

Compartment Review Presentation

Newberry Forest Management Unit

Compartment 11
Entry Year 2015

Acreage: 1,802
County Luce

Management Area: Deer Park

Revision Date: 09/04/2013

Stand Examiner: Jason Tokar

Legal Description:

T49N R11W Sections 4, 5 & 6 T50N R11W Section 33

Identified Planning Goals:

Recreation, timber, wildlife and fisheries are the main uses of this area. The goal is to manage for all of these simultaneously and to provide, enhance and perpetuate their uses.

Soil and topography:

Compartment mostly consists of Deer Park and Rubicon Sand with a predominately forested cover type of pine. The topography throughout the compartment varies from level to rolling with some steep ridges. There are also receding beach line topographical features along the north half of the compartment. The topographical features in this compartment were not identified as Critical Dunes but these features are very similar to areas that have been identified as Critical Dunes in adjacent areas.

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

The entire compartment is state owned as well as all of the land surrounding it. Lake Superior is the north border of the compartment. The area has been managed for timber production in the past. The North Country Pathway runs through this compartment. The compartment is used for an assortment of recreational opportunities.

Unique Natural Features:

The Lake Superior shoreline and the rolling topography of the landscape offer interesting natural features and should be considered as unique. Other interesting natural features within the compartment are Ready Lakes, Rainy Lake, and the Blind Sucker River. MNFI states the potential of osprey, merlin, eagle, GBH rookery, Goshawk, loon, Blanding's turtle, Yellow Rail, American bittern, and rare marsh plants occurring within this area.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

The North Country Pathway runs through this compartment mostly along the Lake Superior shoreline. The topography throughout this compartment is rolling to steep and is similar to other areas that have been identified as a Critical Dunes. Guidelines have been established on how to operate on this topography.

Watershed and Fisheries Considerations:

Fisheries Values: Good

Fisheries Concerns: The Blind Sucker River and Rainy Lake are the two main waterbodies that are represented in this compartment. The Ready Lakes complex is also present in the southern portion of the compartment, but does not have any treatments proposed near there. All prescribed treatments near the Blind Sucker River, Rainy Lake, and the waterbody near stand 47 need to maintain a 100 foot setback. Along the Blind Sucker River in any areas where ridgeline is within 100 foot of the river, begin setback at the top of the ridge.

Wildlife Habitat Considerations:

This compartment lies along the shoreline of Lake Superior and is in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The vegetation is primarily red pine with a significant component of jack pine in western portions and paper birch along the shoreline and scattered throughout the compartment. Overall, presettlement vegetation patterns appear to have been similar to the current landscape of this compartment.

Wildlife objectives will be met by retaining soft and hard mast producing species and red and white pine in jack pine final harvests to provide a food source, nest and den trees, and improve stand diversity. Wildlife featured species in this management area include American marten, piping plover, Kirtland's warbler, and red crossbill.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) clay, silt, sand and gravel. There is insufficient data to determine the glacial drift thickness. The Precambrian Jacobsville Sandstone subcrops below the glacial drift. The Jacobsville has been used as a building stone in the past. The nearest gravel pit is located nine miles to the southwest and potential appears to be limited. There is no economic oil and gas production in the UP.

Vehicle Access:

Access to the compartment can be gained by County Road 407 (Grand Marais Road) and County Road 410. These roads are maintained by the Luce County Road Commission. There are several two track roads (approximately 7 miles) that receive minimal to no maintenance. These roads are typically very sandy and may have portions that are difficult to pass without 4-wheel drive.

Survey Needs:

None.

Recreational Facilities and Opportunities:

Recreational opportunities consist of fishing, hunting, hiking, camping, wildlife viewing, berry picking, ORV riding, snowmobiling and site seeing. There are three nearby state forest campgrounds, Blind Sucker #1, Blind Sucker # 2 and Lake Superior Campground. Blind Sucker #1 Campground is located along the Blind Sucker Flooding / River 1 mile west of this compartment. Lake Superior Campground is also approximately 1 mile west of this compartment and is located along the Lake Superior shoreline where people have access to the lake. Blind Sucker #2 is located along the Blind Sucker Flooding and is approximately ½ mile west of the compartment. All campgrounds are fairly popular. A portion of the Pine Ridge ORV trail runs through the compartment, through stands 12, 37, 39 and 41. Do not skid along the trail, and if any trail marker trees must be cut, work with the ORV trails analyst or Rec Specialist to post carsonite posts with trail markers. Keep the trail clear of logging slash and debris. A portion of the North County National Scenic Trail traverses the northern boundary of the compartment, along the Lake Superior shoreline.

Fire Protection:

Mostly conifer cover types in the compartment and large fire runs are possible. Several stands of Mixed Deciduous cover types may slow fire spread to allow resources to be effective at fire suppression. Access is limited in some areas of the compartment. Some trail roads will need improvement to be effective fire lines. No private property bordering this compartment.

