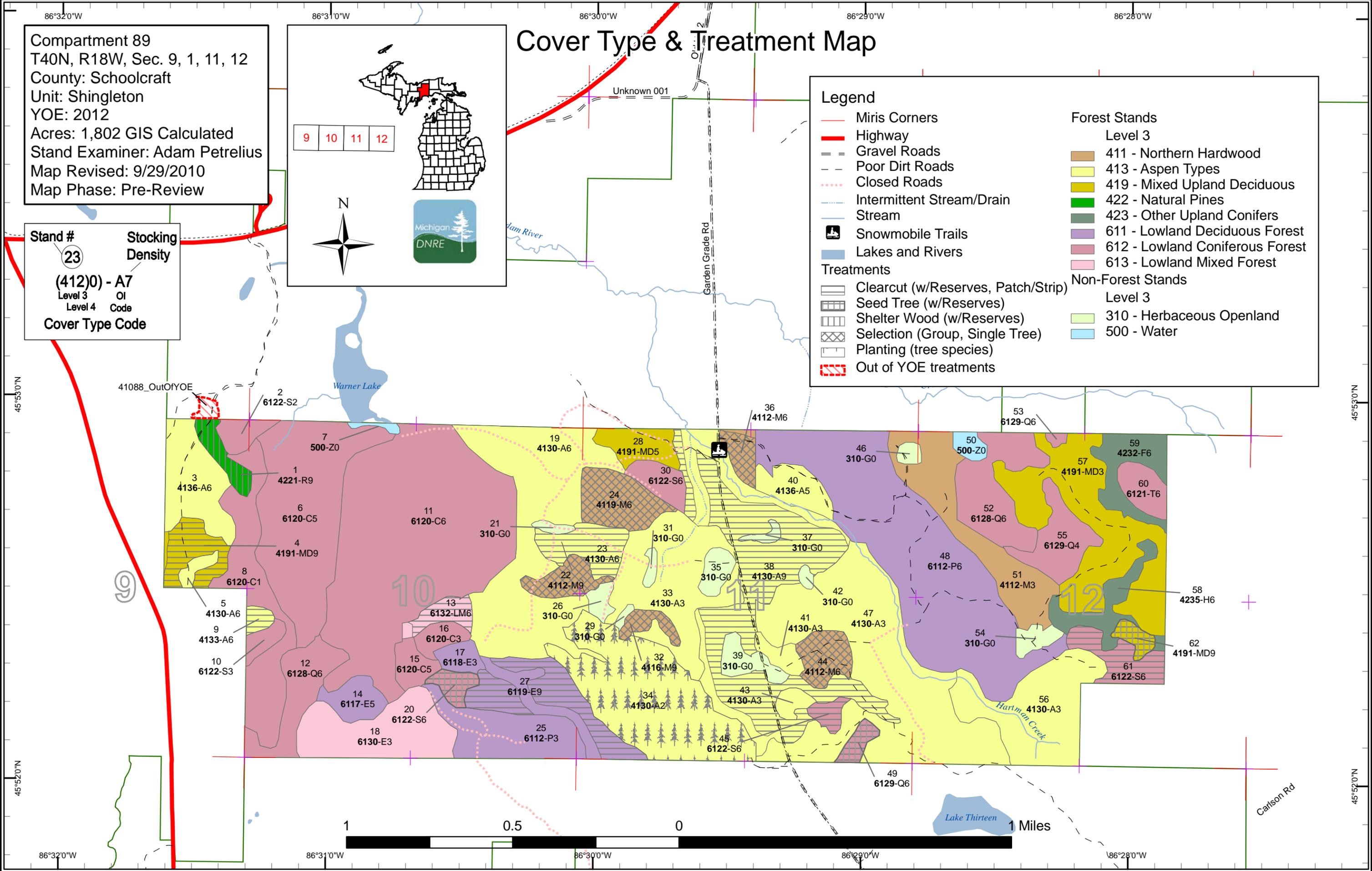
Compartment 89
 T40N, R18W, Sec. 9, 1, 11, 12
 County: Schoolcraft
 Unit: Shingleton
 YOE: 2012
 Acres: 1,802 GIS Calculated
 Stand Examiner: Adam Petrelus
 Map Revised: 9/29/2010
 Map Phase: Pre-Review



