

Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63004 Entry Year 2017 Acreage: 1,871 County Lake

Management Area: Lake County Outwash

Revision Date: 2015-06-12

Stand Examiner: Mike Lesinski

Legal Description:

T20N, R12W, Sec. 8, 9, 16, 17

Identified Planning Goals:

This compartment falls under the direction of Management Area 29 in the Northern Lower Peninsula Regional State Forest Management Plan. More specifically, the plan states that vegetation management in the Lake County Outwash management area will provide forest products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period will focus on harvesting older jack pine and balancing the age-class distribution of aspen.

Soil and topography:

The major soil types are Graycalm, Rubicon and Grayling sands.

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

All four sections of this compartment have private parcels with a fairly large concentration of large and small ownerships clustered in the middle of the compartment.

Unique Natural Features:

No known unique features.

Archeological, Historical, and Cultural Features:

No known archeological, historical, or cultural features

Special Management Designations or Considerations:

No special designations other than NLP MA 29.

Watershed and Fisheries Considerations:

No fisheries considerations.

Wildlife Habitat Considerations:

This compartment is in the Newaygo Outwash Plain Ecosystem. LTA 5111 makes up most of the compartment. The far northeast edge of the compartment falls into the Highplains Ecosystem, LTA 2221. Soils in LTA 5111 are associations of Rubicon-Grayling, Grayling-Graycalm, or Plainfield sands, all of which are excessively drained. Soils in LTA2221 are Rubicon-Montcalm-Graycalm associations. In LTA 5551, historically, pre-settlement vegetation was variable, with upland conifers dominating most of the land surface. Most of these conifer forests were dependent upon wild fires for establishment and persistence. Fire prone outwash plains supported oak/pine barrens, pine barrens, and upland prairie along with large expanses of jack pine, red pine/jack pine, and red pine/oak forests. In LTA 2221, historically, forests were primarily beech and sugar maple with small inclusions of beech and white pine, or white pine, beech and red maple. Timber sale specifications to benefit wildlife (where applicable) will include brush pile creation along lowland edges, protection of mast-bearing wildlife shrubs and ironwood, protection of standing dead snags, and creation of drumming logs (1-2 per acre) and woody debris (tops or whole trees) in aspen cuts. Featured species of special interest are marten, eastern massasauga rattlesnake, snowshoe hare, ruffed grouse, and deer. (E. Victory 6/2015)

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and post-glacial alluvium and minor end moraine of coarse textured till. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan is quarried for gypsum in other areas of the State. A gravel pit is located four miles to the southeast and potential is considered good along the east edge. The nearest oil and gas production is at Peacock Field located eight miles to the southwest. The Field produced nearly 1,7000,000 BO from the Traverse Limestone. The compartment is not currently leased for oil and gas exploration.

Vehicle Access:

A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR.

Survey Needs:

No known survey needs at this time.

Recreational Facilities and Opportunities:

The Lincoln Hills route, Lincoln Hills motorcycle trail, and snowmobile trail #350 are located within the western and northern edges of this compartment. Additionally, Lincoln Hills route and Lincoln Hills motorcycle trail, along with snowmobile trail #35 runs East/West bisecting the south-central portion of this compartment. Trail protection specifications should be included in any timber sale contract potentially impacting these recreational facilities. Specifically, appropriate measures identified in DNR Policy & Procedures "32.22XX" (Best Management Practices for Forest and Wildlife Management Adjacent to Recreational Trails) should be taken into consideration. Illegal ORV use has been identified within this compartment. Funding to restore illegal ORV damaged areas is potentially available from the ORV program. Dispersed camping occurs primarily during the hunting season in this compartment. (T.M.N. 12/16/14)

Fire Protection:

Access to the compartment is good with the many county roads. Due to the fuel types, along with ORV trails and remote camping, fire ignitions are a concern. This compartment has an urban interface concern.

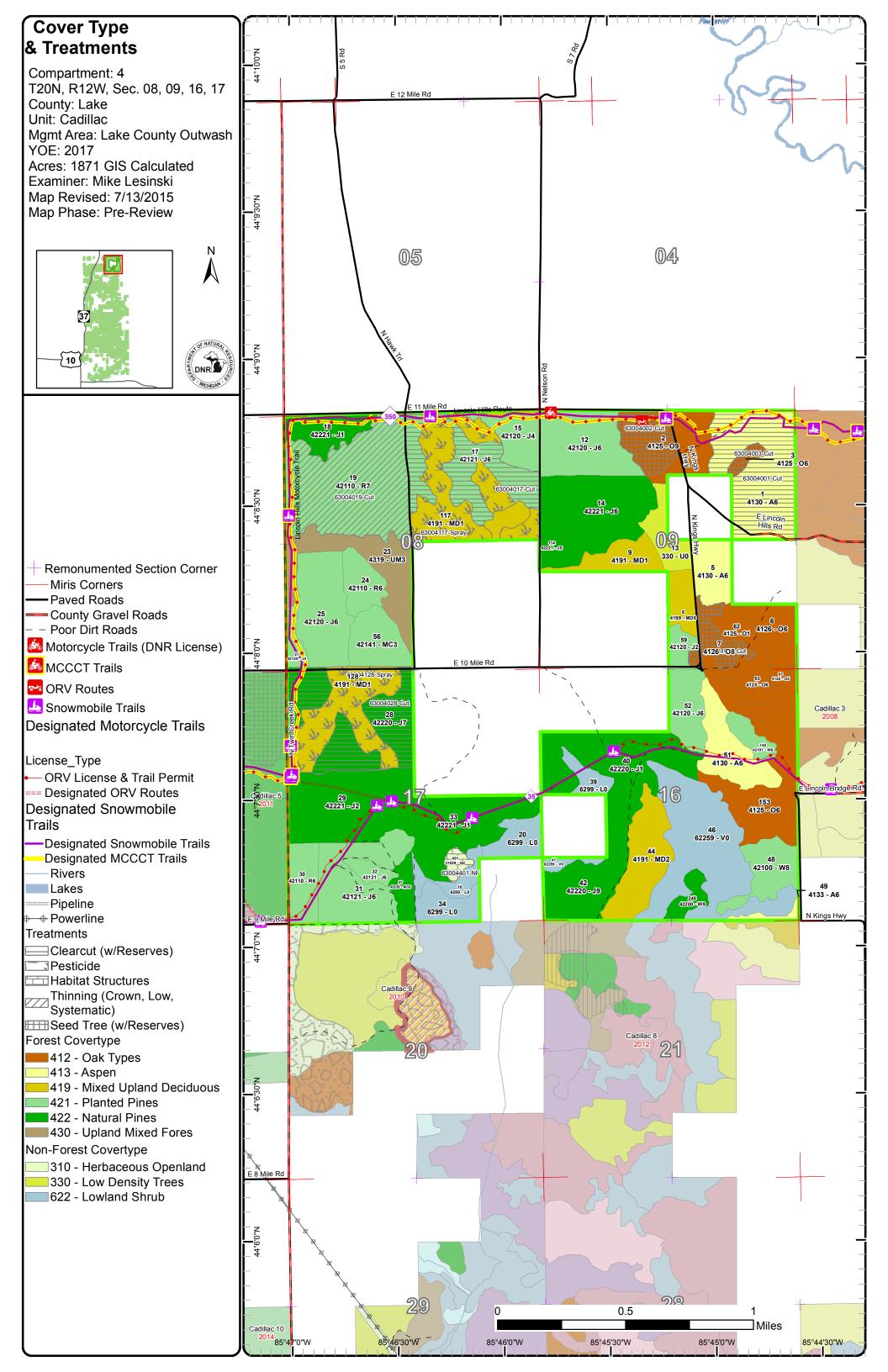
Additional Compartment Information:

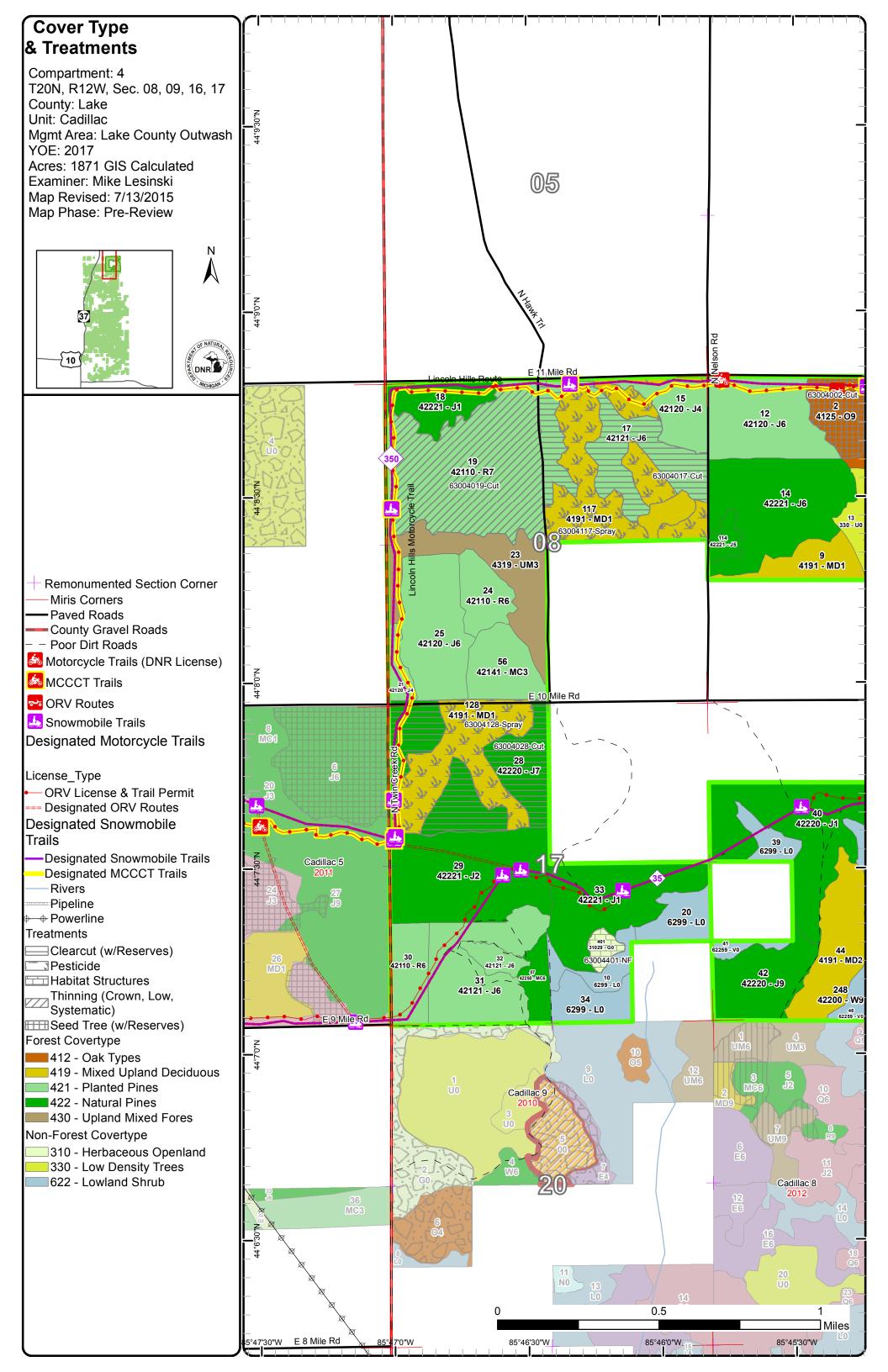
The following reports from the Inventory are attached:

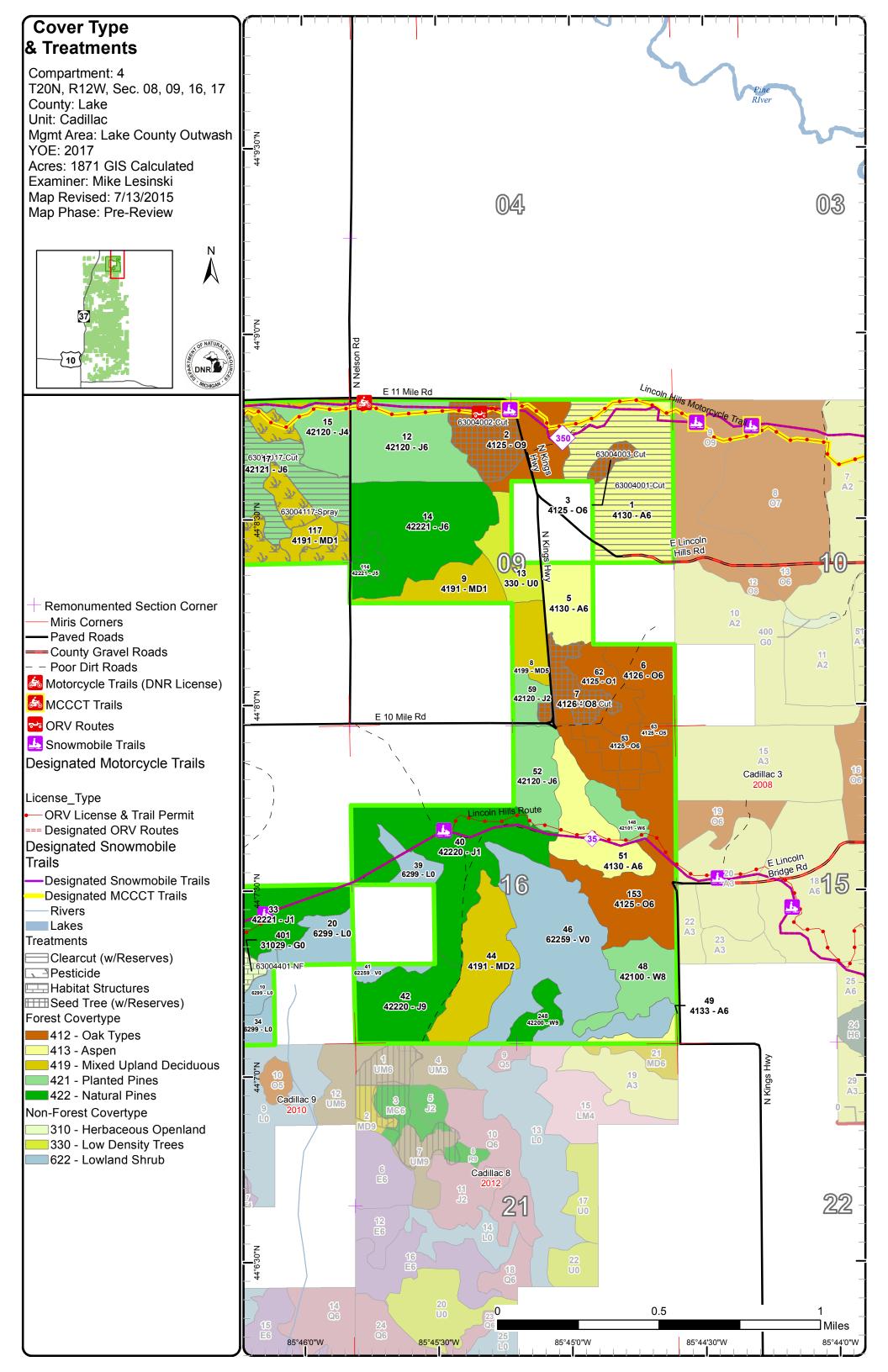
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

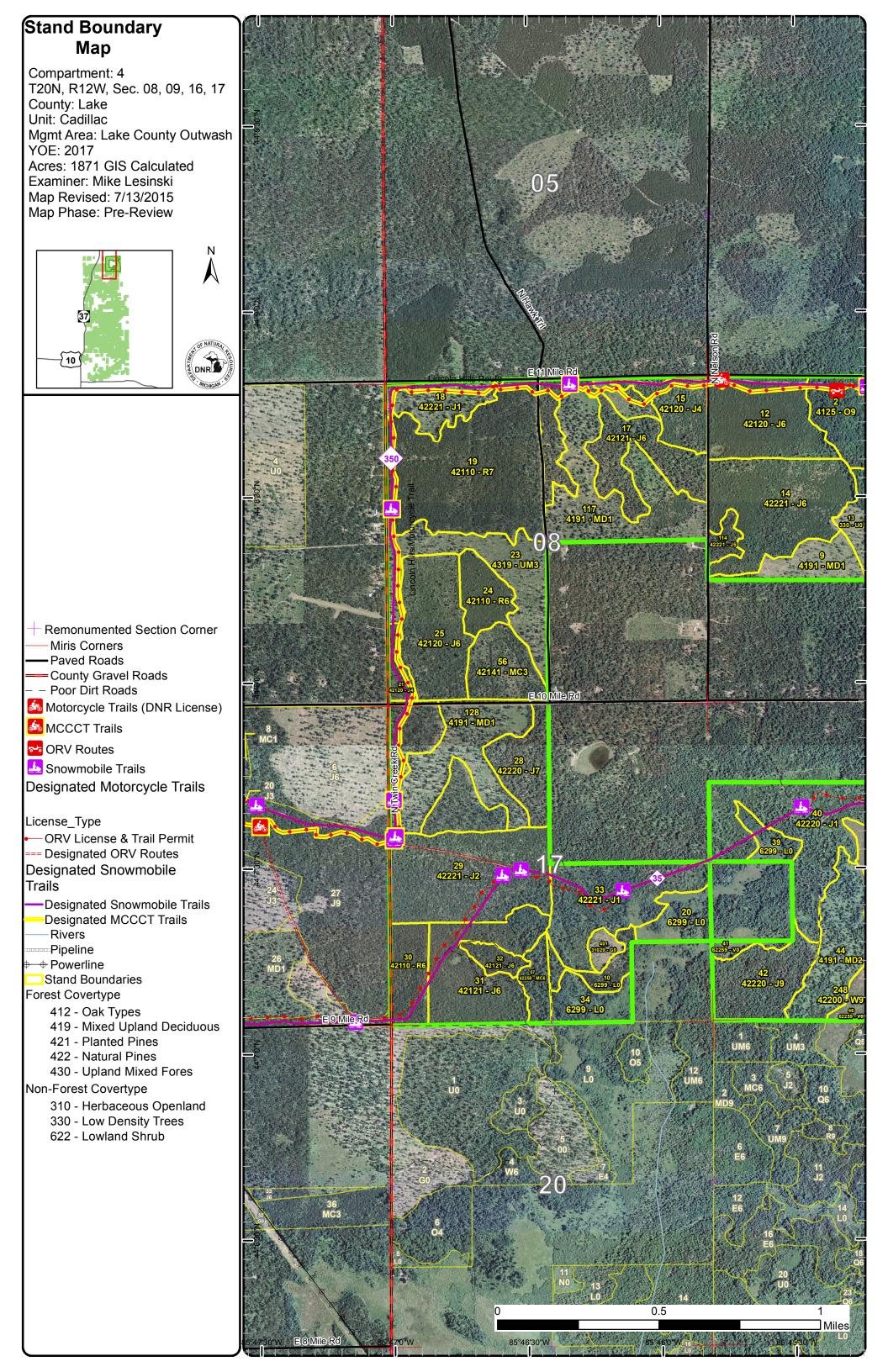
The following information is displayed, where pertinent, on the attached compartment maps:

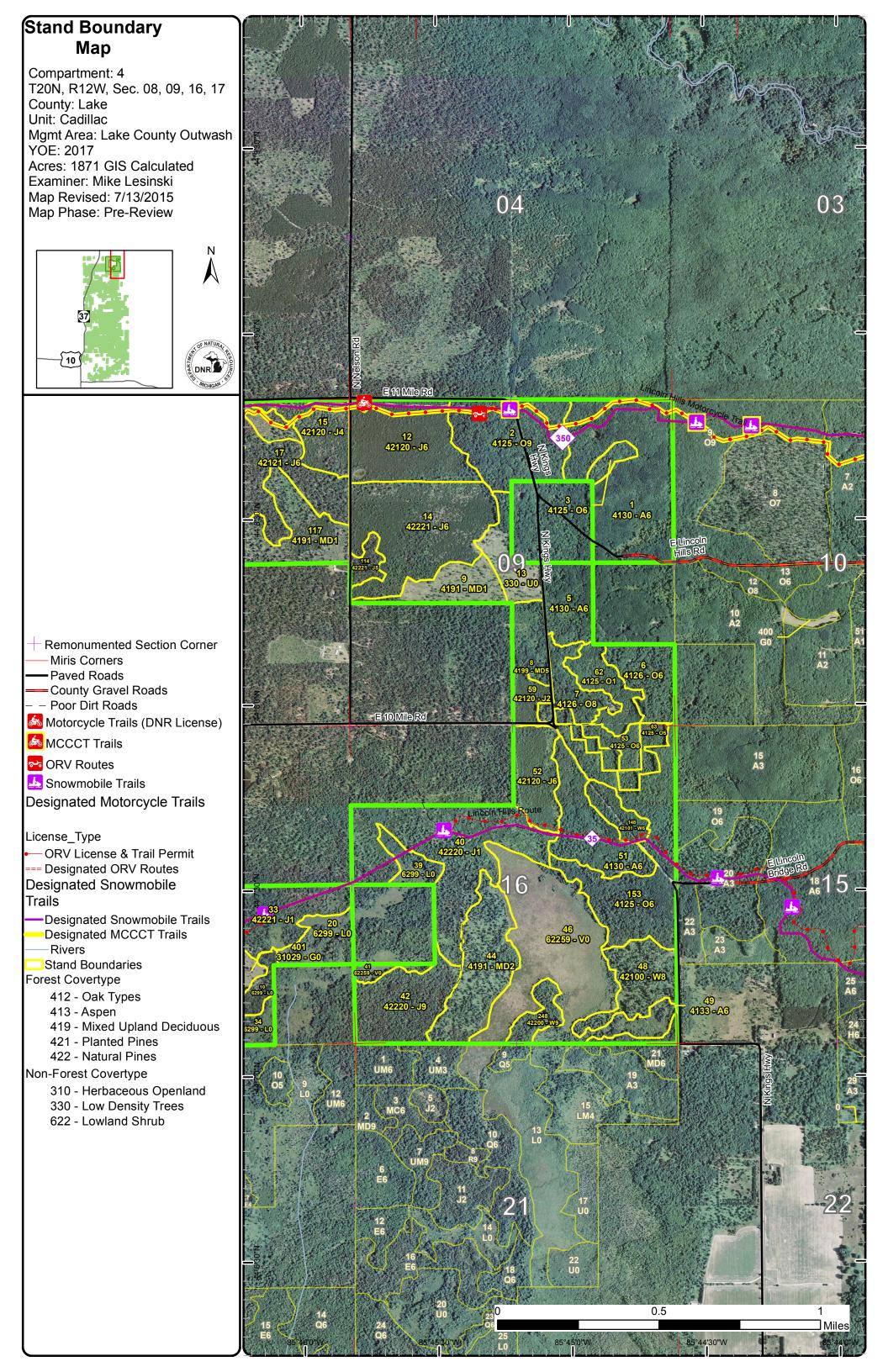
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