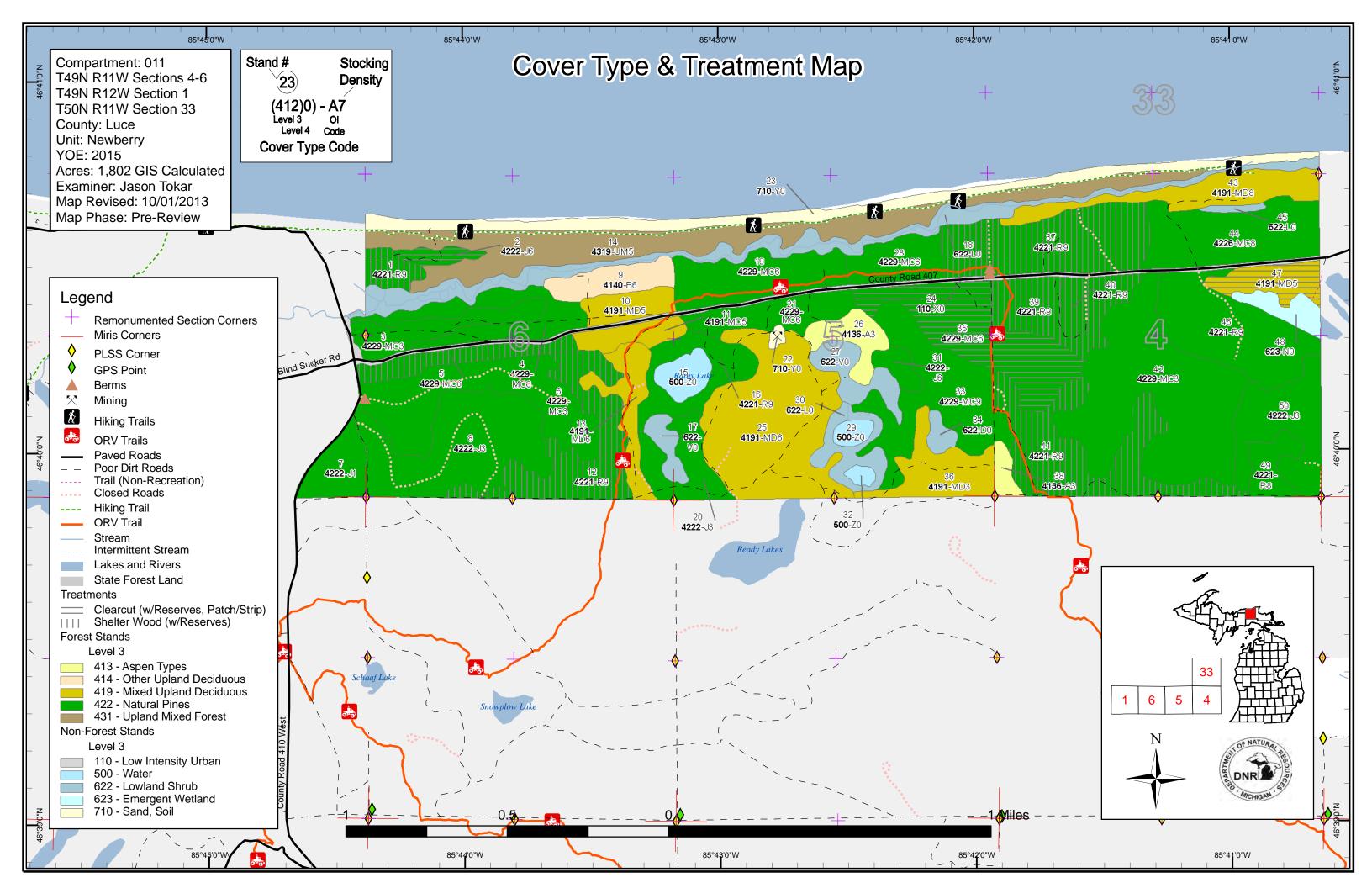
Additional Compartment Information:

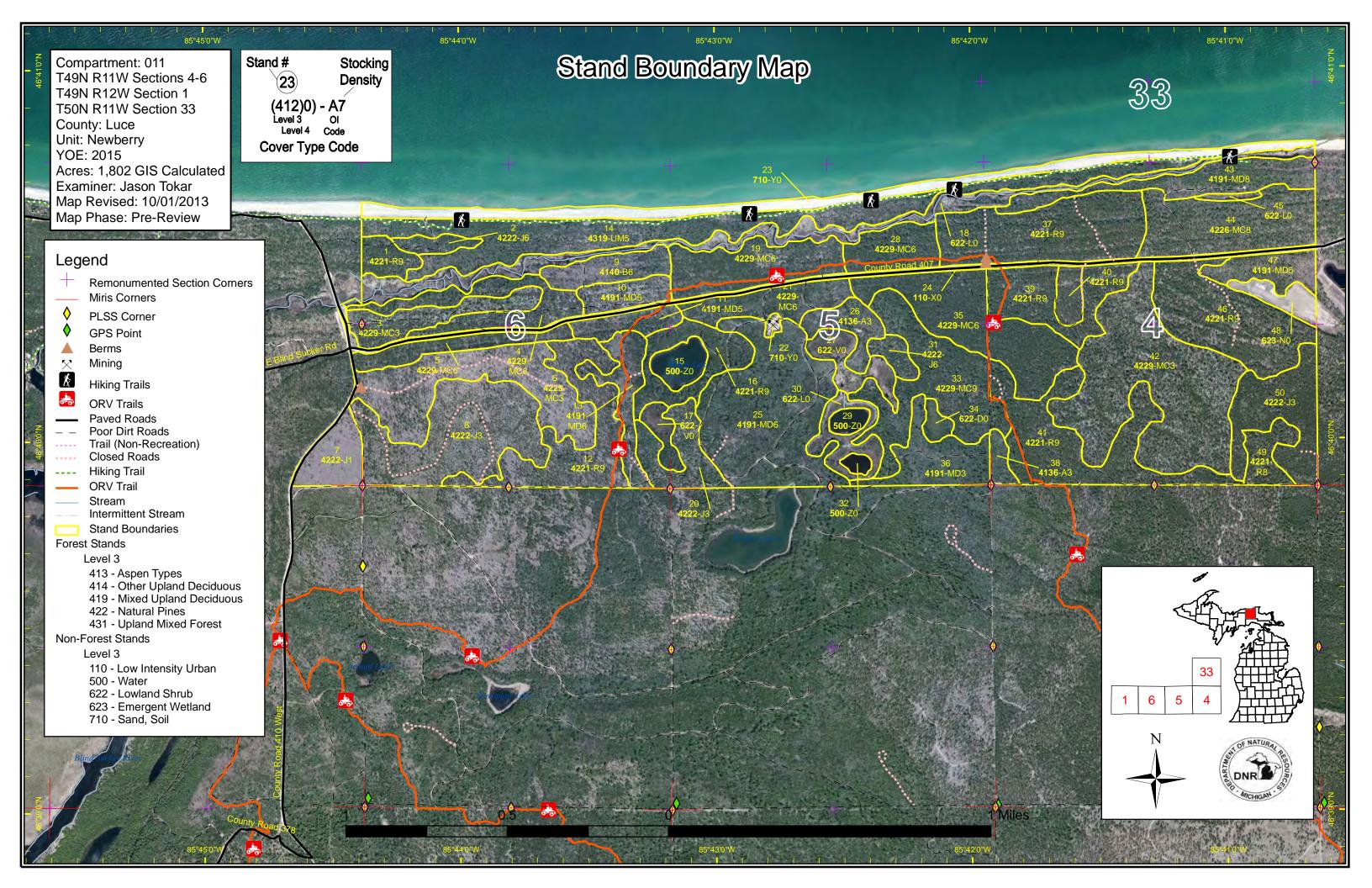
The following reports from the Inventory are attached:

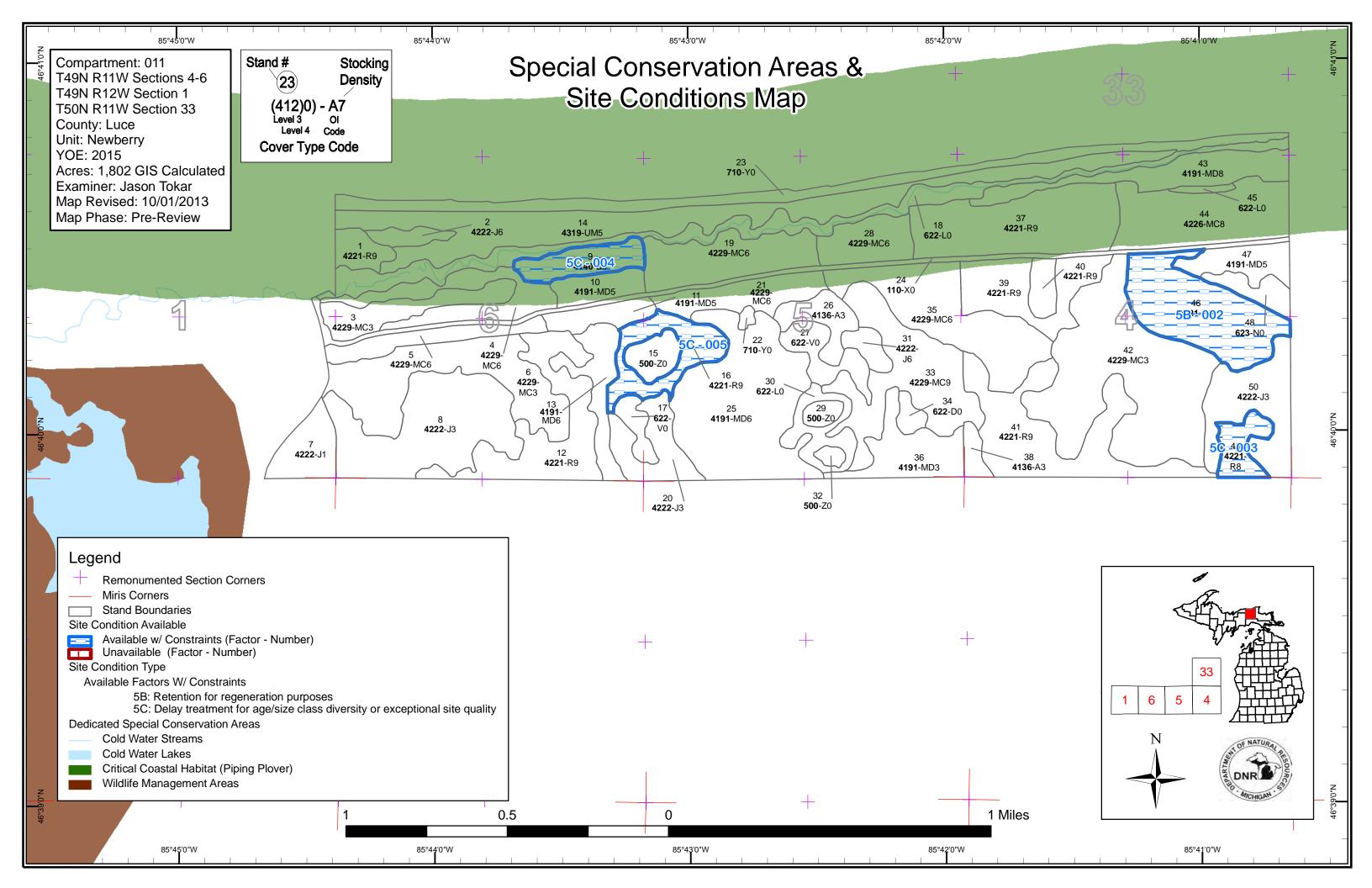
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Compartment 011 Year of Entry 2015