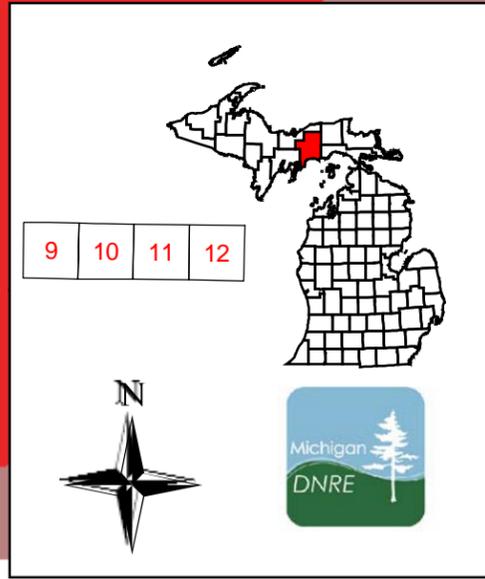
Legend

	Miris Corners		411 - Northern Hardwood
	Highway		413 - Aspen Types
	Gravel Roads		419 - Mixed Upland Deciduous
	Poor Dirt Roads		422 - Natural Pines
	Closed Roads		423 - Other Upland Conifers
	Intermittent Stream/Drain		611 - Lowland Deciduous Forest
	Stream		612 - Lowland Coniferous Forest
	Snowmobile Trails		613 - Lowland Mixed Forest
	Lakes and Rivers	Non-Forest Stands	
	Clearcut (w/Reserves, Patch/Strip)	Level 3	
	Seed Tree (w/Reserves)		310 - Herbaceous Openland
	Shelter Wood (w/Reserves)		500 - Water
	Selection (Group, Single Tree)		
	Planting (tree species)		
	Out of YOE treatments		

Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



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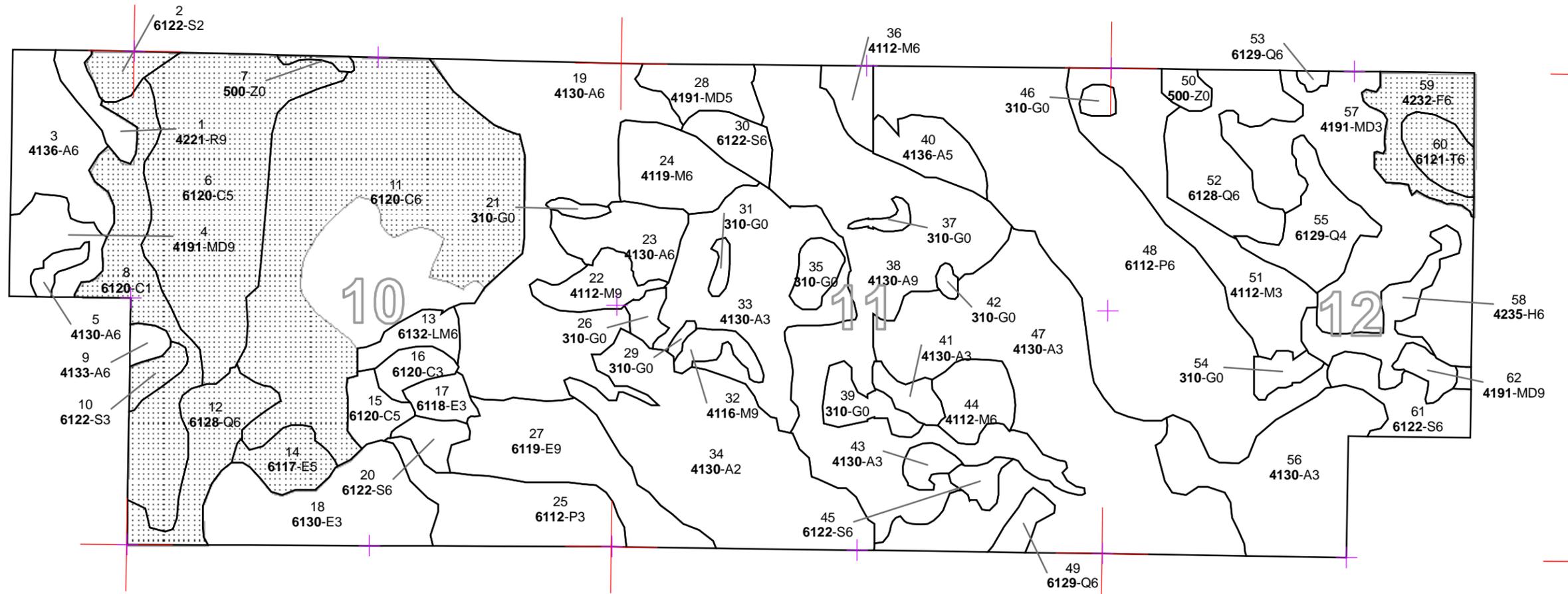


