

Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42120 Entry Year 2019 Acreage: 2,801

County Luce

Management Area: Tahquamenon Basin Wetlands

Revision Date: 2017-08-16

Stand Examiner: Jennifer Burnham

Legal Description:

T45N-R09W Sections 2, 3, 10, 11, 14, and 15

Identified Planning Goals:

Retain and improve the integrity of the deeryard while utilizing mature timber resources where commercially feasible.

Soil and topography:

The majority of soils in the compartment are Carbondale, Lupton, and Tawas mucks. Small areas of Kalkaska and Paquin sands are located along the west side of the compartment. The entire area is seasonally ponded during spring run off. Topography is mostly level.

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

The compartment is contiguous in State ownership. Deer hunting is the most prevalent land use for the compartment. Private, non-industrial ownerships border the compartment on the north and west sides. State ownership borders the compartment along the south and east sides. Land use within the compartment has been small scale timber management for deer yard improvement in the past.

Unique Natural Features:

None identified.

Archeological, Historical, and Cultural Features:

None identified.

Special Management Designations or Considerations:

Deer Winter Complex

Watershed and Fisheries Considerations:

Fisheries Values: Good

Fisheries Concerns: This compartment contains the West Branch Sage River which is a designated trout stream. Native Brook Trout exist here and do provide a fishery to those anglers seeking the adventure to hit remote areas. Any treatments in stands adjacent to the river with aspen as a major component should maintain a 300 ft setback to not encourage beaver activity.

Wildlife Habitat Considerations:

Compartment 120 lies in southeastern Luce county in the Seney Sand Lake Plain ecological sub-subsection and is in the Tahquamenon River Basin Wetlands Management Area and white-tailed deer, black bear, gray jay, and snowshoe hare are designated featured species. The entire compartment lies in the Hulbert-Sage River deer wintering complex which supports high numbers of deer during winter months. This small compartment is dominated by lowland types including cedar and swamp conifer with small components of aspen, fir, and swamp aspen/birch. Several small streams and creeks run through the compartment and the west branch of the Sage River makes up the eastern boundary.

Minimal harvest will occur in the compartment due to the existence of deer wintering complex. Harvested stands will not disturb cedar or hemlock and will occur during winter months to benefit wintering deer. Access to some stands will need to occur through private land to not destroy closed conifer canopy. Existing nest and den trees, snags, and woody debris will be maintained in stands where they exist. Species of special interest potentially using this compartment include white-tailed deer, black bear, moose, bobcat, hare, coyote, mink, and otter.

Mineral Resource and Development Concerns and/or Restrictions

Gravel pits are not located in the area. There may be some sand and gravel potential within the compartment but little information about the surface geology is available for the area. Much of the compartment is covered by wetlands, which could limit any sand and gravel development. Limestone is mined at the Hendricks Quarry more than three miles to the

south. The same limestone may be too deep here to be economically mined. There is no known metallic mineral potential in this area, and there is no known potential for economic oil and gas production in the UP.

Vehicle Access:

Extremely poor. No drivable interior roads exist. Old winter roads are throughout the compartment but are over grown in most places.

Survey Needs:

None.

Recreational Facilities and Opportunities:

No recreation facilities. Hunting and wildlife viewing are a couple of recreational opportunities.

Fire Protection:

Large fires are not likely, because of the swamp conifer and lowland hardwood types. Poor access with wheeled equipment will limit suppression activities.

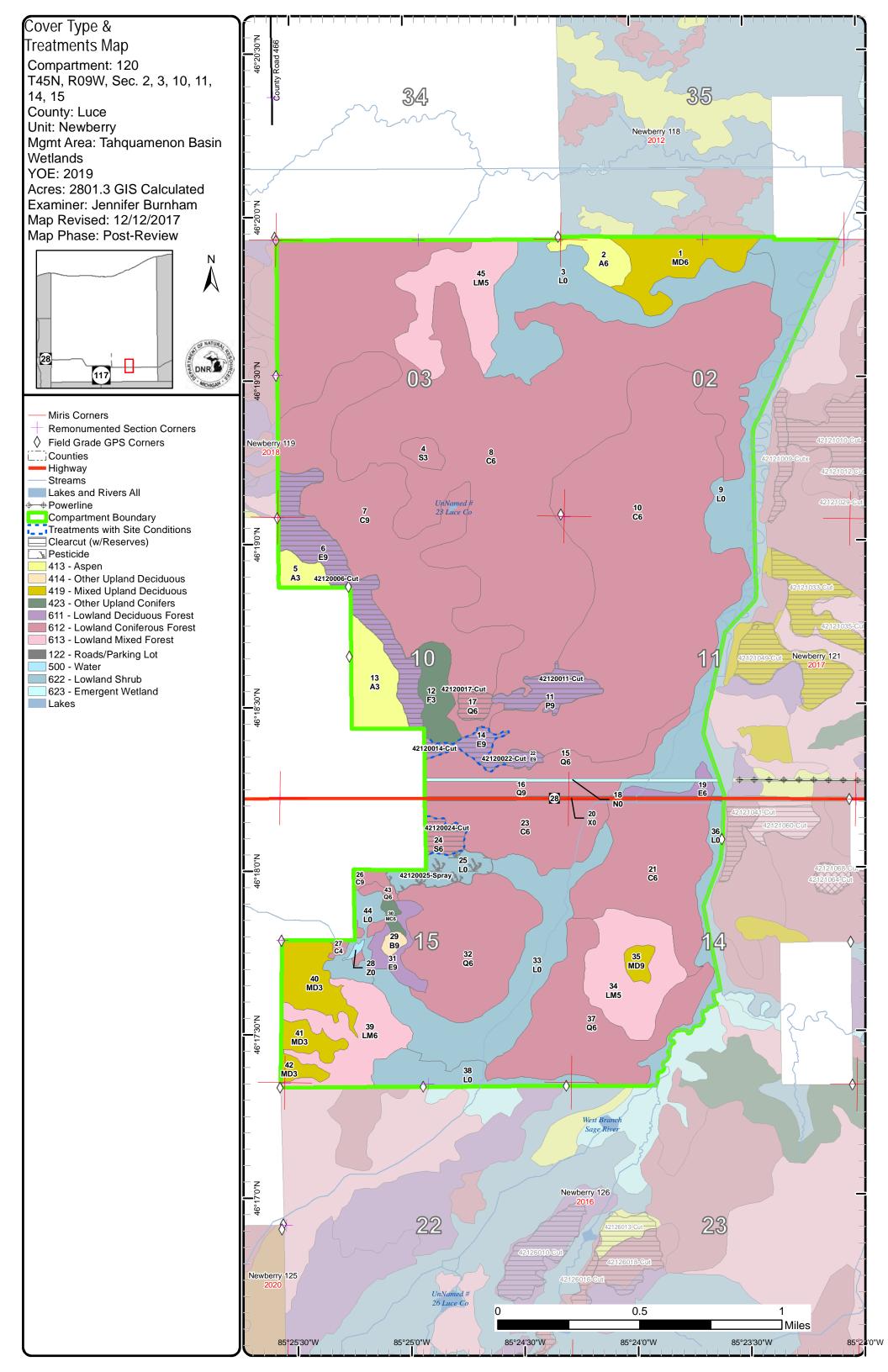
Additional Compartment Information:

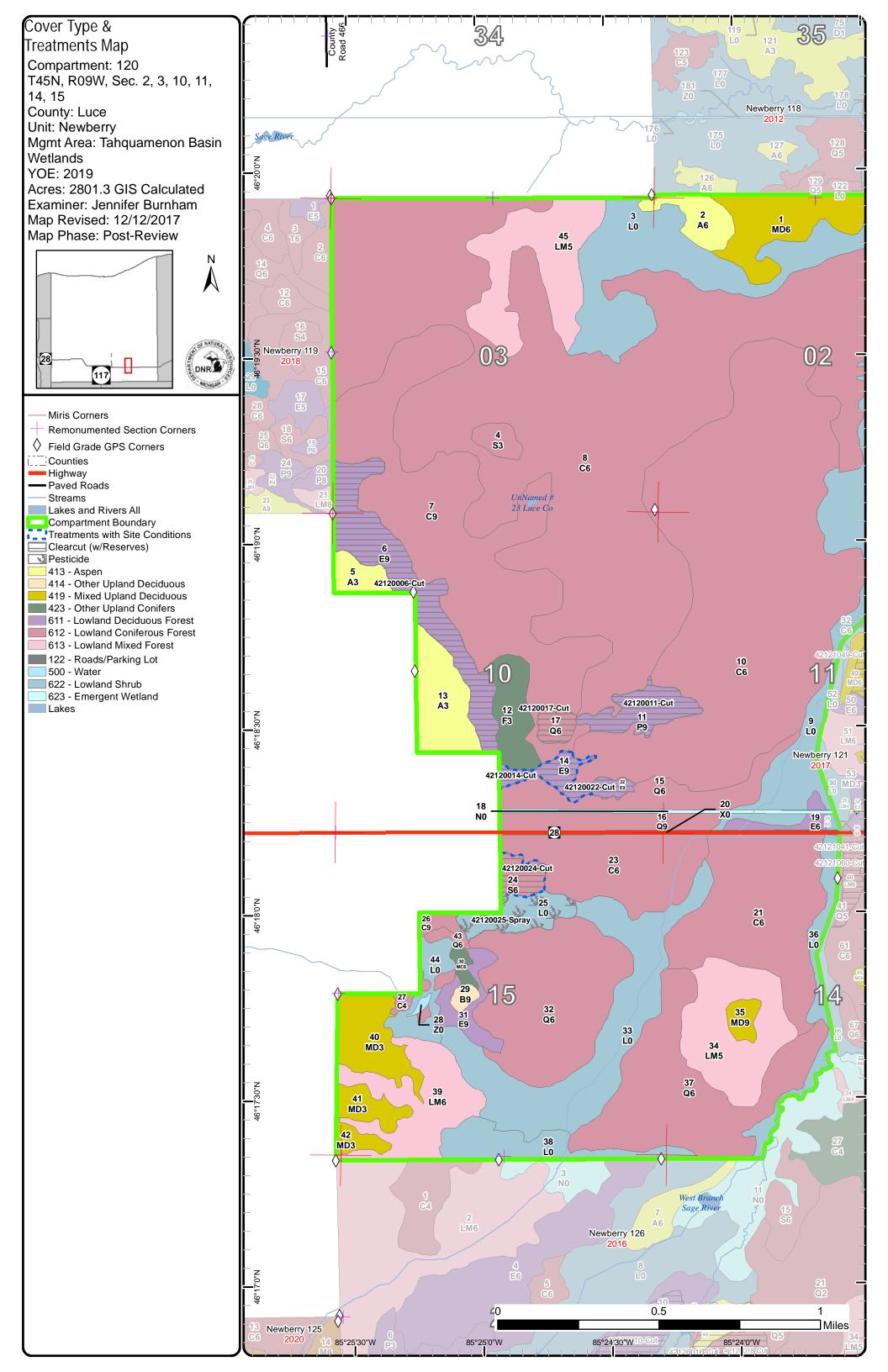
The following reports from the Inventory are attached:

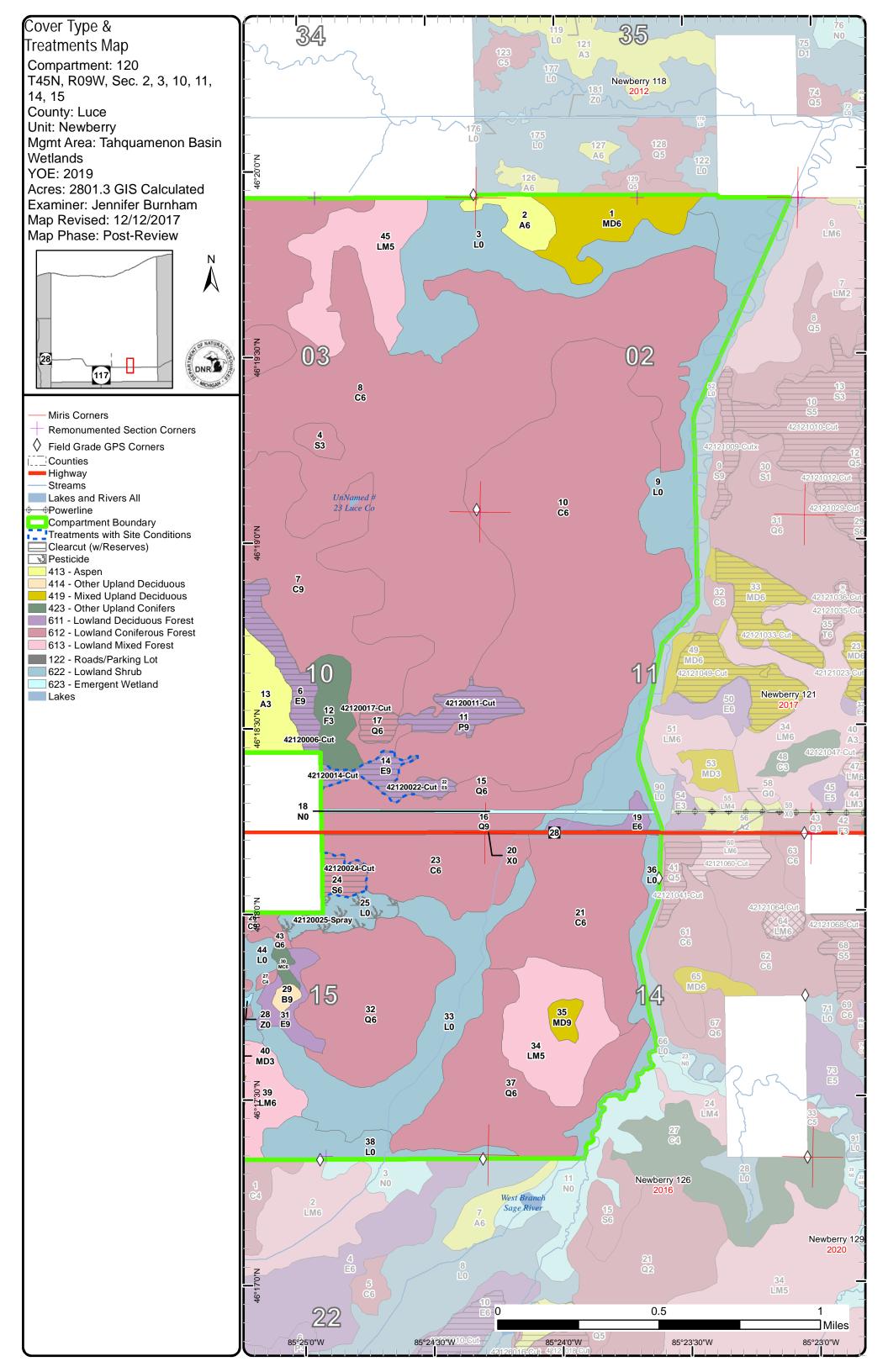
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