Newberry Mgt. Unit Jason Tokar : Examiner



	Age Class															
		6:0	70.79	Parks /	\$6.96 \	AD AS	\$	\$0.00	,	, &	85.00	on on one	70,73	, 0°, 0°, 0°, 0°, 0°, 0°, 0°, 0°, 0°, 0°	S /	, do
Aspen	0	0	6	17	0	0	0	0	0	0	0	0	0	0	23	
Bog	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27	
Jack Pine	22	84	26	55	0	0	8	0	0	0	0	0	0	0	194	
Lowland Shrub	86	0	0	0	0	0	0	0	0	0	0	0	0	0	86	
Marsh	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
Mixed Upland Deciduous	0	0	0	164	0	0	30	0	58	0	0	0	0	0	252	
Natural Mixed Pines	74	0	159	0	0	0	221	0	61	0	70	0	0	0	585	
Paper Birch	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21	
Red Pine	0	0	0	0	0	0	0	0	157	216	0	0	0	0	373	
Sand, Soil	60	0	0	0	0	0	0	0	0	0	0	0	0	0	60	
Treed Bog	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Upland Mixed Forest	0	0	0	0	0	0	0	0	113	0	0	0	0	0	113	
Urban	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
Water	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
Total	336	84	191	235	0	0	259	0	411	216	70	0	0	0	1802	



Report 2 – Proposed Treatment Summaries

Newberry Mgt. Unit Year of Entry 2015

Compartment 011 **Total Compartment Acres: 1,802**

Acres by Treatment Type

Tree Planting - 0 Commercial Harvest - 380

Other - 0

Habitat Cut - 0

Opening Maintenance - 0

Cover Type by Harvest Method The second secon to its sold in the second in t Zining. 20

Mixed Upland Deciduous 20 77 284 **Natural Pines** 0 0 0 361 Total 96 284 380 0 0 0 0

Newberry Mgt. Unit

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 011
Year of Entry 2015

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t a					With	NO LIIII	illy Factor		rear or Linky 2010	DNR DNR
n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	42011001-Cut	11.4	42210 - Natural Red Pine	High Density Lo	98 g	111-140	Harvest	Shelter Wood with Reserves	4221 - Natural Red Pine	Cmpt. Review Proposal
Pres Spec			ove all jack pine. Ma Leave all oak and a						up the canopy enough along Sucker River.	to promote red
Othe Com			e of 12/04/2013. Set e into one sale.	up as one sa	ale with	stand 57, C	comp 04. Access	s to the stand is via	a two track road runni	ng through
Next Step			site to promote red p	oine regenera	ition. Re	egeneration	n check per work	instructions. Acce	ptable regen of red pin	e with jack pine
Propo Start		13								
2	42011002-Cut	7.6	42220 - Natural Jack Pine	High Density Pole	64	111-140	Harvest	Clearcut	4222 - Natural Jack Pine	Cmpt. Review Proposal
Pres Spec			reage stand. No rete ne red line/sale boun		e 10 BA	of red pine	and/or white pin	e as residual. Lea	ve any oak if it exists ir	stand and
Othe Com			e of 12/04/2013. Set e into one sale.	up as one sa	ale with	stand 57, C	comp 04. Access	s to the stand is via	a two track road runni	ng through
Next Step			site to promote jack pine and white pine.	pine regener	ation. R	Regeneratio	n check per work	instructions. Acce	eptable regen of jack p	ine with minor
Dropo	seed									

Proposed

Start Date: 12/04/2013

5 42011005-Cut 20.8 42290 - Natural High 67 111-140 Harvest Shelter Wood 429 - Mixed Upland Cmpt. Review with Reserves Conifers Proposal Pole

Prescription Shelterwood with reserves. Remove jack pine and aspen. Leave a component of white birch and all red oak. In pockets of high red pine BA, mark. Residual stand BA of 50 sq ft. Leave a component of white pine and hardwoods. Long narrow stand, no other retention. Access to the stand is via abandoned road shown on the map. No other roads are to be built.

Other Comments:

Next Scarification of the site to promote jack pine and red pine regeneration. Regeneration check per work instructions. Acceptable regen of red pine and jack pine with aspen, birch and oak.

Proposed

Start Date: 10/01/2014

56.8 42210 - Natural 111-140 Harvest Shelter Wood 4221 - Natural Red Cmpt. Review 12 42011012-Cut High 89 Red Pine Density Log with Reserves Pine Proposal

<u>Prescription</u> Shelterwood harvest. Residual BA of 40-50 sq ft. Open the canopy to promote red pine regeneration throughout the stand. Leave any oak as <u>Specs:</u> residual as well as a component of white pine, white birch, spruce and maple.