Dedicated & Proposed Special Conservation Area Map

Legend

- | | | |
|---|--------------------------------------|---------------------------------|
| — | Miris Corners | Forest Stands |
| + | Remonumented Section Corners | Level 3 |
| ▨ | Proposed Special Conservation Areas | 411 - Northern Hardwood |
| ▩ | SCA - Special Conservation Area | 413 - Aspen Types |
| ▧ | SCA Removal | 419 - Mixed Upland Deciduous |
| ■ | Dedicated Special Conservation Areas | 422 - Natural Pines |
| ■ | Deer Wintering Areas | 423 - Other Upland Conifers |
| ■ | Ecological Reference Areas | 611 - Lowland Deciduous Forest |
| □ | Stand Boundaries | 612 - Lowland Coniferous Forest |
| | | 613 - Lowland Mixed Forest |
| | | Non-Forest Stands |
| | | Level 3 |
| | | 310 - Herbaceous Openland |
| | | 500 - Water |

Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



1 0.5 0 1 Miles



86°32'0"W 86°31'0"W 86°30'0"W 86°29'0"W 86°28'0"W

45°53'0"N

45°53'0"N

45°52'0"N

45°52'0"N

Table 1 – Total Acres by Cover Type and Age Class

Data updated before 2:00 PM



	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 +		Unretn Age
Aspen	0	96	62	215	36	105	0	152	0	0	0	0	0	0	0	666
Cedar	0	0	0	7	0	49	0	0	0	0	103	0	0	0	190	350
Hemlock	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17
Herbaceous Openland	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
Lowland Aspen/Balsam Poplar	0	0	0	196	0	0	0	0	0	0	0	0	0	0	0	196
Lowland Conifers	0	0	0	0	0	0	23	27	0	5	36	0	0	0	0	91
Lowland Deciduous	0	0	0	0	7	0	0	12	43	0	0	0	0	0	0	62
Lowland Mixed Forest	0	0	45	0	0	0	0	9	0	0	0	0	0	0	0	54
Lowland Spruce/Fir	0	0	0	0	0	13	0	10	0	11	17	0	0	0	0	52
Mixed Upland Deciduous	0	81	0	0	14	0	0	22	0	0	0	0	0	0	0	117
Northern Hardwood	0	0	0	48	0	0	0	0	18	46	0	0	0	0	0	112
Red Pine	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
Tamarack	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	45	177	107	466	57	167	23	232	70	94	174	0	0	0	190	1802



Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

Shingleton Mgt. Unit
Year of Entry 2012

Compartment 089
Total Compartment Acres: 1802

Acres by Treatment Type

Commercial Harvest - 291	Site Prep - 0	Tree Planting - 90	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	122	0	0	0	0	0	0	122
Herbaceous Openland	2	0	0	0	0	0	0	2
Lowland Conifers	0	0	5	0	0	0	0	5
Lowland Deciduous	32	0	0	0	0	0	0	32
Lowland Mixed Forest	8	0	0	0	0	0	0	8
Lowland Spruce/Fir	22	0	7	0	0	0	0	28
Mixed Upland Deciduous	17	0	5	0	0	0	0	22
Northern Hardwood	0	63	0	0	0	0	0	63
Red Pine	0	0	0	9	0	0	0	9
Total	202	63	17	9	0	0	0	291