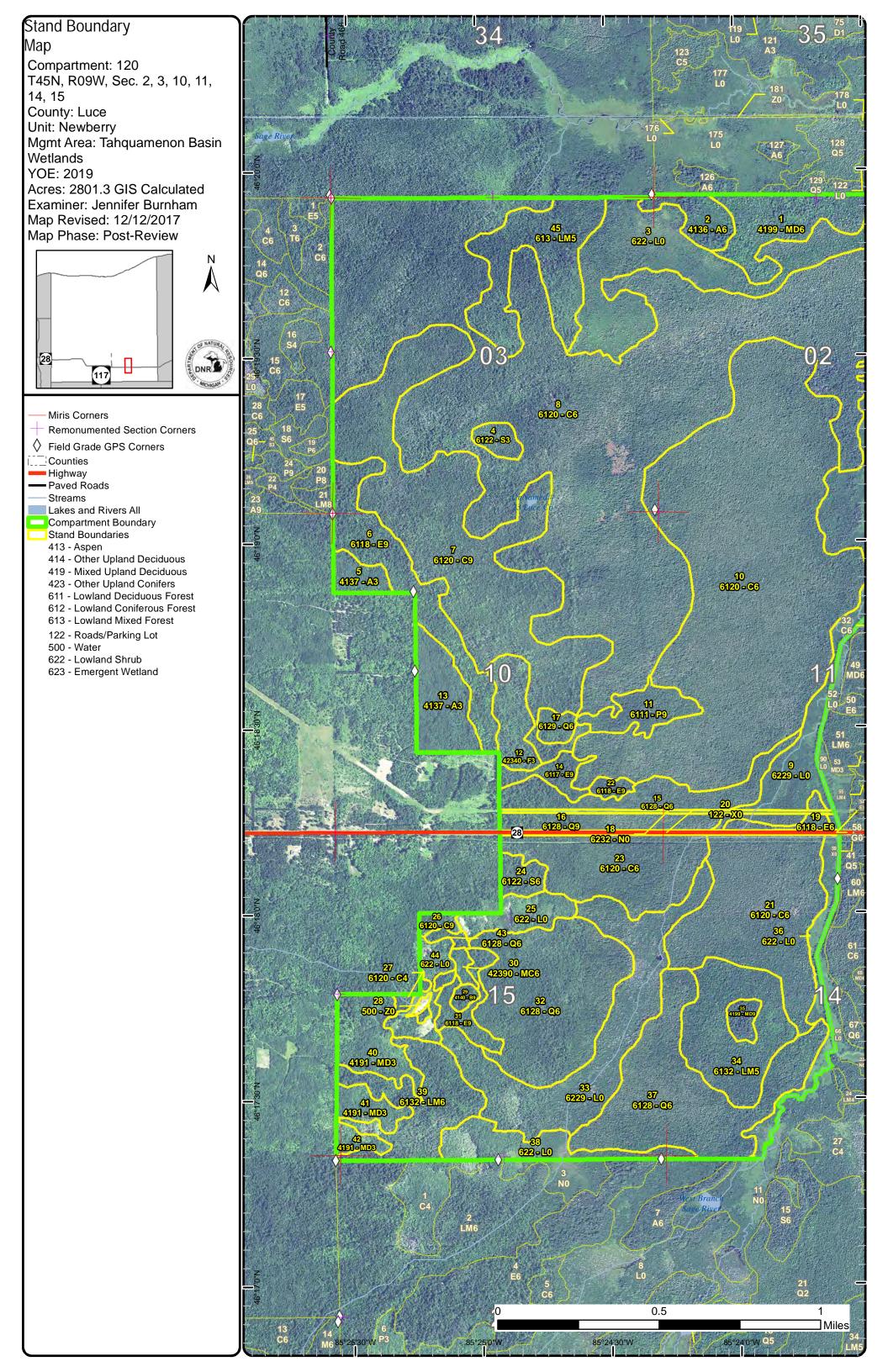
The following information is displayed, where pertinent, on the attached compartment maps:

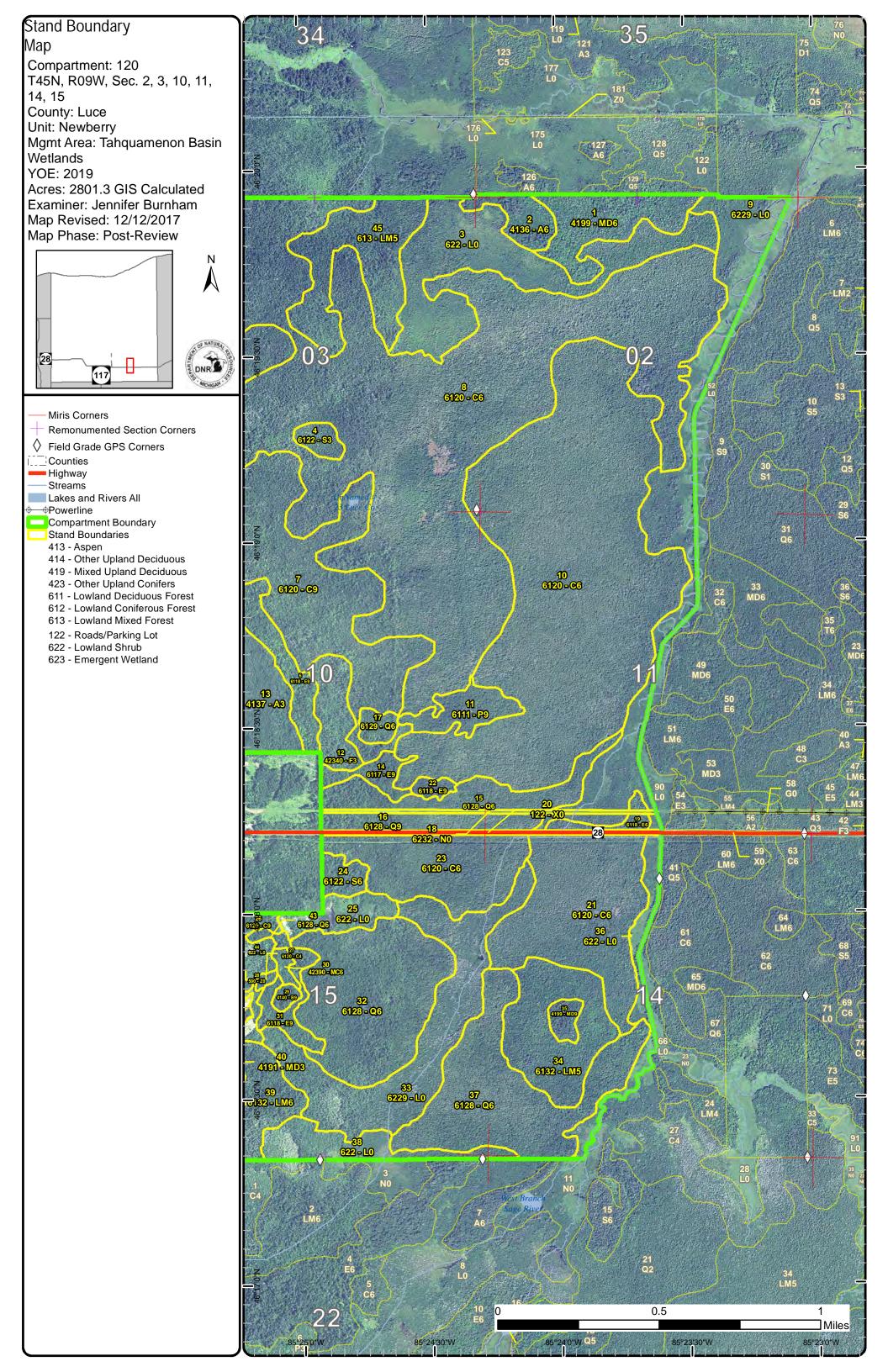
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