Other ORV trail runs through the stand.

Comments:

Scarification of the site to promote red pine regeneration. Regeneration check per work instruction. Acceptable regen of red pine with oak, white

birch and a minor component of white pine.

Steps: Proposed

Next

Start Date: 10/01/2014

Newberry Mgt. Unit S

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 011 Year of Entry 2015

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	MICHIGAN	

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35	42011035-Cut	69.2	42290 - Natural Mixed Pine	High Density Pole	68	141-170	Harvest	Clearcut with Reserves	4222 - Natural Jack Pine	Cmpt. Review Proposal
Pres			es. Areas of higher						or white pine not to except of exceed 3% of totals	•

Specs:

Leave all oak, component of white pine and spruce. Leave understory maple. Retention pockets to be located a minimum of 1 tree length away from the ORV trail

Access may need to be from the south due to steep sandy approach to Co Rd 407 on north end of firelane. ORV trail runs through the stand. Other_

Comments:

Scarification of the site to promote natural jack pine regeneration. Plant jack pine if scarification fails. Regeneration check per work instructions. Acceptable regen of jack pine with minor components of red pine and white pine.

Steps: Proposed

Next

10/01/2014 Start Date:

37 42011037-Cut 74.6 42210 - Natural High 90 111-140 Harvest Shelter Wood 4221 - Natural Red Cmpt. Review Red Pine Density Log with Reserves Pine Proposal

Specs:

Prescription Shelterwood harvest. Reduce BA enough to promote red pine regeneration. Residual BA of 40-50, higher in some areas where the beginning BA is over 150 sq ft. Remove older, larger red pine. Leave all oak, component of white pine and spruce. Leave understory maple. Limit road building into the stand north of Co Rd 407. Use only existing open two track and old abandoned roads shown on map. Maintain a 100 ft buffer along the Sucker River.

Stand thinned in 1984-1986. Sales #82-84 and #38-85. ORV trail runs through the stand. Other

Comments:

Next Scarification to promote red pine regeneration. regeneration check per work instructions. Acceptable regen of red pine with minor components Steps:

of white pine and maple.

Proposed

Start Date: 10/01/2014

39 42011039-Cut 39.7 42210 - Natural Hiah 90 111-140 Harvest Shelter Wood 4221 - Natural Red Cmpt. Review Red Pine **Density Log** with Reserves Pine Proposal

Specs:

Prescription Shelterwood harvest. Reduce BA enough to promote red pine regeneration. Residual BA of 40-50, higher in some areas where the beginning BA is over 150 sq ft. Remove older, larger red pine. Leave all oak, component of white pine and spruce. Leave understory maple. Limit road building into the stand. Use only existing open two tracks and old abandoned road from old wildfire control lines.

Stand thinned in 1984-1986. Sales #82-84 and #38-85. ORV trail runs through the stand. **Other**

Comments:

Scarification to promote red pine regeneration. Regeneration check per work instructions. Acceptable regen of red pine with minor components

of maple and white pine. Steps:

<u>Proposed</u>

Next

10/01/2014 Start Date:

42011040-Cut 4221 - Natural Red 40 92 42210 - Natural High 90 111-140 Harvest Shelter Wood Cmpt Review Red Pine Density Log with Reserves Proposal Pine

Prescription Shelterwood harvest. Reduce BA enough to promote red pine regeneration. Residual BA of 40-50, higher in some areas where the beginning BA is over 150 sq ft. Remove older, larger red pine. Leave all oak, component of white pine and spruce. Leave understory maple. Limit road Specs:

building into the stand. Use only existing open two track roads shown on map.

Other Stand thinned in 1984-1986. Sales #82-84 and #38-85. Stand was burned through by wildfire, "407 Fire". Some char still on stumps 1-2 ft high.

Comments:

Scarification to promote red pine regeneration. Regeneration check per work instructions. Acceptable regen of red pine with minor components <u>Next</u>

Steps: of white pine.

Proposed

10/01/2014 Start Date:

Newberry Mgt. Unit

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 011 Year of Entry 2015

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41	42011041-Cut	71.4	42210 - Natural Red Pine	High Density Log	83	141-170	Harvest	Shelter Wood with Reserves	4221 - Natural Red Pine	Cmpt. Review Proposal

Specs:

S

Prescription Shelterwood. Residual BA should average 40-50 sq ft. Areas with established red pine and white pine regen should have BA of 40 sq ft. Areas of the stand that have a higher BA to begin with, should be treated with slightly higher residual BA, up to 60 sq ft. Remove jack pine and spruce.

Leave all oak, component of white pine and spruce. Leave understory maple.

Stand was harvested as sale #80-84 (east half) and sale #81-84. ORV trail runs through the stand.

Comments:

Other

Scarification to promote red pine regeneration. Regenration check per work instructions. Acceptable regen of red pine with white pine, jack pine Next

and some birch.

Steps: Proposed

10/01/2014 Start Date:

42011047-Cut 19.7 4191 - Mixed Medium 141-170 Harvest Clearcut with 4133 - Aspen, Cmpt. Review Upland Deciduous Density Reserves Mixed Pine Proposal with Conifer Pole

Prescription Clearcut with reserves. Remove aspen, white birch and balsam. Remove 1/2 of sawtimber size/quality oak in the SE corner of the stand.