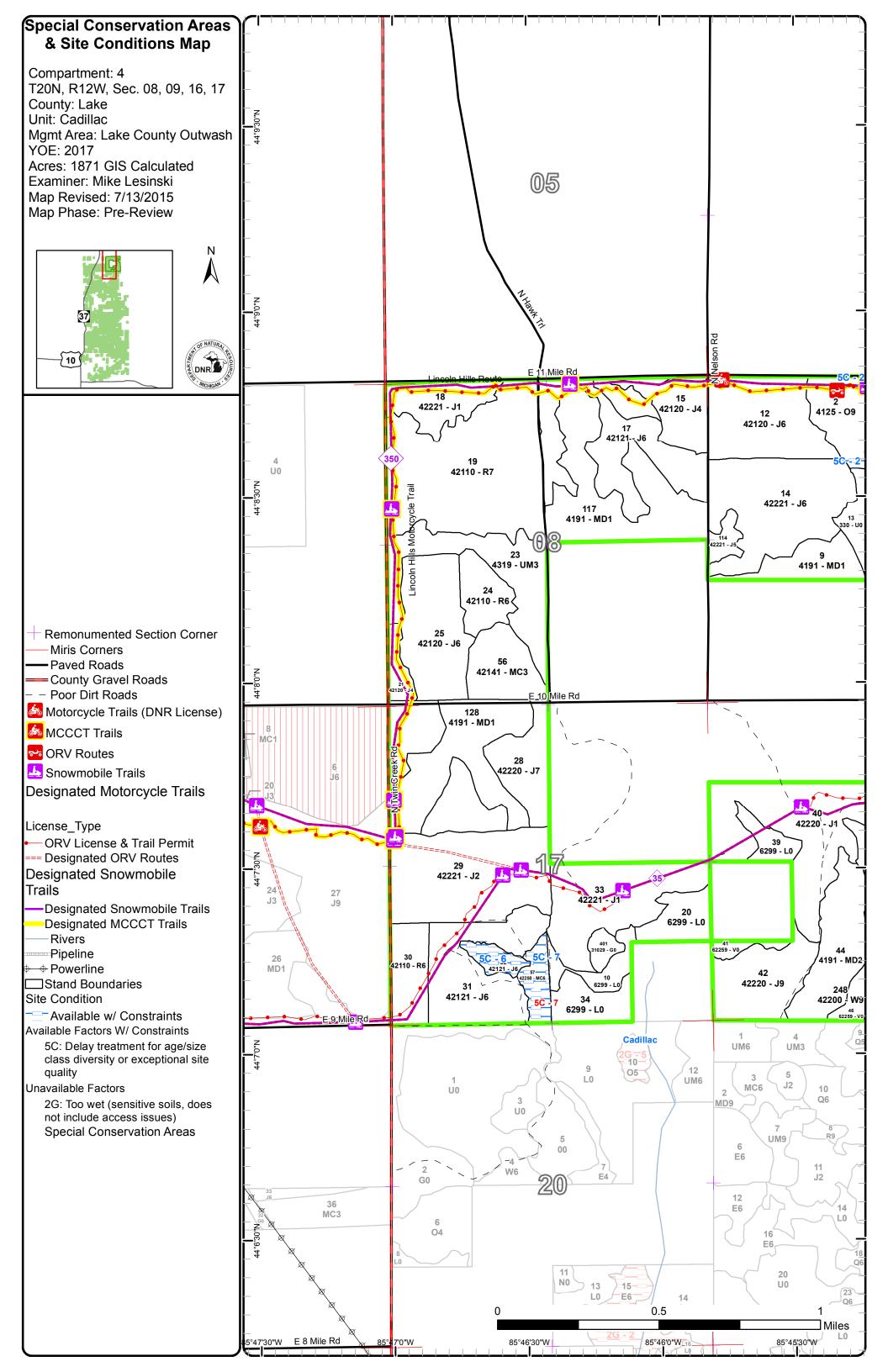


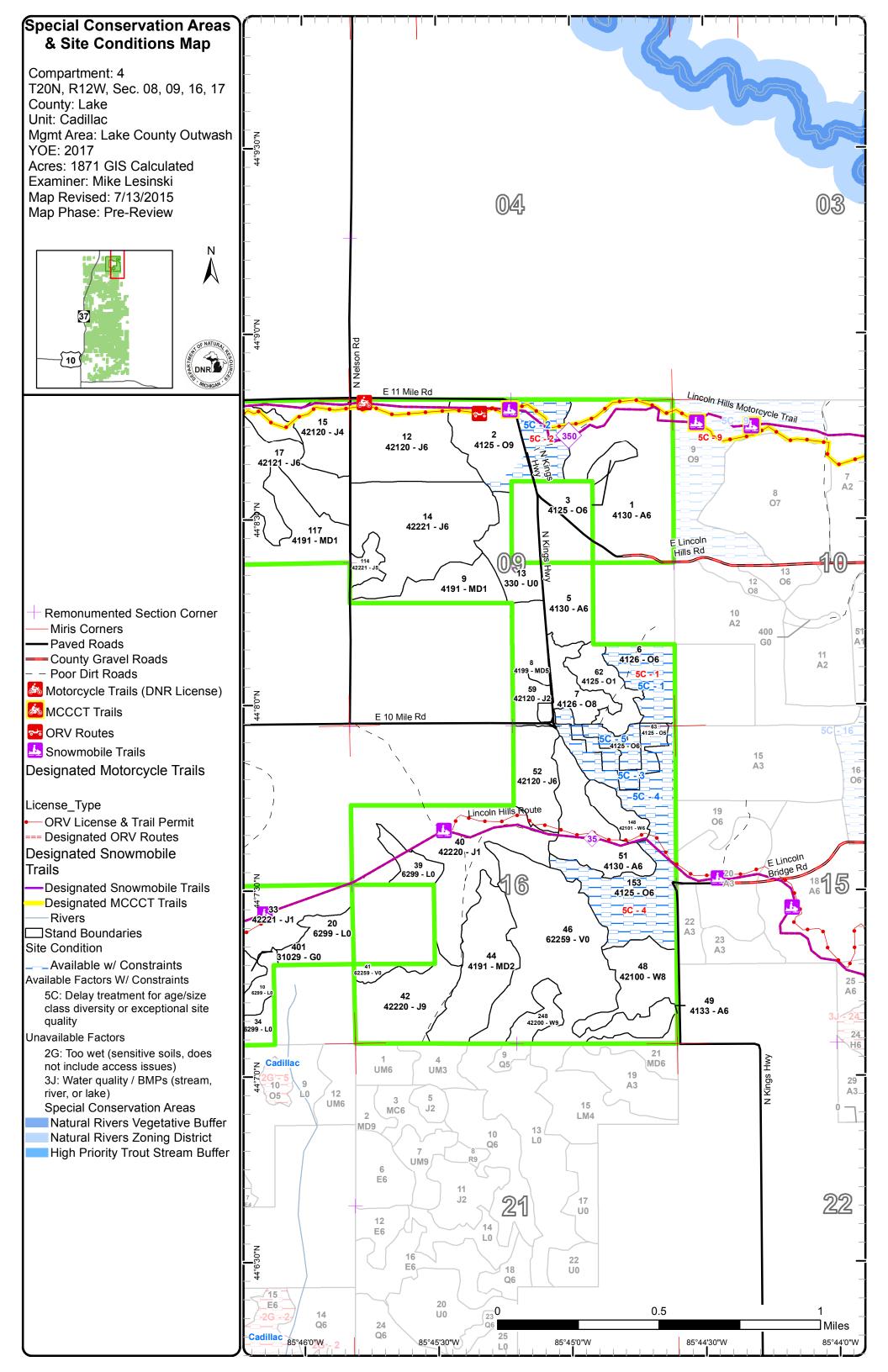












Compartment 4

Year of Entry 2017



Cadillac Mgt. Unit
Mike Lesinski : Examiner

Age Class

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Aspen	0	0	0	37	112	5	0	0	/ ·	0	0	0	0	0			<u> </u>	\ \sqrt{3}	154
Bog	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111
Herbaceous Openland	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Jack Pine	0	25	340	148	118	119	0	8	0	0	0	0	0	0	0	0	0	0	758
Low-Density Trees	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Shrub	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
Mixed Upland Deciduous	0	211	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	227
Natural Mixed Pines	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
Oak	0	0	35	0	0	0	0	0	0	43	144	0	0	0	0	0	0	0	222
Planted Mixed Pines	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Red Pine	0	0	0	20	144	0	0	0	0	0	0	0	0	0	0	0	0	0	164
Upland Mixed Forest	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
White Pine	0	0	0	11	0	0	0	0	0	11	0	0	0	0	0	0	0	29	51
Total	199	289	375	244	390	136	0	8	0	54	144	0	0	0	0	0	0	29	1868