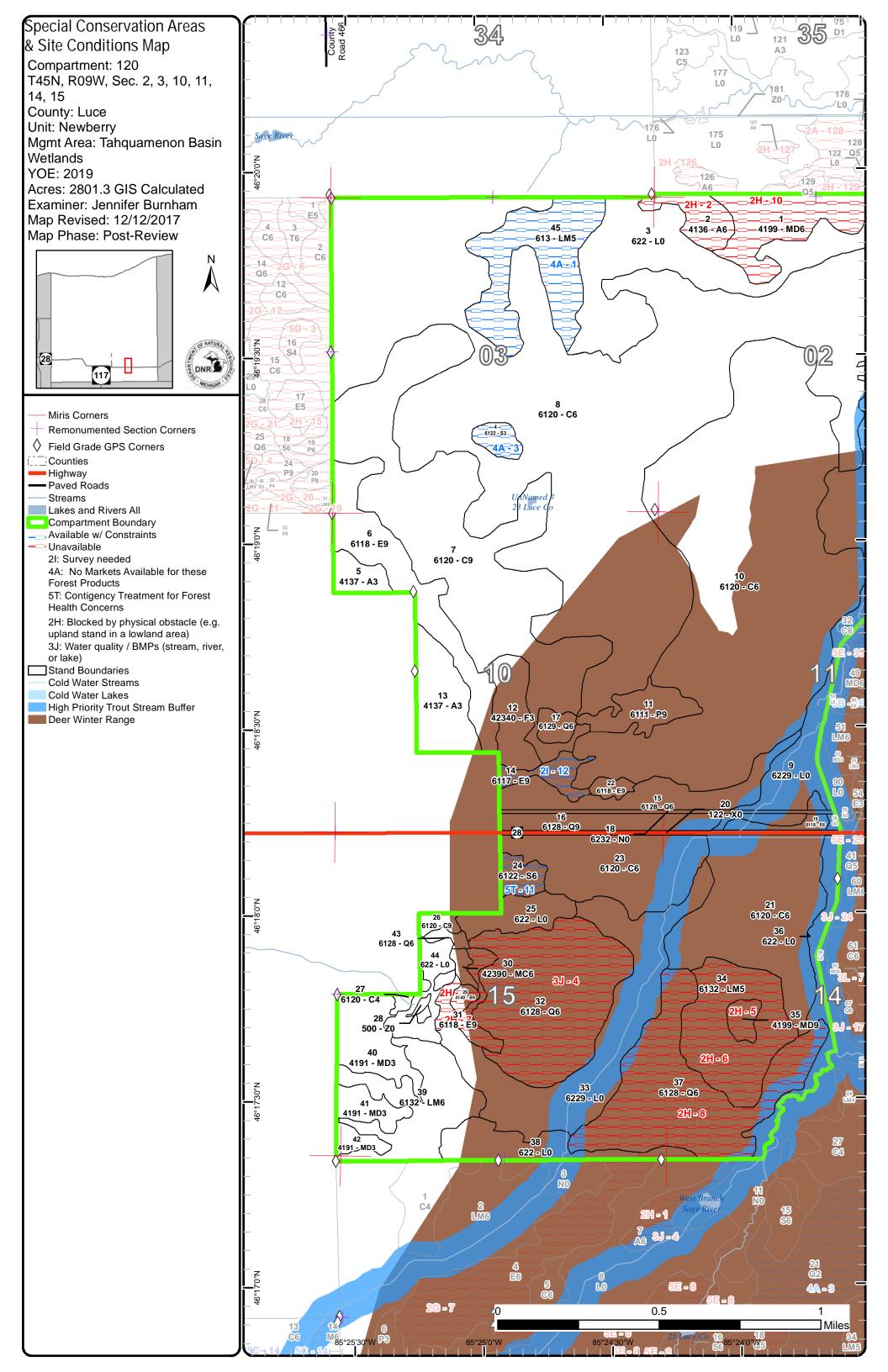


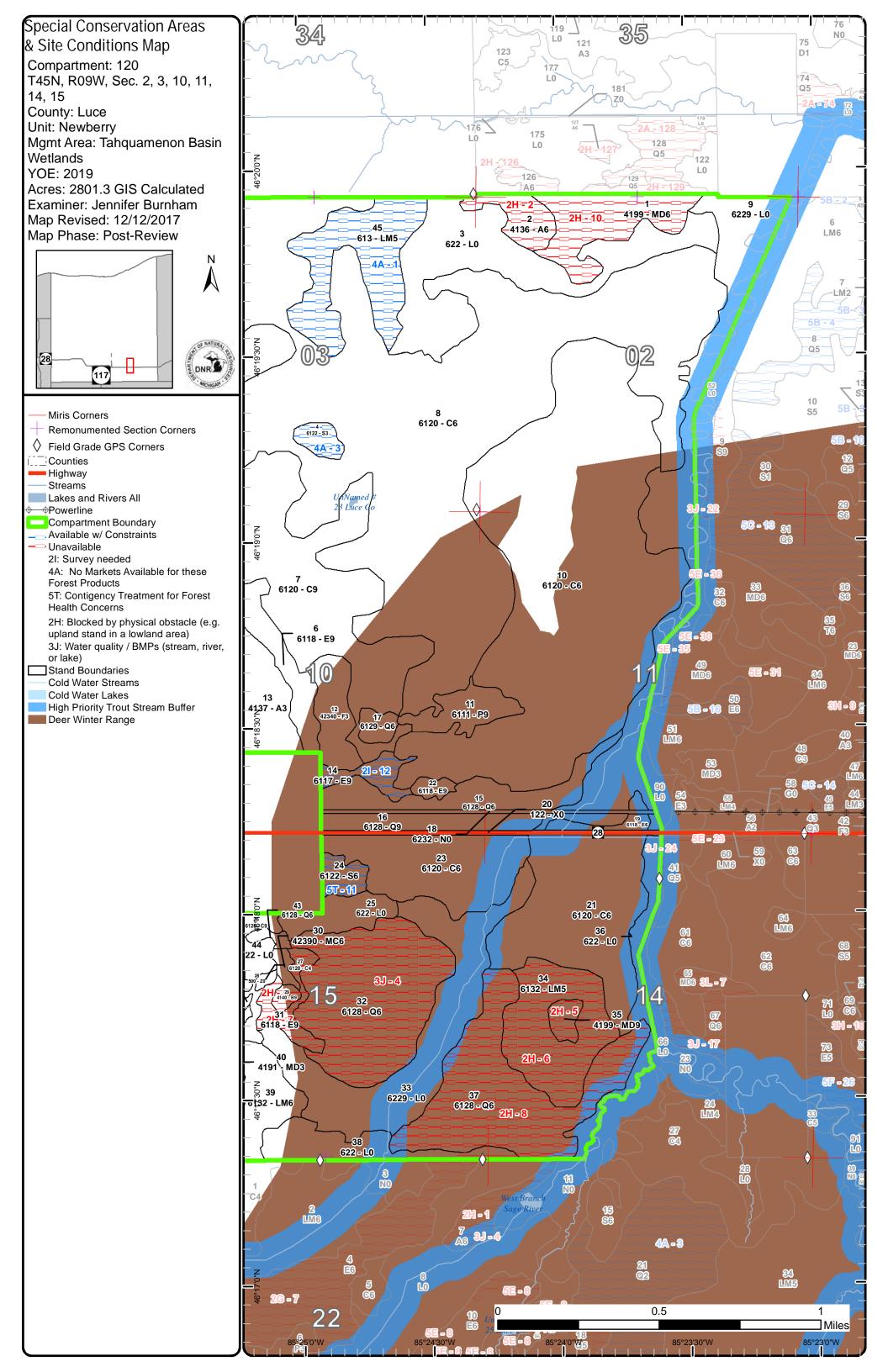












Newberry Mgt. Unit

Jennifer Burnham : Examiner

Compartment 120 Year of Entry 2019



SWARTZN3

Age Class

	No.	Lido C	\$ /2	,		3 / 12	No. 15	, , , , , , , , , , , , , , , , , , ,		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		\$ \\ \ge{s}	0,00	Ž / Ž	,	in the second	ZE ZE	St Jues	A LOS
Aspen	0	0	0	47	0	0	0	0	0	17	0	0	0	0	0	0	0	0	64
Cedar	0	0	0	0	0	0	0	76	1327	0	118	0	0	0	0	0	0	0	1521
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	21
Lowland Conifers	0	0	0	0	0	0	0	66	121	0	116	0	0	0	0	0	0	0	303
Lowland Deciduous	0	0	0	0	0	0	7	12	5	0	0	0	0	0	0	0	0	75	98
Lowland Mixed Forest	0	0	0	0	0	0	0	0	56	69	0	0	0	0	0	0	0	65	190
Lowland Shrub	435	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	435
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	18
Marsh	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Mixed Upland Deciduous	0	0	50	0	0	0	45	0	0	7	0	0	0	0	0	0	0	0	102
Paper Birch	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Upland Conifers	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Upland Spruce/Fir	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	25
Urban	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	453	0	50	47	0	25	56	178	1527	93	234	0	0	0	0	0	0	140	2802



Report 2 – Treatment Summary

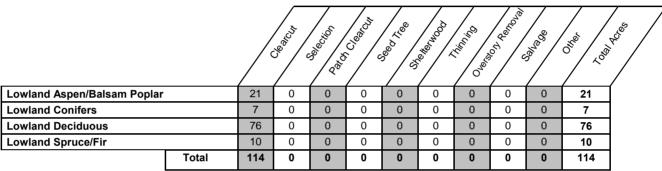
Newberry Mgt. Unit Year of Entry: 2019

Acres of Harvest

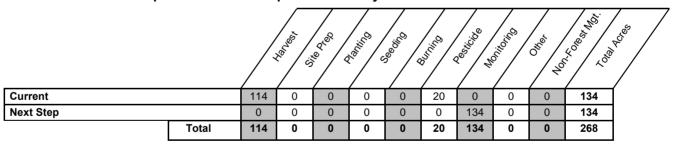
Compartment 120
Total Compartment Acres: 2,801

Commercial Harvest - 92 Harvests with Site Condition - 22 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



deer and snowshoe hare. Place high dollar value on cedar. Comment:

Proposed Start Date: 10/01/2018

42120017-Cut 7.0 6129 - Mixed Poletimber 77 51-80 Harvest Clearcut with 612 - Lowland Even-Aged Draft Field Coniferous Lowland Well Coniferous Retention Boundary Forest Forest

Habitat Cut: No Site Condition:

Prescription Remove all species except cedar. Functional cover will be retained in the stand for deer benefit. The regenerating stand will provide browse for Specs:

deer and snowshoe hare.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regeneration will be of same species present now. Tamarack may not come back because of mortality.

Regen:

Other Winter cut; no chipping allowed.

Comment:

Proposed Start Date: 10/01/2018

Newberry Mgt. Unit Report 3 -- Treatments Compartment: 120 s Year of Entry: 2019 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Method Objective Name CoverType Density Age Range Type Structure **Status** d 42120022-Cut 4.5 6118 - Lowland Sawtimber 76 81-110 Clearcut with 611 - Lowland Draft Field 22 Harvest Even-Aged Deciduous with Well Retention Deciduous Boundary Cedar Forest **Habitat Cut: No Site Condition:** Prescription Harvest all species except the cedar. Functional cover will be retained in the stand for deer benefit. The regenerating stand will provide browse for deer and snowshoe hare. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Regeneration of species that are present now. Regen: Other Winter cut; no chipping allowed. Comment 10/01/2018 **Proposed Start Date:** 10.0 6122 - Black Spruce Poletimber 77 Draft Field 42120024-Cut 81-110 Clearcut with 6122 - Black Harvest Even-Aged Retention Spruce Boundary **Habitat Cut: No** Site Condition: Contingency Treatment Prescription Harvest all species except cedar. Do not harvest any hemlock or white pine if they are present. Functional cover will be retained in the stand for deer benefit. The regenerating stand will provide browse for deer and snowshoe hare. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Regeneration will be same species that are present now. Regen: There is an old skid road that that comes off the powerline that can be used for access. It is still fairly open but will need frozen conditions for Other Comment: good access. Winter cut; no chipping allowed. Proposed Start Date: 10/01/2018 42120025-Pesticide 6229 - Mixed Draft Field 25 Unspec Aerial

ified

lowland shrub

Spray

19.9 622 - Lowland Shrub Nonstocked

Habitat Cut: No Site Condition:

Prescription Area contains phragmites and hogweed. Apply where present.

Specs:

Next Step Monitoring, Other - Specify

Treatments:

Acceptable Regen:

Other Comment:

10/01/2018 **Proposed Start Date:**

Total Treatment Acreage Proposed: 134.0

Boundary

Newberry Mgt. Unit

Jennifer Burnham : Examiner

Compartment: 120 Year of Entry: 2019

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Cond	ditions	5
Acres	Available	With Condition	Not Available		21	4A	5 T	2H	3J
64	47	0	17	Aspen				17	
1521	1521	0	0	Cedar					
21	21	0	0	Lowland Aspen/Balsam Poplar					
302	73	0	230	Lowland Conifers				114	116
98	71	12	15	Lowland Deciduous	12			15	
190	56	69	65	Lowland Mixed Forest		69		65	
435	435	0	0	Lowland Shrub					
18	0	18	0	Lowland Spruce/Fir		8	10		
7	7	0	0	Marsh					
103	50	0	52	Mixed Upland Deciduous				52	
3	0	0	3	Paper Birch				3	
4	4	0	0	Upland Conifers					
25	25	0	0	Upland Spruce/Fir					
10	10	0	0	Urban					
1	1	0	0	Water					
2,801	2,320	99	382	Total Forested Acres	12	77	10	267	116
	83%	4%	14%	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 Dominant Sit No. Cond Availabi	. •	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition					
1 Available	4A: No Markets Available for these Forest Products	69	Unspecified	Unspecified	Unspecified	Unspecified					
Comments: Due to high water table, stand is taking a long time to become merchantable.											
2 Unavailabl	e 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	17	2B: Unknown if access through adjacent landowner(s) is possible	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified					
			•	, , , , , , , , , , , , , , , , , , , ,							