Maintain all other smaller diameter red oak. Mark red pine and white pine to cut, retaining a component of each. Retention - individual tree Specs:

retention, not to exceed 40 sq ft of BA. Buffer the "bog" area to the south (buffer of 25 ft).

Difficult access due to steep, sandy approach to Co Rd 407. Check into permission from Luce Co Road Commmision to deck along Co Rd ROW Other_ Comments:

near west end of the stand where cleared ROW is wide.

<u>Next</u>

Regeneration check per work instructions. Acceptable regen of aspen with mixed pine and oak.

Steps:

Proposed Start Date: 10/01/2014

Total Treatment

380.3 **Acreage Proposed:**

Newberry Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 011 a Limiting Factor s Year of Entry 2015 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Objective Method Status Name Density Age Range Type #Type! #Type! **Prescription** Specs: **Other** Comment: <u>Next</u> Steps: <u>Proposed</u> #Type! Start Date:

Total Treatment

Limiting Factor

Acreage Proposed: 0.0

Report 5 – Site Conditions

Newberry Mgt. Unit

Jason Tokar: Examiner

Compartment 011
Year of Entry 2015

Availa	ability for I	Management					
Total	Acres	Acres		Domina	nt Site	e Cond	ditio
Acres	Available	Not Available		No	5C	5B	
23	23		Aspen	23			
194	194		Jack Pine	194			
252	252		Mixed Upland Deciduous	252			
585	585		Natural Mixed Pines	585			
21	21		Paper Birch		21		
373	373		Red Pine	263	44	66	
113	113		Upland Mixed Forest	113			
1,562	1,562		Total Forested Acres	1,431	65	66	
	100%		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
002	Available	5B: Retention for regeneration purposes	66				
	Comments: Stand was harveste	d (thinned/shelterwood) in 198	36. Good	I regeneration becoming e	established.		
003	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	15				
(Comments:						
004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	21				
(Comments:						

Report 5 – Site Conditions

Newberry Mgt. Unit

Jason Tokar: Examiner

Compartment 011
Year of Entry 2015

005 Available

5C: Delay treatment for

29

age/size class diversity or exceptional site quality

Comments:

Treatment removed per request of wildlife division to maintain pine marten habitat connectivity due to other prescribed treatments within the compartment.

Newberry Mgt. Unit Compartment: 011

Year of Entry: 2015



Report 6 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Newberry Mgt. Unit Compa

Compartment: 011 Year of Entry 2015



Report 7 - 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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area			
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ey are relatively deep, have substantial the state. Such lakes are established by			
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions and those of other coldwater fish spectyear to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial			
SCA	Habitat Area	An area that provide some specific need for the life cycle of wild and Waterfowl Production Areas, deer wintering complexes in loopenings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened o covered by species recovery plans that are developed in cooper	owland conifer communities, grassland nabitat designated for recovery of r piping plover areas) in that they are more or endangered species, and are not			
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources PA 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two explover Habitat.	d endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed			

s t	Newberry Mgt. Unit			Report 8	Forested	Stands Compartment: 011 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42210 - Natural Red Pine	High Density Log	11.4	98	111-140	Red Pine with jack pine and a component of white pine. A few pockets of higher jack pine BA.
2	42220 - Natural Jack Pine	High Density Pole	7.6	64	111-140	Jack pine with a good component of red pine. Also white pine and red maple. Pockets that are thicker to red pine. Some mortality in jack pine.
3	42290 - Natural Mixed Pine	High Density Sapling	26.2	27		Stand was harvested as sale #78-84. Cut in 1986. Regenerating to jack pine with a component of red pine, white pine, red maple and white birch. Some residual red pine, white pine, white birch and red oak throughout the stand. Heavier residual in areas.
4	42290 - Natural Mixed Pine	High Density Pole	34.9	65	81-110	Same species components as adjacent stand to south of Co Rd 407. Diameters appear to be slightly smaller. Pockets of jac pine. Some larger diameter red pine and jack pine throughout.
5	42290 - Natural Mixed Pine	High Density Pole	20.8	67	111-140	Pole size red pine and jack pine with components of larger red pine and jack pine. Component of red oak, aspen and white birch as well. Mortality showing in jack pine, aspen and white birch.
6	42290 - Natural Mixed Pine	High Density Sapling	74.3	7		Stand harvested as sale #007-05-01. Complete in 2006. Scarification after sale was complete. Jack pine regeneration filling in nicely, 4-7 ft tall. Aspen regeneration in pockets, 7-12 ft tall. Red maple regen as well. Residual red pine poles/logs as well as a few red maple and white birch poles.
7	42221 - Natural Jack Pine, Mixed Deciduous	Low Density Sapling	21.7	7		Young jack pine with red maple, and pole size red pine and white birch. Stand was harvested and scarified in 2006 (sale #007-05-01). Jack pine 3-5 ft tall, red maple stump sprouts 3-7 ft tall, and residual red pine and white birch left from harvest.
8	42220 - Natural Jack Pine	High Density Sapling	84.0	16		Stand was cut in 1997, sale #022-95. Regeneration of young jack pine and aspen. Pockets of residual mature red pine throughout. Residual white birch left as well. Occasional oak.
9	4140 - Other Upland Deciduous	High Density Pole	20.9	83	81-110	White birch stand with aspen, red maple, white pine and red pine. More white pine in the eastern portions of the stand. Stand borders the south side of the Sucker River. Pockets of pretty nice white birch. Scattered mountain ash near the river.
10	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	15.4	66		Fairly open white birch stand with red pine, white pine, red maple, aspen, red oak and jack pine. Mixed bag of species and ages. Lower quality, short heights. White birch and aspen showing decline and mortality. Stand will likely transition over to a pine stand as the white birch and aspen die out.
11	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	14.4	65	51-80	Aspen stand with a mix of white birch, white pine and red pine. Component of small diameter red maple. Mortality in aspen and white birch. Small diameter and short birch. Aspen tops out at 3 sticks merchantable. South portion of the stand includes a fairly steep ridge.