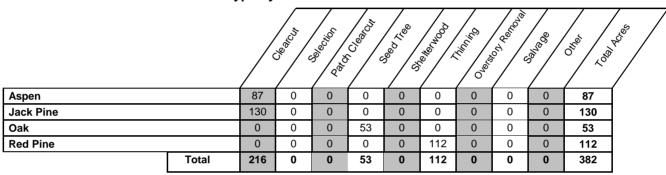
Report 2 – Treatment Summary

Cadillac Mgt. Unit

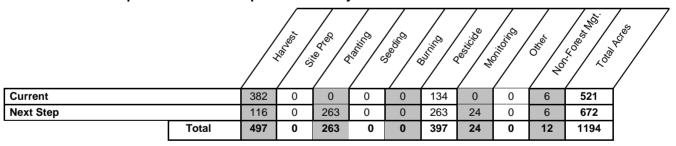
Compartment 4 Year of Entry: 2017 **Total Compartment Acres: 1,871 Acres of Harvest**

> Commercial Harvest - 0 Harvests with Site Condition - 0 Next Step Harvest - 116 Habitat Cut - 140

Cover Type by Harvest Method



Proposed and Next Step Treatments by Harvest Method



Cadillac Mgt. Unit Report 4 -- Treatments Compartment: 4 Year of Entry: 2017

S

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	63004001-Cut	86.6	4130 - Aspen	Poletimber Well	37	111- 140	Harvest	Clearcut with	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Final harvest aspen. Leave some scattered oak and small islands for retention where applicable. Protect vernal ponds and ORV trails.

Specs:

Next Step Treatments:

Acceptable Aspen/Mixed upland deciduous stand.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

63004002-Cut 29.0 4125 - Black, N. Pin Sawtimber 95 81-110 Harvest Seed Tree with 4125 - Black, N. Even-Aged Proposal

Oak Well Retention Pin Oak

Habitat Cut: No Site Condition:

Prescription Harvest to 10 to 20 BA. Leave a representative mix of species. Protect ORV trails as needed.

Specs:

Next Step **Treatments:**

Acceptable Oak/Upland deciduous mix.

Regen:

Other Retention: Residual BA Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

63004003-Cut 5.6 4125 - Black, N. Pin Poletimber 95 81-110 Seed Tree with 4121 - Oak, Even-Aged Proposal Harvest Retention Oak Aspen

Site Condition:

Habitat Cut: No Prescription Harvest to 10 to 20 BA. Leave a scattered oak where applicable.

Specs:

Next Step **Treatments:**

Acceptable Oak / aspen mix.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

63004007-Cut 18.6 4126 - White, Sawtimber 89 111-Seed Tree with 412 - Oak Types Even-Aged Proposal Harvest

Retention

Black, N. Pin Oak Medium 140

Habitat Cut: No Site Condition:

Prescription Final harvest to 10 to 20 BA. Leave a representative mix of species.

Specs:

Next Step Treatments:

Acceptable Oak / mixed upland deciduous stand.

Regen:

Other Retention: Residual BA. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Cadillac Mgt. Unit Report 4 -- Treatments Compartment: 4 s Year of Entry: 2017 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Method Name CoverType Density Age Range Type Objective Structure **Status** d 63004017-Cut 59.5 42121 - Planted Poletimber 81-110 Clearcut 4211 - Planted 17 36 Harvest Even-Aged Proposal Jack Pine, Mixed Well Red Pine Deciduous **Habitat Cut: No Site Condition:** Prescription Final harvest. Chip tops & keep stumps low for replanting. Protect ORV trails. Specs: Next Step Pesticide, Skidder/Mechanical; Planting, Initial Plant Treatments: Acceptable Red pine with scattered oak and jack pine. Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2016 42110 - Planted 63004019-Cut 112.4 Sawtimber 37 141-Systematic 42110 - Planted Even-Aged Proposal Harvest Red Pine 170 . Thinnina Red Pine Poor **Habitat Cut: No Site Condition:** Prescription Third row thin planted red pine. Final harvest jack pine / oak area on the east side of the stand. Leave scattered jack pine and oak (10 BA) Specs: where final harvest occurs. Next Step Treatments: Acceptable Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2016 63004028-Cut 42220 - Natural 4211 - Planted 70.1 Sawtimber 46 111-Harvest Clearcut Even-Aged Proposal Jack Pine Poor 140 Red Pine **Habitat Cut: No Site Condition:** Prescription Final harvest. Chip tops and keep stumps low for replanting. Specs: Pesticide, Skidder/Mechanical; Planting, Initial Plant Next Step Treatments: Acceptable Planted red pine with a small mix of oak and jack pine. Regen: Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

117 63004117-74.3 4191 - Mixed Sapling Immatu Pesticide Skidder/Mechanic 4211 - Planted Even-Aged Proposal

Upland Deciduous Poor Red Pine Spray re al

with Conifer

Habitat Cut: Yes Site Condition:

Prescription Pesticide or mechanical site prepfor planting to red pine.