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1 41089001-Cut	8.8	42210 - Natural Red Pine	High Density Log	77	Harvest	Shelterwood	Natural Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Mark red pine and white pine to 50 sq. ft. basal area to thicken crowns and prepare for regeneration harvest next year of entry. Cut all other species except hemlock and oak.								
<u>Specs:</u>								
<u>Other Comments:</u> Treatment leaks over northern compartment boundary. This area should be included as well. Set up treatment as soon as it is approved at compartment review in order to combine it into one timbersale with Compartment 88, stand 43. No additional retention, small stand.								
<u>Next Steps:</u> Evaluate stand next year of entry for possible regeneration harvest. Try to maintain management objective of natural red pine.								
4 41089004-Cut	16.5	4191 - Mixed Upland Deciduous with Conifer	High Density Log	62	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription</u> Cut all species except hemlock and oak. Red pine and white pine should be marked to cut. Focus leaving smaller diameter red pine and white pine poles and a few large mature seed trees. Leave higher concentrations of pine along the private boundaries in the west and south.								
<u>Specs:</u>								
<u>Other Comments:</u> Retention should be left along the western edge of stand. A steep hill exists here the paint line should be kept on top of ridge. Stand should be set up as soon as it is approved at compartment review and combined into the same timbersale as compartment 88 (2011 YO) stand 43.								
<u>Next Steps:</u> Acceptable regeneration includes any mixture of species currently found onsite.								
9 41089009-Cut	3.6	4133 - Aspen, Mixed Pine	High Density Pole	60	Harvest	Clearcut with Reserves	Aspen, Mixed Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut all species except hemlock, oak, red pine, and white pine.								
<u>Specs:</u>								
<u>Other Comments:</u> Access to stand is through private. Minimal disturbance on private land would occur, but permission is needed from 1 or possibly 2 owners. Only possible access is through private. Do not allow access on state land through old growth SCA. Stand should be set up as soon as it is approved at compartment review and combined into the same timbersale as compartment 88 (2011 YO) stand 43. No additional retention, small stand. Stand could possibly be an optional unit since the only access is through private and that can not be guaranteed.								
<u>Next Steps:</u> Acceptable regeneration is any mixture of species currently found onsite.								
13 41089013-Cut	8.1	6132 - Mixed Lowland Forest with Cedar	High Density Pole	65	Harvest	Clearcut with Reserves	Mixed Lowland Forest with Cedar	Cmpt. Review Proposal
<u>Prescription</u> Cut all species except hemlock and oak. Leave some cedar for seed. These can be individual trees, group patches, or adjacent to sale boundary.								
<u>Specs:</u>								
<u>Other Comments:</u> Possible creeks located in stand. Visit on bare ground to determine locations. No additional retention, small stand.								
<u>Next Steps:</u> Cedar has regenerated well in this area following past harvests. Acceptable regeneration includes any species mixture currently found onsite.								
20 41089020-Cut	6.6	6122 - Black Spruce	High Density Pole	82	Harvest	Seed Tree with Reserves	Black Spruce	Cmpt. Review Proposal
<u>Prescription</u> Cut all species except hemlock, oak, and cedar.								
<u>Specs:</u>								
<u>Other Comments:</u> Possible creeks located within stand. Visit on bare ground. No additional retention, small stand.								
<u>Next Steps:</u> Acceptable regeneration includes any species mixture currently found onsite.								



