Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42069
Entry Year: 2027
Acreage: 2,050
County: Chippewa

Management Area: Grand Marais Moraine Complex

Stand Examiner: Matt Payment

Legal Description:

T48N R6W Sections 3, 4 & 5 T49N R6W Sections 27, 33 & 34

Identified Planning Goals:

Maintain or improve the forest health and productivity through limited timber management while simultaneously protecting the unique natural communities found within the compartment. Increase age class and structural diversity in forested upland stands. Through any management, care should be taken to maintain the integrity of the sensitive communities associated with the patterned fen complex within the compartment.

Soil and topography:

Lowland peat soils and muck soils dominate the compartment. Forested cover types on these lowland soils are mainly treed bogs, sub-merchantable, low quality cedar, and some open bogs. Subtle ridges and higher ground within the compartment are comprised of sand or sand loams producing forested cover types of mixed deciduous, white birch, white pine, red pine and black spruce. The topography of the compartment is primarily level, low ground with slight ridges in the eastern portions of the compartment and areas of higher ground along the western reaches of the compartment.

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

The compartment is entirely State owned. The compartment is bordered by private property to the east and to the north. The western boundary is bordered primarily by two large private land holdings, the Hiawatha Club and the Maranatha Preserve (wildlife preserve). To the south of the compartment lies the Tahquamenon Falls State Park. Land use and development are substantial to the east of the compartment with many small private parcels containing either permanent or seasonal residences along Lake Superior. Land use and development to the north is increasing with the parceling and sale of many private properties. The lands to the west and south of the compartment should see very little development with the State Park and the wildlife preserve. Due to the lowland nature and "inaccessibility" of the compartment, land use within the compartment boundaries will remain minimal.

Unique Natural Features:

MNFI has documented a Patterned Fen within sections 33, 34, and 3, 4 of the compartment, and lists a number of unique plants associated with the Patterned Fen. There is the potential for various wildlife such as osprey, moose, eagle and Blanding's turtle. There's also the potential for unique plants such as yellow pitcher plant, English sundew, black crowberry and a host of others. Black Creek flows through the compartment and out to Lake Superior.

Archeological, Historical, and Cultural Features:

The Bureau of History does not list any records of historical features within the compartment. There are no concerns for this compartment.

Special Management Designations or Considerations:

Most of the compartment is a large complex of unique communities and features associated with the Patterned Fen. Those stands comprising the patterned fen and adjacent area have been designated as a Special Conservation Area (SCA). Possible effects on this system should be carefully considered when management activities take place.

Watershed and Fisheries Considerations:

Fisheries Concerns: Black Creek, Clark's Creek, and Obrien's Creek are located within this compartment. O'Brien's Creek is listed as a Type-1 designated trout stream, while Black Creek and Clark's Creek are not. Stand 1 near O'Briens Creek has the appropriate minimum 100-foot riparian management zone (RMZ) applied. Stand 10 treatment covers Clark's Creek, so a minimum 100 foot, plus 5 feet per 1% increase in slope, RMZ should be applied to in accordance with BMP's near surface water.

Wildlife Habitat Considerations:

Compartment 69 lies in northern Chippewa County along Lake Superior and is in the Grand Marais Moraine Complex

Management Area. This compartment is dominated by bogs, marshes and lowland brush with a medium component of swamp conifers and scattered fir, birch and aspen stands. Approximately ¼ to 1/3 of the compartment consists of wildlife purchased lands. Harvested stands have similar species diversity and thus maintaining as much structural and species diversity as possible and remaining trees will provide food sources, nest and den trees, and improve stand diversity. Wildlife species potentially using this compartment include white-tailed deer, moose, black bear, gray wolves, grouse, and mink.Featured species include Blackburnian warbler, black throated blue warbler, American marten, Kirtland's warbler, red crossbill, spruce grouse, ruffed grouse and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Sections 27, 33, & 34, T49N R6W and sections 3-5, T48N R6W, Chippewa County.

Surface sediments consist of lacustrine sand and gravel and peat and muck. There is insufficient data to determine the glacial drift thickness (~ 100-300 feet). The Precambrian Jacobsville Sandstone subcrops below the glacial drift. The Jacobsville was used as a building stone in the past. There may be some minor sand and gravel pits in Section 22, and there may be some potential within the compartment. There is no economic oil and gas production in the UP.

Vehicle Access:

The compartment is located one mile south of Paradise, west of M-123. The main access to the general vicinity of the compartment is via Highway M-123 to the east. Preacher Lakes Road approaches the compartment from the northwest but is gated at the private property. Vehicle access to the actual compartment is limited to those with permission to cross private land. There is some ORV activity in the southwestern portion of the compartment, coming from the adjacent private land. During winter months, access can be via the groomed snowmobile trail.