s t	Newberry	Newberry Mgt. Unit				d Stands Compartment: 011 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	42210 - Natural Red Pine	High Density Log	56.8	89	111-140	Stand cut in 2006 as sale #007-05. Originally part of adjacent stand to the west (J6 last inventory). This portion of the original stand had higher red pine BA and was not opened up enough to promote jack pine regeneration after the sale. Stand is now a red pine stand with a component of white birch, white pine and red maple. Very little red pine or jack pine regeneration. Areas that were opened up after the harvest do have aspen, red pine, and jack pine regeneration.
13	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	24.4	37	1-50	Stand was harvested in 1976. Regenerated to mainly white birch, aspen, balsam and red maple. Residual red pine and white pine. Pockets in stand of more aspen. More balsam and spruce near low ground edge. Very thick stand in most areas. Scattered red oak.
14	4319 - Mixed Upland Forest	Medium Density Pole	113.4	88		Stand has a large amount of variability from one end to the other. Entire stand was a white birch stand last inventory. Much of the birch is dying out in portions of the stand, but is still healthy in other areas. Large diameter white pine and red pine throughout much of the stand. West end of the stand has very little overstory and is thick with balsam and red maple in the understory. Birch is dying out on teh ridges closest to the lakeshore. Stand may end up converting to a mixed pine/conifer stand as the aspen and birch die out.
16	42210 - Natural Red Pine	High Density Log	29.2	81	141-170	Stand was thinning in 1986, sale #083-84. Good diameters, shorter heights. Some tops are starting to look "weak". Wp component mainly along the shore of Rainy Lake.
19	42290 - Natural Mixed Pine	High Density Pole	44.7	68	111-140	Mixed stand of red pine and jack pine. Some older larger diameter red pine throughout. Good component of red oak and aspen. Most of the aspen is in the eastern portion of the stand. Aspen showing decline, white birch is dying out. Pockets of more red pine and pockets thicker to jack pine.
20	42220 - Natural Jack Pine	High Density Sapling	26.1	27	1-50	Sale #83-84. Young jack pine with a component of red pine, white birch and spruce. More spruce near lower ground areas. Some open grown, wolfy jack pine throughout.
21	42290 - Natural Mixed Pine	High Density Pole	27.8	68	111-140	Mixed stand of red pine and jack pine. Some older larger diameter red pine throughout. Good component of red oak and aspen. Most of the aspen is in the eastern portion of the stand. Aspen showing decline, white birch is dying out. Pockets of more red pine and pockets thicker to jack pine.
25	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	107.7	38	1-50	Stand harvested in 1975. Regenerating to a mixed stand of white birch, aspen, balsam and red maple. Components of white pine, red pine and spruce. Some residual, larger diameter aspen, red maple, red pine and white pine. Very thick stand, some areas still mainly a sapling size stand. Northern 1/3 of the stand is more aspen than birch.
26	4136 - Aspen, Mixed Conifer	High Density Sapling	17.0	34		Stand harvested 30+ years ago. Good aspen regeneration with a component of red maple, white birch, and balsam. Pole size red pine and white pine also present. Stand is has some rolling topography.

S t	Newberry Mgt. Unit			Report 8	– Forested	Stands Compartment: 011 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	42290 - Natural Mixed Pine	High Density Pole	23.9	68		Mixed stand of red pine and jack pine. Some older larger diameter red pine throughout. Good component of red oak. Scattered aspen and white birch. White birch is dying out. Pockets of more red pine and pockets thicker to jack pine. Northern portion of the stand is larger diameter red pine.
31	42221 - Natural Jack Pine, Mixed Deciduous	High Density Pole	8.1	37		Stand was cut in 1976. Regenerated to jack pine, aspen and birch. Mainly jack pine but some pockets thicker to aspen and birch. Some scattered large diameter red pine and white pine remaining from harvest. Small diameter pole stand, transitioning from saplings to poles.
33	42290 - Natural Mixed Pine	High Density Log	69.9	104	81-110	Stand was set up as the "Couch Blind Sale", 036-95. The sale was not completed. The producer was cutting randomly throughout the stand. Most of the jack pine and aspen was cut in areas, but nothing was cut in other areas. Therefore, the stand has variability in canopy closure and species composition throughout. Various age classes within the stand as well. Large, older red pine and white pine mixed with younger red, white and jack pine. Also young balsam, spruce, maple and aspen in areas.
35	42290 - Natural Mixed Pine	High Density Pole	69.2	68	141-170	
36	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	31.6	34		Stand was cut in 1979. Stand is regenerating to aspen, white birch, red maple, balsam, white pine, red pine and spruce. Component of mature, large diamater white pine that was left after the harvest. Dominant stand/featured stand is the regenerating stand of aspen and birch. Stand is beginning to transition from a sapling stand to a small pole stand.
37	42210 - Natural Red Pine	High Density Log	74.6	90	111-140	Stand thinned in 1984-1986. Sales #82-84 and #38-85. Nice log sized red pine with a white pine component. Scattered red maple and red oak. Pockets of small diameter black spruce. Higher BA in the center of the stand near the two track road entering the stand.
38	4136 - Aspen, Mixed Conifer	High Density Sapling	6.4	28		Stand harvested in 1985, sale #025-85. Regenerating to mainly aspen with a component of balsam, white pine, red maple and white birch. Some red pine regeneration as well.
39	42210 - Natural Red Pine	High Density Log	39.7	90	111-140	Stand thinned in 1984-1986. Sales #82-84 and #38-85. Nice log sized red pine with a white pine component. Scattered red maple and red oak. Pockets of small diameter black spruce. Higher BA in the center of the stand near the two track road entering the stand.
40	42210 - Natural Red Pine	High Density Log	9.2	90	111-140	Stand thinned in 1984-1986. Sales #82-84 and #38-85. Nice log sized red pine with a white pine component. Scattered red maple and red oak. Pockets of small diameter black spruce. Higher BA in the center of the stand near the two track road entering the stand.
41	42210 - Natural Red Pine	High Density Log	71.4	83	141-170	Stand was harvested as sale #80-84 (east half) and sale #81-84. Nice red pine, good diameters and heights. Pockets of shorter, limbier red pine. Good established regeneration (red pine, white pine, maple, spruce) 2-3 inches in diameter.