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22 41089022-Cut	12.0	4112 - Maple, Beech, Cherry Association	High Density Log	70	Harvest	Single Tree Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal

Prescription Follow Complete Marker standards.Specs:Other Treatment transitions into aspen in the north. Keep this transition zone as hardwood management objective where possible.Comments:Next Acceptable regeneration includes any species mixture currently found onsite.Steps:

23 41089023-Cut	18.6	4130 - Aspen	High Density Pole	60	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
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Prescription Cut all species except hemlock and oak. No retention, small stand.Specs:Other Treatment transitions into hardwood in the north and south. Keep this transition zone as hardwood management objective where possible.Comments:Next Acceptable regeneration includes any species mixture currently found onsite.Steps:

24 41089024-Cut	23.3	4119 - Mixed Northern Hardwoods	High Density Pole	85	Harvest	Single Tree Selection	Mixed Northern Hardwoods	Cmpt. Review Proposal
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Prescription Follow Complete Marker Standards. Do not cut hemlock and oak.Specs:Other Treatment will have to be accessed from both the north and south due to a steep ridge. Do not mark trees located on ridge if inoperable.Comments: Treatment transitions into aspen in the south. Keep this transition zone as hardwood management objective where possible. RDR should be fixed leading to treatment in north.Next Acceptable regeneration includes any species mixture currently found onsite.Steps:

27 41089027-Cut	32.2	6119 - Mixed Lowland Deciduous Forest	High Density Log	75	Harvest	Clearcut with Reserves	Mixed Lowland Deciduous Forest	Cmpt. Review Proposal
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Prescription Cut all species except hemlock and oak.Specs:Other Buffer creek 100 feet. Cut ridge in northeast if possible. Retention lies in creek buffers.Comments:Next Acceptable regeneration includes any species mixture currently found onsite.Steps:

32 41089032-Cut	6.2	4116 - Mixed N. Hardwood - Aspen	High Density Log	76	Harvest	Single Tree Selection	Mixed N. Hardwood - Aspen	Cmpt. Review Proposal
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Prescription Follow Complete Marker standards and beech bark guidelines.Specs:Other Stand was left for beech mast production 20 years ago.Comments:Next Acceptable regeneration includes any species mixture currently found onsite.Steps:



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
36 41089036-Cut	7.6	4112 - Maple, Beech, Cherry Association	High Density Pole	85	Harvest	Group Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal

Prescription Mark some groups of trees to create regeneration holes. Thicker areas can be thinned.

Specs:

Other Stand was cut in 2005. It never regenerated, most likely because of deer browse issues. Not many trees will be marked since it was recently cut.
Comments: Since we will be harvesting adjacent stands this would be a good opportunity to create a few regen holes.

Next Steps: Plant white pine, oak, or white spruce in regeneration gaps. Planting species will be based on deer densities and wildlife division recommendations at timber of planting. Mixed hardwood regeneration is also acceptable.

38 41089038-Cut	99.5	4130 - Aspen	High Density Log	60	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
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Prescription Cut all species except red pine, white pine, hemlock, and oak.

Specs:

Other Buffer creeks in north 100 feet. Some unmapped drains or creeks may exist and treatment should be looked at on bare ground. Drain in southwest is bordered by cedar and hemlock which should be excluded. RDR exists in northwest that needs to be fixed. Retention lies in creek buffers.

Next Steps: Acceptable regeneration includes any species mixture currently found onsite.

44 41089044-Cut	14.1	4112 - Maple, Beech, Cherry Association	High Density Pole	85	Harvest	Single Tree Selection	Maple, Beech, Cherry Association	Cmpt. Review Proposal
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Prescription Follow Complete Marker standards.

Specs:

Other Stand was not marked heavy enough last year of entry. Needs some regeneration holes.

Comments:

Next Steps: Acceptable regeneration includes any species mixture currently found onsite.

45 41089045-Cut	4.8	6122 - Black Spruce	High Density Pole	81	Harvest	Clearcut with Reserves	Black Spruce	Cmpt. Review Proposal
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Prescription Do not cut hemlock and oak. Cut all other species.

Specs:

Other No additional retention, small stand.

Comments:

Next Steps: Acceptable regeneration includes any species mixture currently found onsite.

49 41089049-Cut	5.3	6129 - Mixed Coniferous Lowland Forest	High Density Pole	84	Harvest	Seed Tree with Reserves	Mixed Coniferous Lowland Forest	Cmpt. Review Proposal
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Prescription Cut all species except hemlock and oak. Leave some large crown red pine and white pine for seed.

Specs:

Other May need to leave some trees along southern boundary of stand to satisfy green-up requirements. Lake 13 sale is adjacent to treatment and has just been written. No additional retention, small stand.