Report 4 - Site Conditions

Newberry Mgt. Unit

Compartment: 120 Year of Entry: 2019 Jennifer Burnham : Examiner

ilable 3J: W (str s: rrounded by low ch would need to ilable 2H: E obs	later quality / BMPs eam, river, or lake)	116 rains. W	Chantable. Should get there e Unspecified Yould need to cross pvt for act pp.	Unspecified	Unspecified	Unspecified
(str rrounded by low ch would need to ilable 2H: E obs stan	eam, river, or lake) /s, beaver ponds and do be harvested to get to	rains. W	ould need to cross pvt for ac		<u> </u>	Unspecified
rrounded by low ch would need to ilable 2H: E obs stan	b be harvested to get to Blocked by physical	other s		ccess and only during a r	ool winter. Tree ere of amo	
obs stan		7			eai willer. Thee are of Silia	II diameter and dense
	d in a lowland area)	,	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified	Unspecified
s: n of higher grou	nd surrounded by lowla	nd. Woı	uld need two bridges and a re	eal winter get to the stand	d.	
obs	stacle (e.g. upland	65	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
s: eek/drain crossii	ngs. Over 1/2 mile of we	et cedar	stand to get through. Stand	it self is also wet with sm	all drains in the stand.	
obs	stacle (e.g. upland	15	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
s: eaver ponds and	I drains not sure how to	access	the area for harvesting.			
obs	stacle (e.g. upland	114	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	obs stan :: ek/drain crossir ilable 2H: E obs stan :: eaver ponds and ilable 2H: E obs	obstacle (e.g. upland stand in a lowland area) i: ek/drain crossings. Over 1/2 mile of we liable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) i: eaver ponds and drains not sure how to liable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	obstacle (e.g. upland stand in a lowland area) c: ek/drain crossings. Over 1/2 mile of wet cedar ilable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) c: eaver ponds and drains not sure how to access ilable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	obstacle (e.g. upland stand in a lowland area) BMPs (stream, river, or lake) BMPs (stream, river, or lake)	obstacle (e.g. upland stand in a lowland area) BMPs (stream, river, or lake) BMPs (stream, river, or stand it self is also wet with small lable and lake) BMPs (stream, river, or lake)	obstacle (e.g. upland stand in a lowland area) BMPs (stream, river, or lake) Consider the stand in a lowland area and drains not sure how to access the area for harvesting. BMPs (stream, river, or lake) Consider the stand in a lowland area and drains not sure how to access the area for harvesting. BMPs (stream, river, or lake) Consider the stand in a lowland area and drains not sure how to access the area for harvesting. Consider the stand in a lowland area and lake) Consider the stand in a lowland area and lake and lak

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Report 4 - Site Conditions

Compartment: 120 Year of Entry: 2019

Newberry Mgt. Unit

Jennifer Burnham: Examiner

9 Unavailable 2H: Blocked by physical 3 Unspecified Unspecified Unspecified Unspecified obstacle (e.g. upland stand in a lowland area) Comments: Blocked by old beaver ponds, creeks, and drains. 10 2H: Blocked by physical 45 Unspecified Unspecified Unspecified Unspecified Unavailable obstacle (e.g. upland stand in a lowland area) Comments: Unspecified 11 **5T: Contigency Treatment** 2I: Survey needed Unspecified Unspecified **Available** 10 for Forest Health Concerns Comments: 2I: Survey needed Unspecified Unspecified Unspecified Unspecified 12 **Available** 12 Comments:

12/12/2017 8:28:17 AM - Page 3 of 3 SWARTZN3

Mgt. Unit

Compartment: #Type! Year of Entry:

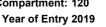


Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Newberry Mgt. Unit Compartment: 120





Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservation Type Area		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	ies to persist from year to year. Suitable 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 cond stocked trout populations and those of other coldwater fish specified year 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 wildle and Waterfowl Production Areas, deer wintering complexes in lo openings 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 or covered by species recovery plans that are developed in cooperations.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more rendangered species, and are not				
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effe as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well				

s t	Newberry		Report 7	Forested	Stands Compartment: 120 Year of Entry: 2019	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4199 - Other Mixed Upland Deciduous	Poletimber Well	45.4	50	51-80	No way to get to the stand for harvesting. OPIC - FMD: VERY THICK fir with associated low quality r maple and aspen poletimber. Aspen is large. Areas of well stocked lowland hardwood saplings. Cedar component. Stand makeup is really F3/M4/A7. Soil:Hendrie mucky peat
2	4136 - Aspen, Mixed Conifer	Poletimber Well	17.3	80	81-110	With new imagery you can see the BA has decreased since last inventory. No access to the stand. OPIC - FMD: very mature Asp - stand is breaking up. Asp 12-16" dbh 6-8 stks. Heavy fir understory with areas of natural Asp regeneration and r maple saplings. Access is a major issue - Big
						Ditch to the N., expansive cedar swamp to the south. A cut should remove all merchantable aspen, and spruce/fir. Retain maple, cherry, associated cedar and hemlock. A conifer component within the stand would be covered given the extensive spruce/fir sapling understory. Rutting would be a major concern. MO is for aspen, secondary MO for spruce/fir Soil: Hendrie mucky peat
4	6122 - Black Spruce	Sapling Well	8.0	78	1-50	Slow growing. OPIC - FMD: small diameter b spruce poletimber and associated cedar regen. B spruce and ced 5-10' tall. Tamarack component. Heavy leatherleaf. Cut approx in the late 1930's
5	4137 - Aspen, Birch	Sapling Well	11.3	26	Immature	Same as stand 13 to the south. OPIC - FMD: good aspen sapling regen. 16-20' tall. Heavy fir sapling component. Associated r maple stump sprouts. Sale #009-89, completed 7/91
6	6118 - Lowland Deciduous with Cedar	Sawtimber Well	59.6	90	81-110	Over story is too thick for any regen coming in. There are a couple very small pockets of blowdown. Areas along the aspen type is more diverse in species. Aspen, birch and ash dying out from age.
						OPIC - FMD: Cedar 6-12" dbh 3-4 sticks tall. Associated b spruce, w spruce, hemlock and widely scattered w pine. Low quality y birch, r maple, and b ash component. Scattered aspen and balm throughout. E side of stand gradiates to cedar type. Stand cond 8 SCA= deeryard. Stand cond for timber = 6
7	6120 - Lowland Cedar	Sawtimber Well	221.5	77	111-140	South half canopy more dense. OPIC - FMD: well formed cedar 5-14" dbh 3-4 sticks. Two aged stand from cutting in the 30's. Fairly open understory - ced saplings 2-4", associated fir saplings. Occassional openings with heavier regen. Multiple small creeks throughout the stand, flowing generally E-W. Deer usage, especially at the western end of stand. Associated w birch and widely scattered aspen/balm. Stand cond 8, SCA=deeryard. Timber Stand cond 7
8	6120 - Lowland Cedar	Poletimber Well	695.2	70	111-140	Cedar is short, the other spp are over topping most of them. Tamarack is dead or dying. White birch and Bam are over mature.
						OPIC - FMD: cedar 6-8" dbh, 2-3 sticks. Pockets of larger cedar 10-16"dbh. Cedar/fir understory, heavy in areas. Tag alder inclusions in small openings. Widely scattered tamarack inclusions, especially in/along old roads. Scattered b spruce inclusions, aspen/balm also in pockets. Area heavily cut in late 1930's. Stand cond 8 SCA=deeryard. Timber Stand cond 7