Specs:

Pesticide, Other - Specify; Planting, Initial Plant Next Step

Treatments:

Acceptable Regen:

Other Old next step comments:

Comment:

10/1 /2019 **Proposed Start Date:**

Cadillac Mgt. Unit Report 4 -- Treatments Compartment: 4 s Year of Entry: 2017 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** Age n Method Objective d Name CoverType Density Age Range Type Structure **Status** 63004128-4191 - Mixed Sapling Skidder/Mechanic 4211 - Planted 128 59.4 5 1-50 Pesticide Even-Aged Proposal **Upland Deciduous** Spray Poor Red Pine with Conifer **Habitat Cut: Yes Site Condition:** Prescription Herbicide or mechanical preparation post harvest of stand 28. Specs: Next Step Pesticide, Other - Specify; Planting, Initial Plant Treatments: <u>Acceptable</u> Regen: <u>Other</u> Old next step comments: Comment: **Proposed Start Date:** 10/1 /2019 5.9 31029 - Grass (OI) Nonstocked Unspec NonForestMgt Brushpile/Woody 310 -Proposal 63004401-NF ified Debris Creation Herbaceous Openland **Habitat Cut:** Yes **Site Condition:** Prescription Habitat cut jack pine to maintain wildlife opening. Create brush piles for small mammals.

Specs:

Next Step

Treatments:

Acceptable Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Total Treatment 521.4 Acreage Proposed:

Report 5 – Site Conditions

Compartment: 4

Cadillac Mgt. Unit

Mike Lesinski : Examiner Year of Entry: 2017

Availa	ability for N	lanagement			
Total	Acres	Acres		Dominar	nt Site Conditions
Acres	Available	Not Available		5C	
155	155	0	Aspen		
111	111	0	Bog		
6	6	0	Herbaceous Openland		
759	751	8	Jack Pine	8	
20	20	0	Low-Density Trees		
62	62	0	Lowland Shrub		
228	228	0	Mixed Upland Deciduous		
12	0	12	Natural Mixed Pines	12	
222	73	150	Oak	150	
28	28	0	Planted Mixed Pines		
165	165	0	Red Pine		
53	53	0	Upland Mixed Forest		
52	52	0	White Pine		
1,871	1,701	170	Total Forested Acres	170	
	91%	9%	Relative Percent		

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	24	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	26	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 5 – Site Conditions

Cadillac Mgt. Unit
Mike Lesinski : Examiner

Compartment: 4
Year of Entry: 2017

3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	16	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	75	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



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				

Mgt. Unit Compartment:
Year of Entry

Report 7 - EXISTING SPECIAL CONSERVATION AREA DETAILS



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

Conservation Type Description
Area

ERA = Ecological Reference Area

HCVA = High Conservation Value Area

SCA = Special Conservation Area

S t	Cadillad	c Mgt. Unit		Report 8	- Forested	Stands Compartment: 4 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Poletimber Well	88.3	37	111-140	Could be harvested.
2	4125 - Black, N. Pin Oak	Sawtimber Well	55.3	95	81-110	
3	4125 - Black, N. Pin Oak	Poletimber Well	5.6	95	81-110	OPIC - FMD: OI Stand Year Origin was 1920
5	4130 - Aspen	Poletimber Well	24.2	39	51-80	OPIC - FMD: OI Stand Year Origin was 1976
6	4126 - White, Black, N. Pin Oak	Poletimber Well	24.3	87	111-140	OPIC - FMD: STAND LEFT AFTER TREATMENT OF REST OF STAND 6 WHICH WAS BROKE OFF INTO STANDS 62 & 63. Per the compartment review of 12/21/2005, TMS to walk through and evaluate success and fail to learn from what works and what does not work.
7	4126 - White, Black, N. Pin Oak	Sawtimber Medium	18.6	89	111-140	STAND LEFT AS VISUAL BUFFER WHEN PATCH CUT DONE IN 1997 SALE 206-97-01. Small stand may be left for age class diversity.
8	4199 - Other Mixed Upland Deciduous	Poletimber Medium	16.3	39	81-110	
9	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	22.8	7	Immature	
12	42120 - Planted Jack Pine	Poletimber Well	55.5	26	Immature	OPIC - FMD: This stand is coming along nicely. There are some Oaks and hardwoods as well as Jack Pine in the stand. According to FTP records from '89, the stand was machine planted with 1037 seedlings/acre.
14	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	77.1	18	81-110	OPIC - FMD: This was a seed tree cut with good JP reproduction.
15	42120 - Planted Jack Pine	Poletimber Poor	23.2	18	Immature	OPIC - FMD: SEED TREE CUT #206-97-01 GENTZ FP. WIND DAMAGE TO JACK PINE SEED TREES AFTER SALE WAS COMPLETE.
17	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	59.5	36	81-110	Stand split in previous harvest, this portion was left unharvested. Stand could be cut, but will likely hold 10 more years. Adjoining stand 117 still looks like a recent harvest.
18	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Poor	25.4	7	Immature	

S t	Cadillad	: Mgt. Unit		Report 8	Forested	Stands Compartment: 4 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	42110 - Planted Red Pine	Sawtimber Poor	120.4	37	141-170	OPIC - FMD: This stand will hold for another entry, I merged Std. 22 and Std. 21. At the next entry the Jack Pine should be harvested. Some of the Red Pine might be thinned to imporve the chances for Oak regeneration. The stand to the east of this stand is scheduled for treatment. The stand has a cylce trail and a snowmobile trail in it. THE STAND BORDERS ON 11 Mi. Rd. There is a stand of Red Pine to the north of this stand and those trees have put on 24" in height in one year. There is an old two-track which passes through this stand and old Std. 21 to the west. I drove the trail and there was NO evidence of ORV usage. On the north side of this trail is the remains of a junk car from the 60's. The car appears to have been here since the stand was planted.
21	42120 - Planted Jack Pine	Poletimber Poor	8.7	45	81-110	this stand is a visual buffer that was left when adjoining stand to the east was harvested. ORV and single track trails cut through stand.
23	4319 - Mixed Upland Forest	Sapling Well	52.6	7	Immature	This stand was cut in spring of 08 by Lutke FP in sale number 630210701 snowmo jack.
24	42110 - Planted Red Pine	Poletimber Well	20.2	22	Immature	Not ready for commercial harvest.
25	42120 - Planted Jack Pine	Poletimber Well	53.7	18	Immature	SEED TREE CUT SALE #218-96-01 BURKE FP; ftp#c63-477 TRENCHED THEN HAND PLANTED 32,000 2-0 JACK PINE BARE ROOT SEEDLINGS WERE PLANTED BY A CREW FROM EXPRESS FORESTRY. 5/14/2001
28	42220 - Natural Jack Pine	Sawtimber Poor	70.1	46	111-140	Adjoins stands that are recently harvested. Leave for next inventory cycle.
29	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Medium	86.1	21	Immature	
30	42110 - Planted Red Pine	Poletimber Well	24.0	34	111-140	
31	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	58.5	34	81-110	
32	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	8.1	64	81-110	OPIC - FMD: Older trees surrounded by a younger JP stand. Trees appear to be doing well, no sign of mortality at time of field work. There was evidence of stand being used by deer. The understory had a mix of Oak, Jack Pine and Black Cherry.
33	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Poor	61.7	16	Immature	STAND TREATED 1998-99 SALE # 209-97-01; SHELTER/SEED-TREE LEFT SOME JP AND OAK ON SITE.
40	42220 - Natural Jack Pine	Sapling Poor	87.8	16	Immature	STAND TREATED 1998-99 SALE # 209-97-01 SHELTERWOOD/SEED TREE CUT. LEFT RESIDUAL OAK AND JP ON SITE.