Next Steps: Acceptable regeneration includes any species mixture currently found onsite.



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
61 41089061-Cut	16.9	6122 - Black Spruce	High Density Pole	90	Harvest	Clearcut with Reserves	Black Spruce	Cmpt. Review Proposal

Prescription: Do not cut hemlock, cedar, oak. Leave some pine on higher ground for seed.

Specs:

Other Comments: Access to this area of the compartment previously involved installing a portable bridge. There is a different route into this portion of the compartment. It lies entirely on state land and would not require a bridge, but possibly a small culvert. No additional retention, small stand.

Next Steps: Acceptable regeneration includes any species mixture currently found onsite.

62 41089062-Cut	5.1	4191 - Mixed Upland Deciduous with Conifer	High Density Log	65	Harvest	Seed Tree with Reserves	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
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Prescription: Cut all species except hemlock, cedar, oak. Leave some large pine trees for seed.

Specs:

Other Comments: Access to this area of the compartment previously involved installing a portable bridge. There is a different route into this portion of the compartment. It lies entirely on state land and would not require a bridge, but possibly a small culvert. No additional retention, small stand.

Next Steps: Acceptable regeneration will be a mixture of species currently found onsite. Pine seed trees are being left in hopes of maintaining a pine component to the stand.

37 NF_41089037-Cut	2.3	Non-Forested		0	Harvest	Clearcut with Reserves	Mixed Upland Herbaceous	Cmpt. Review Proposal
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Prescription: Do not cut hemlock, oak, red pine, and white pine.

Specs:

Other Comments: Small grass stand surrounded by an aspen forest type which is going to be harvested. No additional retention, small stand.

Next Steps: Grass objective is acceptable.

34 41089034-Plant	90.1	4130 - Aspen	Medium Density Saplin	4	Tree Planting	Hand Plant	Aspen	Cmpt. Review Proposal
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Prescription: Plant white pine, oak, or white spruce where holes exist. Could be one more more of the listed species depending on availability of trees, deer densities, and wildlife division recommendations at time of planting.

Specs:

Other Comments: Stand burned shortly after harvest. Aspen flushed back, but there are empty holes that would be suitable for planting to add diversity to stand and fill in empty pockets.

Next Steps:

**Total Treatment
Acreage Proposed: 381.5**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

Total Treatment
Acreage Proposed: 0



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41039_OutOfY OE-Cut	14.6				Harvest	Clearcut with Reserves	Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription:</u> Cut all trees except hemlock and oak. Leave a few red pine and white pine for seed.								
<u>Specs:</u>								
<u>Other Comments:</u> Access to this stand will involve the installation of a temporary bridge. This could be built and placed by the logger west of this stand. Winter havest may be needed. Survey work may be needed. There is a creek / drainage located in southern part of stand, it runs east/west. Buffer 50 feet. Buffer Smith creek 100 feet. These will be the retention areas. East edge of stand has some cedar. Cedar can be cut, but sale boundary should exclude the very dense patches.								
<u>Next Steps:</u> Plant red pine on ridges to maintain component. Low ground should regenerate to mixed species. Acceptable management objectives includes any species mixture currently found onsite.								
41049_OutOfY OE-Cut	15.3				Harvest	Single Tree Selection	Natural Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Cut all species except red pine ,oak, white pine, and hemlock. Red pine and white pine should be marked. Create regeneration holes where available and thin thicker areas of poles.								
<u>Specs:</u>								
<u>Other Comments:</u> See MNFI comments. Winter harvest will be needed due to road conditions into treatment area. Buffer on Walsh Ditch should be placed at the bottom of spoils. Protect existing red pine and white pine regeneration.								
<u>Next Steps:</u> Natural regeneration of red pine, jack pine, and white pine is acceptable. Plant red pine if regeneration fails.								
41088_OutOfY OE-Cut	2.3				Harvest	Shelterwood	Natural Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Mark red pine and white pine to 50 sq. ft. basal area to thicken crowns and prepare for regeneration harvest next year of entry. Cut all other species except hemlock and oak.								
<u>Specs:</u>								
<u>Other Comments:</u> Set up treatment as soon as it is approved at compartment review in order to combine it into one timbersale with Comparment 88, stand 43. No additional retention, small stand.								
<u>Next Steps:</u> Evaluate stand next year of entry for possible regeneration havest. Try to maintain management objective of natural red pine.								
41118_OutOfY OE_1-Cut	8.6				Harvest	Crown Thinning	Natural Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Cut all Jack Pine and mark Red and White Pine to 90 BA								
<u>Specs:</u>								
<u>Other Comments:</u> Cut with stand 34 comp 117								
<u>Next Steps:</u>								
41179_OutOfY OE-Cut	4.2				Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription:</u> Cut to 80 SF using selection system. Release crop trees using the complete marker as a guide, mark for best tree in place. This stand has some species variation across it, thin to improve diversity favor retention of mesic confers. In areas of beech use beach bark marking guidelines. Place gaps in areas of less shade tolerant species. Cut aspen clones for aspen regeneration. Leave some single aspen trees where possible for soft snags.								
<u>Specs:</u>								
<u>Other Comments:</u> Acceptable regeneration is a mix of hardwood species including Sugar maple, Red maple, Basswood, Black Cherry, Yellow Birch, Aspen, White Birch, Hemlock and White Pine								
<u>Next Steps:</u>								
Total Treatment Acreage Proposed:		45.1						