S t	Newberry		Report 7	- Forested	Stands Compartment: 120 Year of Entry: 2019	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
10	6120 - Lowland Cedar	Poletimber Well	410.2	72	171-200	Stand is of fair quality. There are small creeks scattered that flow back to the West Branch Sage River. More tag alder, smaller cedar and water near the River edge. OPIC - FMD: ced 6-14"dbh, areas of heavy cedar regen 1-20' tall where stand has had windthrow. Associated w birch especially in S of stand. Extensively cut in late 1930's - early 40's. Stand cond 8 SCA=deeryard. Timber Stand cond 7
11	6111 - Lowland Balsam Poplar	Sawtimber Well	21.3	69	111-140	Old red lines still visible. Most of the trees are over mature and starting to fall out of the canopy. BA has gone down from 10 years ago. OPIC - FMD: Mixed stand- w birch, aspen poletimber. Heavy component of cedar poletimber. Fir/cedar understory. Multiple small creeks flowing E - W. Stand cond 8 SCA=deeryard timber Stand cond 7
12	42340 - Upland Spruce/Fir	Sapling Well	24.7	42	1-50	Cedar regen from cut is slightly shorter than the other spp but really nice. Good diversity in the stand. OPIC - FMD: thick fir/cedar regen 6-12', high occurance of windthrow on overstory. W birch poletimber 6-10"dbh 2-4 sticks throughout the stand. Scattered w spruce and cedar. Stand cond 8 SCA=deeryard timber Stand cond 5
13	4137 - Aspen, Birch	Sapling Well	35.3	26	Immature	Great regen, sale completed in 1991. OPIC - FMD: good aspen regen 16-20' tall. Associated fir and r maple saplings. Sale #009-89, completed 7/91 Soil: Kalkaska Okeefe sand
14	6117 - Lowland Deciduous, Mixed Coniferous	Sawtimber Well	11.7	67	81-110	Part of sale 17-99 but never cut. There are more blow down areas than stand 6. Regen is Bfr, RM, cedar 1-5' tall and of low density with in the blow down pockets. OPIC - FMD: Cedar and associated spruce/fir. W birch is associated throughout the stand. Mature aspen/balm is found in pockets. Fir seedlings/sapling understory. Stand was formerly included in First Creek North timber sale (#017-99) which went unsold. Stand cond 8 SCA=deeryard timber Stand cond
15	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	39.7	65	111-140	More spp diversity on the E/W edges of the stand. There are small pockets of blow down. OPIC - FMD: overall fairly small diameters 2-7" dbh. Associated larger cedar left from past cutting. W. side of stand holds larger diameters in areas and more r maple sapling and scattered aspen w birch component. Stand cond 8 SCA=deeryard timber Stand cond 5
16	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	23.1	69	51-80	Too shaded for regen except for the blow down pockets. In the blow down there are cedar, Bfr, and tag alder. Tamarack starting to fall out of the stand. Small creek in-between this stand and stand 19. OPIC - FMD: cedar 6-14" dbh. W end of stand hold the better formed cedar. Aspen, balm, w birch components throughout. Pockets of small diameter cedar and cedar/fir regen. Widely scattered r maple. Stand cond 8 SCA=deeryard timber Stand cond 5

S t	Newberry	/ Mgt. Unit		Report 7	Forested	Stands Compartment: 120 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	7.0	77	51-80	Tamarack is dying. Final harvest soon before the timber is not merchantable. No cutting of cedar.
19	6118 - Lowland Deciduous with Cedar	Poletimber Well	7.3	54	111-140	Smaller spp coming in well from past harvest. There is some cedar coming in as part of the regen especially in the more open areas of the canopy. Maybe another 20 years and the stand may have merchantable stems for harvest. OPIC - FMD: pockets of fair to well formed cedar 10-12" dbh 4-5 sticks, though overall stand runs 2-3 stick heights. Associated w birch-10-12" 5-6 sticks. Fir understory with associated tag alder and w birch saplings. Stand cond 8 SCA=deeryard timber Stand cond 6
21	6120 - Lowland Cedar	Poletimber Well	113.0	94	81-110	Cedar is mainly 3 sticks tall, not very dense and more pocketed than scattered through the whole stand evenly. In open areas there is good cedar regen 1-10' tall. Drains running E-W in the stand full of water 3-10' wide. OPIC - FMD: low quality cedar poletimber 1-3 sticks height. Scattered b ash, w birch. Heavy tag alder understory - possible resulting from past cutting on a lower SI site. Stand cond 8 SCA=deeryard timber Stand cond 3 Soil: Carbondale, Lupton, Tawas
22	6118 - Lowland Deciduous with Cedar	Sawtimber Well	4.5	76	81-110	Canopy fairly open because of the mortality of the bam and white birch. Cedar regen is present in the more open areas. OPIC - FMD: well formed aspen and balm. Slightly higher ground site. W birch poletimber component with scattered well stocked spruce and fir poletimber areas. Light fir sapling understory. Associated cedar in single trees and pockets. Clearcut with reserves:: Remove merchantable aspen, balm, spruce, fir w birch and maple. Retain all cedar, hemlock and w pine. Avoid areas that would need cedar to be cut in order to access cut tree species. Given the small acreage and the surrounding cedar type holding all of the above cut species, retain no designated cut species in the stand. MO is lowground aspen/balm. Secondary MO is spruce/fir Stand cond 8 SCA=deeryard timber Stand cond 4 Soil:Carbondale, Lupton, Tawas
23	6120 - Lowland Cedar	Poletimber Well	71.2	62	141-170	Overstory too thick for regeneration except for the areas where blow down is occurring. There are areas of heavy cedar and should be left when harvesting. Some cedar maybe cut to allow for harvesting. OPIC - FMD: Variable stand. Overall good quality cedar with lower quality inclusions, especially towards east end of the stand Associated b spruce ,tamarack and w birch throughout, Fir understory throughout 8-20'. Stand cond 8 SCA= deeryard timber Stand cond 7. Soil Carbondale, Lupton, Tawas.

s t	Newberry	/ Mgt. Unit		Report 7	– Forested	Stands Compartment: 120 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	6122 - Black Spruce	Poletimber Well	10.0	77	81-110	All spp but cedar are starting to dying out from being over mature. Old access road still very open.
						OPIC - FMD: large, overmature aspen and balm. Associated good quality b spruce and tamarack. Fir sapling understory. Cedar poletimber component - pockets of trees in areas. SW part of the stand has a heavy fir understory, may exclude from treatment. Remove merchantable aspen, balm, b spruce, tamarack, fir and w birch. Retain cedar, hemlock and w pine. Avoid areas that would make cutting cedar necessary to access above designated cut species. Clearcut with reserves: retain no above designated cut species given the small acreage and the species well represented in the adjacent stand. MO is lowland aspen/balm Secondary MO is maple, spruce/fir Stand cond 8 SCA=deeryard timber Stand cond 4 Soil:Carbondale, Lupton, Tawas
26	6120 - Lowland Cedar	Sawtimber Well	4.4	61	81-110	Not the quality of stand 23. There is open water and drains in the stand especially by the marsh area. BMP's would be an issue if treating.
						OPIC - FMD: Variable stand. Cedar, y birch, elm, b ash. Balm and w birch scattered throughout 10-14" 4-7 sticks. Good quality cedar inclusion along eastern edge. W. end of stand graduates more to b ash, fir saplings 20-30' tall. Multiple drainages throughout. Stand is actually a C6/P5 type. Soil:Carbondale, Lupton, Tawas
27	6120 - Lowland Cedar	Poletimber Poor	5.4	90	1-50	OPIC - FMD: older aged cedar 12-14" dbhs, 3-5 sticks. Areas of well stocked, but overall stand is poor stocked. Much of associated spruce/fir has experienced mortality and fallen over. Thick r maple, b ash saplings 8-10' - shorter saplings are heavily browsed Fir component, especially at E end of stand. Soil: Carbondale, Lupton, Tawas
29	4140 - Other Upland Deciduous	Sawtimber Well	3.3	69	81-110	Edges give way to more mature Bam, fir. AllI spp are at max age except cedar. Not sure how to get to the stand for this small of
						acreage. OPIC - FMD: Stand is two aged - has been cut through in the past, areas of small diam w birch and aspen 3-6" dbh mixed with w birch and cedar 10-14" dbhs. Fir poletimber component. Stand is on a small, localized upland area. Stand is isolated by an expansive series of beaver floodings and creeks entirely surrounding the area. Soil: Carbondale, Lupton, Tawas
30	42390 - Mixed Non- Pine Upland Conifers	Poletimber Well	3.6	51	51-80	When ready to harvest, access will be difficult. Cedar in the stand is found in pockets.
						OPIC - FMD: well stocked fir 8-12' tall, very dense. Associated scattered cedar. Cut in the late 1960's when access was available, before beaver flooding. Soil:Carbondale, Lupton, Tawas
31	6118 - Lowland Deciduous with Cedar	Sawtimber Well	15.1	90	81-110	Would be nice to treat if access is possible. All spp are at maximum age except for the cedar.
						OPIC - FMD: Mixed stand - lowground aspen, w birch with associated fair to good cedar. W birch component/inclusions. Scattered tag alder. N end of stand has mature aspen 10-12" dbh 6-7 sticks. Fir poletimber and understory. Stand has no access due to the area surrounded by creeks and series of beaver floodings. Soil: Carbondale, Lupton, Tawas