S t	Cadillac	Mgt. Unit		Report 8	- Forested	Stands Compartment: 4 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	42220 - Natural Jack Pine	Sawtimber Well	40.1	42	111-140	OPIC - FMD: A variety of species exist in this stand. Some discussion should be givento treating this stand. The stand is listed as a J-9 because of the total volume in the stand.
44	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	46.4	7	1-50	
48	42100 - Planted White Pine	Sawtimber Medium	29.3	94	51-80	OPIC - FMD: This stand should have a sale. We can remove all of the Aspen and Red Maple. The White Pine and Red Pine log trees should be cut and release the pulp trees of both species. There is some Blueberry in the stand. The Aspen can come back in pockets where it is and this will produce food and cover for grouse and deer. There is a road into the stand for access. THIS STAND SHOULD BE CUT IN THE WINTER ALONG WITH Std. 148 AND Std. 248. Stand treated with sale #63-29-07-01. 3/18/2015: White pine overstory, with some areas that are thick to red maple and aspen in the understory.
49	4133 - Aspen, Mixed Pine	Poletimber Well	4.9	41	81-110	Could be combined with stand 21 from compartment 8. Surrounded by lowland.
51	4130 - Aspen	Poletimber Well	37.4	28	81-110	
52	42120 - Planted Jack Pine	Poletimber Well	26.1	18	Immature	OPIC - FMD: STAND TREATED SALE # 206-97-01 MALBERG FP ftp#63c-483 trenched then hand planted. 32000 2-0 jack pine bare root seedlings were planted by a crew from Express Forestry. There are oak seedlings as well as stump sprouts spread in the stand. THERE IS A SURVEY POST AT THE NORTHWEST CORNER OF THE STAND.
53	4125 - Black, N. Pin Oak	Poletimber Well	9.0	95	81-110	OPIC - FMD: STAND PARTILLY TREATED IN 1997 PATCH CUT 13 ACRES SALE # 206-97-01 MALBERG FP
56	42141 - Planted Mixed Pine, Mixed Deciduous	Sapling Well	28.4	26	Immature	OPIC - FMD: The stand appears to be a R-2, J-2 with an O-2 oak component. There is some mortality within the stand, some Jack Pine as well as some Red Pine have died. There are areas with some dead seedlings and other areas have grass and cherry. In those areas no evidence of planting remains.
57	42250 - Pine, Oak	Poletimber Well	12.2	44	111-140	OPIC - FMD: Stand is n/o of a 2-track which runs east from Twin Creek Rd. at the s. edge of Sec. 17.
59	42120 - Planted Jack Pine	Sapling Medium	10.0	18	51-80	OPIC - FMD: STAND TREATED SALE # 206-97-01 MALBERG FP. The stand has been planted with Jack Pine and there is an oak component made up of stump sprouts and seedlings coming up in the stand.
62	4125 - Black, N. Pin Oak	Sapling Poor	19.3	18	Immature	OPIC - FMD: BROKE OUT OF STAND #6 AFTER TREATEMENT; CC SALE # 206-97-01 MALBERG FP.
63	4125 - Black, N. Pin Oak	Poletimber Medium	15.5	18	Immature	OPIC - FMD: DIAM CUT TO THIN OAK ; SALE # 206-97-01 MALBERG FP. BROKE OUT OF STAND #6 AFTER TREATMENT

S t	Cadillad	Mgt. Unit		Report 8	- Forested	Stands	Compartment: 4 Year of Entry: 2017		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	MICHIGAN	
114	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Medium	7.0	21	81-110	OPIC - FMD: Are	ea adjacent to road not cut when cut.	Std. 14 was	
117	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	82.9	5	Immature		Treated with sale #63-025-07-01 species. likely to be an oak / jack		
128	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	59.4	5	1-50	was removed ar	en 56 acres of stand 28 were cut. Id an overstory of oak was left. Hothig FP in sale #63-031-07-01.		
148	42101 - Planted White Pine, Mixed Deciduous	Poletimber Well	11.4	28	111-140				
153	4125 - Black, N. Pin Oak	Poletimber Well	74.5	95	81-110				
248	42200 - Natural White Pine	Sawtimber Well	10.9	86	111-140	Stand diffi	cult to access. Surrounded by lo	wland.	

Report 9 - Nonforested Stands

Compartment: 4
Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
10	6299 - Lowland Shrub (OI)	13.0	No	OPIC - FMD: At the west edge of the stand there is some Aspen which is starting to degrade. The area is not large enough for a commercial sale and the stand condition might not take large equipment. Wildlife may want to cut the trees to promote regeneration.
13	330 - Low-Density Trees	19.7	No	Harvested in early winter of 2014.
20	6299 - Lowland Shrub (OI)	18.6	No	OPIC - FMD: At the west edge of the stand there is some Aspen which is starting to degrade. The area is not large enough for a commercial sale and the stand condition might not take large equipment. Wildlife may want to cut the trees to promote regeneration.
34	6299 - Lowland Shrub (OI)	19.7	No	
39	6299 - Lowland Shrub (OI)	10.5	No	OPIC - FMD: OI Stand Year Origin was 1950
41	62259 - Bog (OI)	4.9	No	
46	62259 - Bog (OI)	106.4	No	
401	31029 - Grass (OI)	5.9	Yes	Scattered low density jack pine.