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Shingleton Mgt. Unit

5 – Forested Stands

Compartment: 089
Year of Entry: 2012

Data updated before 2:00 PM

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42210 - Natural Red Pine	High Density Log	8.8	77	111-140	
2	6122 - Black Spruce	Medium Density	7.7	45		poor site, stunted trees
3	4136 - Aspen, Mixed Conifer	High Density Pole	32.9	33		
4	4191 - Mixed Upland Deciduous with Conifer	High Density Log	17.2	62		
5	4130 - Aspen	High Density Pole	3.6	32		New stand added.
6	6120 - Lowland Cedar	Medium Density Pole	94.2	90		flooded, a lot of dead cedar
8	6120 - Lowland Cedar	Low Density Sapling	49.2	40		dead cedar poles throughout. sparse cedar saplings. flooded
9	4133 - Aspen, Mixed Pine	High Density Pole	3.6	60		
10	6122 - Black Spruce	High Density Sapling	5.3	45		
11	6120 - Lowland Cedar	High Density Pole	190.2	Uneven Age		small strip cuts and parch cuts scattered throughout. ages of harvests vary.
12	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	25.3	60		
13	6132 - Mixed Lowland Forest with Cedar	High Density Pole	9.0	65		
14	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	11.9	60		
15	6120 - Lowland Cedar	Medium Density Pole	8.7	90		
16	6120 - Lowland Cedar	High Density Sapling	7.3	22		
17	6118 - Lowland Deciduous with Cedar	High Density Sapling	6.8	33		
18	6130 - Fir, Aspen, Maple	High Density Sapling	45.2	14		
19	4130 - Aspen	High Density Pole	104.6	40		

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	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	6122 - Black Spruce	High Density Pole	6.6	82		
22	4112 - Maple, Beech, Cherry Association	High Density Log	12.0	70	111-140	
23	4130 - Aspen	High Density Pole	18.6	60		
24	4119 - Mixed Northern Hardwoods	High Density Pole	23.3	85	111-140	quality white ash in sw corner
25	6112 - Lowland Aspen	High Density Sapling	36.2	25		
27	6119 - Mixed Lowland Deciduous Forest	High Density Log	43.3	75		
28	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	14.1	33		
30	6122 - Black Spruce	High Density Pole	10.3	68		
32	4116 - Mixed N. Hardwood - Aspen	High Density Log	6.2	76	111-140	small hardwood ridge surrounded by young aspen
33	4130 - Aspen	High Density Sapling	61.7	15		Northern portion of stand blew over in 1997. Oak was planted by WLD in this area.
34	4130 - Aspen	Medium Density	90.1	4		Last Shot Aspen (2005) .TSI in 2005. most of stand burned shortly after harvest
36	4112 - Maple, Beech, Cherry Association	High Density Pole	8.4	85	81-110	Last Shot Aspen (2005).
38	4130 - Aspen	High Density Log	129.8	60		pockets of younger (25 to 35 year old) aspen exist in stand. southern portion of stand was saved last yoe for age class distribution
40	4136 - Aspen, Mixed Conifer	Medium Density Pole	14.8	23		sparse with grass pockets
41	4130 - Aspen	High Density Sapling	6.1	4		Last Shot Aspen (2005). TSI in 2005. Regen is good.
43	4130 - Aspen	High Density Sapling	4.8	23		
44	4112 - Maple, Beech, Cherry Association	High Density Pole	14.1	85	1-50	Last Shot Aspen (2005) . basal area points- 13,10,10,15,15. Stand was not marked heavy enough and is lacking regeneration.
45	6122 - Black Spruce	High Density Pole	4.8	81		