s t	Newberry	/ Mgt. Unit		Report 7	– Forested	Stands Compartment: 120 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	115.5	90	51-80	Fair to poor quality stand. Small dbh in many areas because of the high water table. There are many areas of all cedar. Areas with the other species have old stumps from past harvests. I don't think these areas could be treated without harvesting cedar.OPIC - FMD: overall low quality cedar 1-3 sticks. Moderately stocked fir and cedar saplings 3-10' tall. Associated b spruce, w birch and fir poletimber. Inclusions of better formed/quality cedar. Stand cond 8 SCA=deeryard timber Stand cond 7 Soil: Carbondale, Lupton, Tawas
34	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	64.9	120	51-80	Stand is doesn't have a tightly packed canopy. There are many areas of open with tag alder and cedar, other conifer. Very wet stand and multiply creek crossing and drains in the area. Would need a very cold winter to harvest.
						OPIC - FMD: R maple poletimber 10-16" dbh - very low quality. B ash and y birch poletimber. Tag alder and fir saplings (10-12') understory. SW edge of stand has A9 inclusion. Moderately stocked cedar component throughout the stand. Stand is on slightly higher ground, though still wet. Stand cond 8 SCA=deeryard timber Stand cond 6 Soil: Carbondale, Lupton, Tawas
35	4199 - Other Mixed Upland Deciduous	Sawtimber Well	6.9	82	51-80	Cedar is the only spp not dying out. OPIC - FMD: Well formed aspen 10-16" dbh 6-9 sticks. Tag alder, fir understory. Scattered cedar poletimber component. Scattered w birch, r maple, and b ash. Unfortunately inaccessible due to area being surrounded by creeks/drainages and extensive cedar swamp (deeryard). Great form to the aspen but showing mortality by windthrow. Stand cond 8 SCA= deeryard timber Stand cond 4 Soil: Carbondale, Lupton, Tawas
37	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	114.0	72	141-170	Old stumps, not sure when it was picked through. Cedar quality is fair. All spp are about at max age except for the cedar. Mostly wet ground. Old skid roads are filled in with ash and alder OPIC - FMD: Cedar 6-10" dbh 1-3 sticks. Fairly open understory - light tag alder and fir saplings 3-10' tall. Widely scattered w birch, w spruce, balm and r maple. Stand cond 8 SCA= deeryard timber Stand cond 7 Soil: Carbondale, Lupton, Tawas
39	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	55.9	72	81-110	Patches of good quality cedar with higher BA in some places. With the amount of water not sure how to cut with out having BMP issues especially in the southern part of the stand.
						OPIC - FMD: Fir, r maple and tag alder. B ash and w birch component. Areas of good quality cedar. Multiple creeks/drainages. Narrow areas in west of the stand are/have experienced heavy windthrow. Soil: Carbondale, Lupton, Tawas
40	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	31.0	13	Immature	OPIC - FMD: stand regenerating to aspen and balm saplings 6-8' tall, r maple stump sprouts 6' tall. Associated raspberry in more open areas. Scattered fir residual saplings and cedar inclusions. Several areas are well stocked with cedar, especially at the N end of the stand. Tag alder present. First Creek South sale #018-99, completed 4/04. Soil: Carbondale, Lupton, Tawas

S t				Report 7	– Forested	Stands Compartment: 120 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	12.7	13	Immature	OPIC - FMD: stand regenerating to aspen and balm saplings 6-8' tall, r maple stump sprouts 6' tall. Associated raspberry in more open areas. Scattered fir residual saplings and cedar inclusions. Several areas are well stocked with cedar, especially at the N end of the stand. Tag alder present. First Creek South sale #018-99, completed 4/04. Soil: Carbondale, Lupton, Tawas
42	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	6.7	13	Immature	OPIC - FMD: stand regenerating to aspen and balm saplings 6-8' tall, r maple stump sprouts 6' tall. Associated raspberry in more open areas. Scattered fir residual saplings and cedar inclusions. Several areas are well stocked with cedar, especially at the N end of the stand. Tag alder present. First Creek South sale #018-99, completed 4/04. Soil: Carbondale, Lupton, Tawas
43	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	3.1	65	51-80	Stand is of fair quality. It is surrounded by beaver ponds, drains and pvt lands. Not sure how to access when it becomes merchantable. Fir is mainly in the SE corner.
45	613 - Lowland Mixed Forest	Poletimber Medium	68.9	87	1-50	Old cut area from the 30's. Stand appears to have more trees coming in. OPIC - FMD: Expansive tag alder with swamp grass/cattails - high water table. Scattered inclusions of cedar and fir. Old clearcut area from the late 1930's. Soil: Hendrie mucky peat

Compartment: 120 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
3	622 - Lowland Shrub	110.2	No	The east side is starting to die out due to the high water table. OPIC - FMD: Expansive tag alder with swamp grass/cattails - high water table. Scattered inclusions of cedar and fir. Old clearcut area along the west side from the late 1930's. Soil: Hendrie mucky peat
9	6229 - Mixed lowland shrub	122.3	No	OPIC - FMD: tag alder/willow along Sage River. Swamp grasses, scattered cedar, tamarack, b spruce. Occasional mixed lowland conifer inclusions. Multiple "oxbows" and river bends off of Sage Ditch. Stand cond 8 SCA=deeryard. Timber Stand cond 0
18	6232 - Wet Prairie	7.4	No	OPIC - FMD: powerline ROW - lowland grasses, small diam balm and tag alder. Stand cond 8 SCA=deeryard timber Stand cond 0
20	122 - Road/Parking Lot	9.5	No	OPIC - FMD: M - 28 and ROW
25	622 - Lowland Shrub	19.9	No	There is now established small pockets of phragmites and giant hogweed. OPIC - FMD: tag alder/swamp openings. Series of old and active beaver ponds. Associated w birch saplings and red osier dogwood. Creeks, drainages, small ponds throughout. Widely scattered cedar poletimber (C4 low quality, stunted). Stand cond 8 SCA=deeryard timber Stand cond 0 Soil: Carbondale, Lupton, Tawas.
28	500 - Water	1.1	No	OPIC - FMD: Beaver pond
33	6229 - Mixed lowland shrub	107.2	No	OPIC - FMD: extensive tag alder. Stand was once well stocked to cedar, but has experienced heavy windthrow and water kill - area is flooded. Pockets of cedar saplings 5-10' tall, fir saplings 10-16' tall. Multiple creek channels and drainages throughout the stand - many old beaver floodings. Stand cond 8 SCA= deeryard timber Stand cond 2 Soil: Carbondale, Lupton, Tawas
36	622 - Lowland Shrub	26.2	No	OPIC - FMD: tag alder along the Sage R. Stand cond 8 SCA= deeryard timber Stand cond 0 Soil: Carbondale, Lupton, Tawas
38	622 - Lowland Shrub	32.1	No	OPIC - FMD: scattered tag alder and swamp grasses with multiple drainages. Scattered cedar inclusions and isolated trees. Stand cond 8 SCA=deeryard timber Stand cond 0. Soil: Carbondale, Lupton, Tawas
44	622 - Lowland Shrub	16.9	No	The high water table will keep spp from becoming merchantable and able to harvest. OPIC - FMD: tag alder/swamp openings. Series of old and active beaver ponds. Associated w birch saplings and red osier dogwood. Creeks, drainages, small ponds throughout. Widely scattered cedar poletimber (C4 low quality, stunted). Stand cond 8 SCA=deeryard timber Stand cond 0 Soil: Carbondale, Lupton, Tawas.