s t	Newberry Mgt. Unit			Report 8	– Forested	d Stands Compartment: 011 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	42290 - Natural Mixed Pine	High Density Sapling	132.4	28	1-50	Stand was harvested in 1985 as sale #080-84. Northern portion was harvested as sale #82-84 also in 1985. Combining two old stands into one. Same species component and same age. Jack pine regenerating very well. Component of red pine and white pine regeneration as well. Both red pine and white pine regeneration is patchy. Regenerating jack pine is the featured stand. Good component of mature red pine and white pine that were left after the harvest. Pockets throughout stand of thicker red pine and white pine overstory (R8). Quality in mature pine ranges from shorter trees to taller utility pole quality. Rolling topography throughout the stand.
43	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	38.7	88		Mixed stand of white birch, aspen, white pine, red pine and red maple. Good red oak component. Much of the birch is dying out of the stand or is dead already. Aspen showing signs of decline as well. Good thick regeneration of all species. Understory is thick throughout most of the stand. Good white pine regeneration. Stand appear to be slowly converting to white pine and red pine over time.
44	42260 - Natural Pine, Mixed Deciduous	Medium Density Log	61.0	87	81-110	Red pine stand with a good component of red oak, white pine. White birch, aspen and red maple mixed in. Farily open canopy, thick understory in many areas. Possible management in 10-20 yrs. White birch dying out of stand.
46	42210 - Natural Red Pine	High Density Log	66.3	95	111-140	Stand was thinned as sale #82-84. Completed in 1986. Red pine with white pine and red oak component. Large diameter red pine and white pine. Good advanced regeneration of red pine, white pine, maple, balsam, spruce and jack pine. Layer of 5-10 ft tall red pine, white pine and jack pine as well. Pockets of mature 14-16 inch red pine and white pine. Southern portion of the stand has about 10-12 acres of thicker red pine, very "park like", high BA (180 sq ft).
47	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	19.7	85	141-170	Mlxed stand of large diameter aspen clones/pockets, mainly on the east end of the stand, along with red pine and red oak along the ridges near Co Rd 407. Component of white birch as well. Aspen is mature and birch is beginning to die out of the stand.
49	42210 - Natural Red Pine	Medium Density Log	14.7	95	81-110	Large diameter red pine with a good component of small diameter spruce, mainly in the understory. Stand is fairly open. Hold stand and treat in 10 years.

42220 - Natural Jack

Pine

50

High Density Sapling

46.5

36

1-50

Stand was harvested in 1976, permit #2-75. Stand scarified in 1977. Nice jack pine regeneration. Scattered red pine log/pole component throughout. Component of red pine regeneration as well.

Compartment: 011 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
15	50 - Water	12.6	No	Unspecified	Rainy Lake
17	6225 - Bog	8.7	No	Unspecified	
18	6229 - Mixed lowland shrub	65.9	No	Unspecified	Sucker River and surrounding lowland brush corridor
22	710 - Sand, Soil	1.8	No	Unspecified	Rainy Lake Sand/Gravel pit
23	710 - Sand, Soil	58.4	No	Unspecified	Lake Superior shoreline, beach and sand dunes
24	11 - Low Intensity Urban	28.9	No	Unspecified	County Road 407 and cleared ROW
27	6225 - Bog	17.8	No	Unspecified	Bog type ground, filling in with trees, fairly dry during summer of 2013. Center portion of the stand is drier and has more open grown jack pine filling in. Willow and tag alder as well.
29	50 - Water	5.3	No	Unspecified	Northern most of the Ready Lakes
30	6229 - Mixed lowland shrub	17.8	No	Unspecified	
32	50 - Water	3.0	No	Unspecified	One of the Ready Lakes.
34	6224 - Treed Bog	5.2	No	Unspecified	
45	6220 - Alder/willow	2.5	No	Unspecified	
48	6239 - Mixed Emergent Wetland	11.5	No	Unspecified	