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Shingleton Mgt. Unit

5 – Forested Stands

Compartment: 089

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	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	4130 - Aspen	High Density Sapling	138.8	23		ridgetops have some older trees that were left
48	6112 - Lowland Aspen	High Density Pole	159.5	26		Stand was cut between 1982 and 1987. Mixture of lowland and upland ridges.
49	6129 - Mixed Coniferous Lowland Forest	High Density Pole	5.3	84		
51	4112 - Maple, Beech, Cherry Association	High Density Sapling	48.0	29		
52	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	36.5	90		
53	6129 - Mixed Coniferous Lowland Forest	High Density Pole	1.4	60		
55	6129 - Mixed Coniferous Lowland Forest	Low Density Pole	22.6	56		Cooks Grade Birch Sale (2004) - Residual values - hemlock 32ft, white pine 6ft, cherry 2 ft. regen good. Residual hemlock from harvest is now canopy. regeneration is subcanopy. Good regeneration on higher ground with many species. Lower ground is mostly black spruce and regeneration is a little more sparse but should fill in.
56	4130 - Aspen	High Density Sapling	57.0	23		
57	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	80.9	5		Cooks Grade Birch Sale (2004) - Residual values - hemlock 5ft, white pine 1 ft, cherry 2 ft. TSI completed in 2005. Alot of cherry present, but good mix of other species beneath cherry canopy.
58	42350 - Upland Hemlock	High Density Pole	17.5	95		
59	42320 - Upland Spruce	High Density Pole	20.4	85		
60	6121 - Tamarack	High Density Pole	11.4	85		
61	6122 - Black Spruce	High Density Pole	16.9	90		
62	4191 - Mixed Upland Deciduous with Conifer	High Density Log	5.1	65		New stand added.



Stand	Cover Type	Acres	Gen Cmts:
7	50 - Water	1.6	
21	310 - Herbaceous Openland	2.1	
26	310 - Herbaceous Openland	4.3	
29	310 - Herbaceous Openland	1.2	
31	310 - Herbaceous Openland	2.2	
35	310 - Herbaceous Openland	7.0	
37	310 - Herbaceous Openland	2.3	
39	310 - Herbaceous Openland	9.4	
42	310 - Herbaceous Openland	1.6	
46	310 - Herbaceous Openland	2.7	
50	50 - Water	4.5	Stand swapped from Forested to Non-Forested.
54	310 - Herbaceous Openland	5.7	



7 – 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.

Data updated before 2:00 PM

Stand	SCA Type	SCA Name	Acres	Comments
multiple - see	Unique Site - SCA	41089_SCA_east	31.9	Stands were previously designated by wildlife division as potential old growth. These stands form a dense conifer habitat corridor in close proximatey to the deer wintering complex. Management goals are to maintain dense cover and mature trees in these stands.
multiple - see	Unique Site - SCA	41089_SCA_west	345.4	Stands were previously designated by wildlife division as potential old growth. These stands form a dense conifer habitat corridor in close proximatey to the deer wintering complex. Management goals are to maintain dense cover and mature trees in these stands.



8 – 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.

Data updated before 2:00 PM

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

Conservation Area	Type	Description
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