Survey Needs:

Survey needs are dependent on access issues. If access is gained and timber management occurs, the following corners are needed: W1/16, SW1/16 and S1/16 of Section 27; ½ corner between Sec 27 and 34; the N1/16, Center, and S1/16 of Section 34; These survey needs will be prioritized once it is certain whether or not access can be acquired.

Recreational Facilities and Opportunities:

The Paradise-Raco snowmobile trail (trail #8) runs through the eastern most part of the compartment. Other recreational opportunities are limited due to access through private land, but would include hunting, hiking, and wildlife viewing.

Fire Protection:

The Whitefish Zone Dispatch Area touches the northern and northwestern portions of this compartment. This area will have long response times and lowland conifers may make suppression activities difficult. Due to the presence of the patterned fen and associated sensitive soils, Minimal Impact Suppression Tactic (MIST) should be implemented when suppressing wildfires in the majority of the compartment.

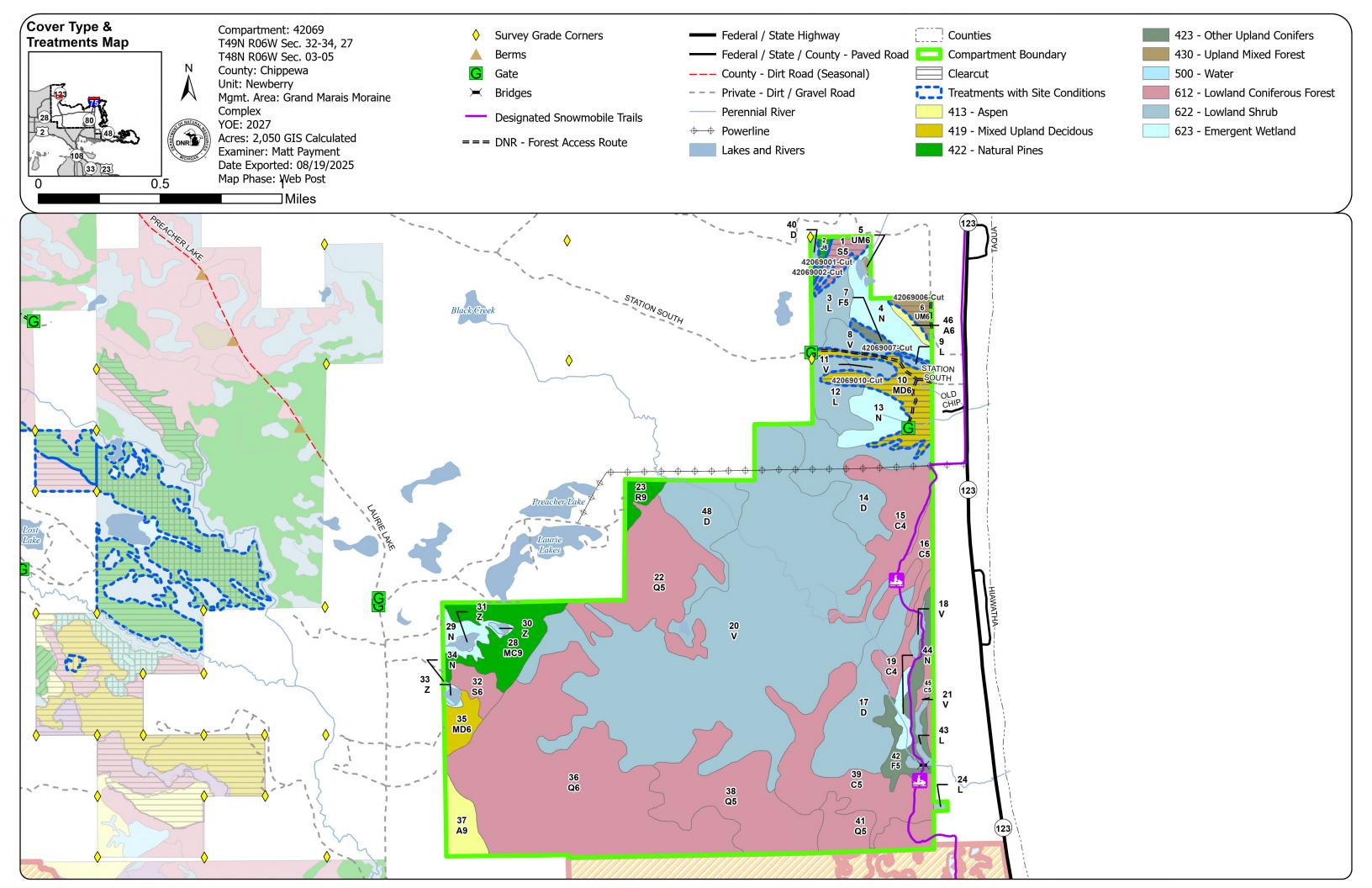
Additional Compartment Information:

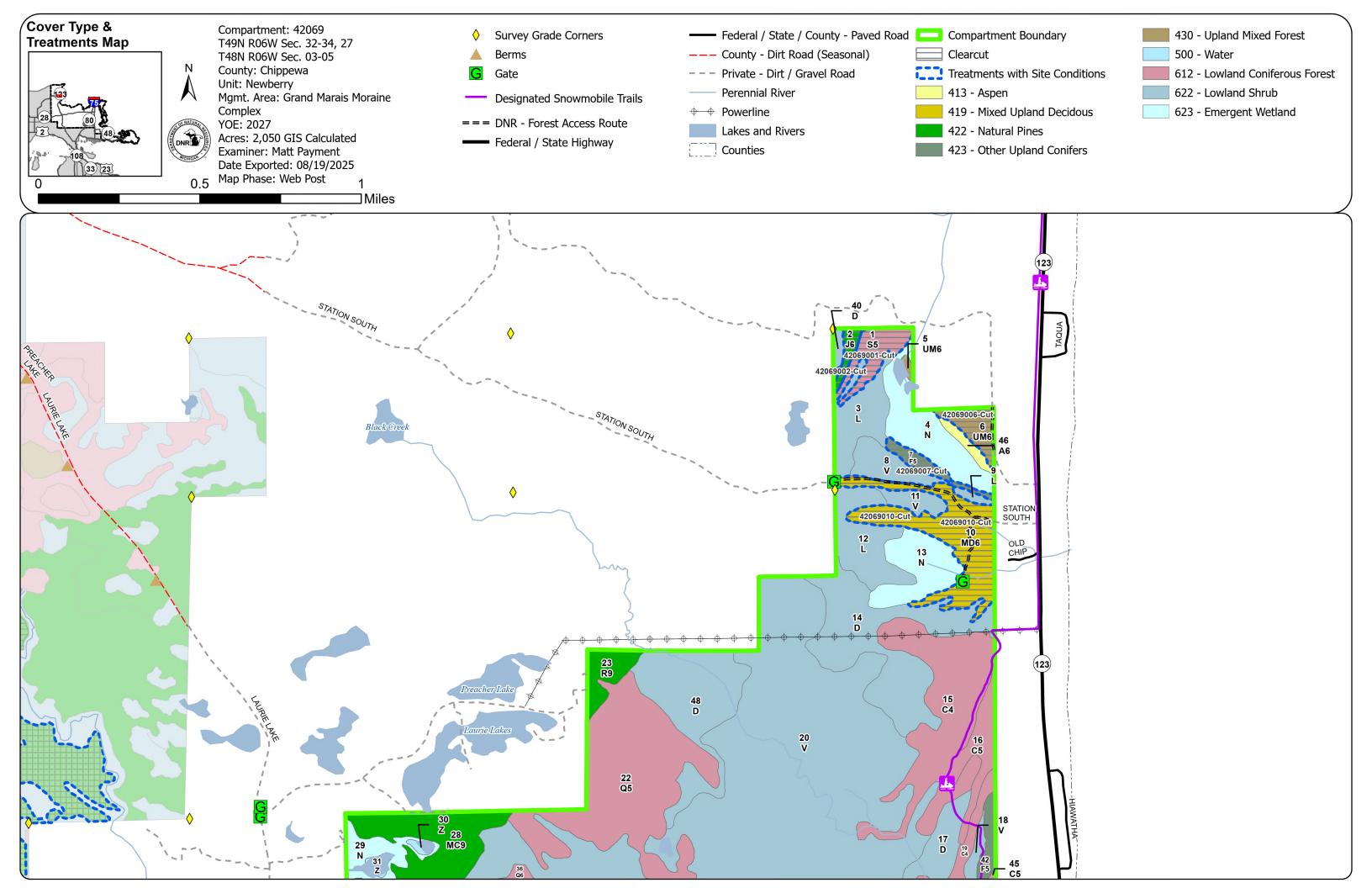
The following reports from the Inventory are attached:

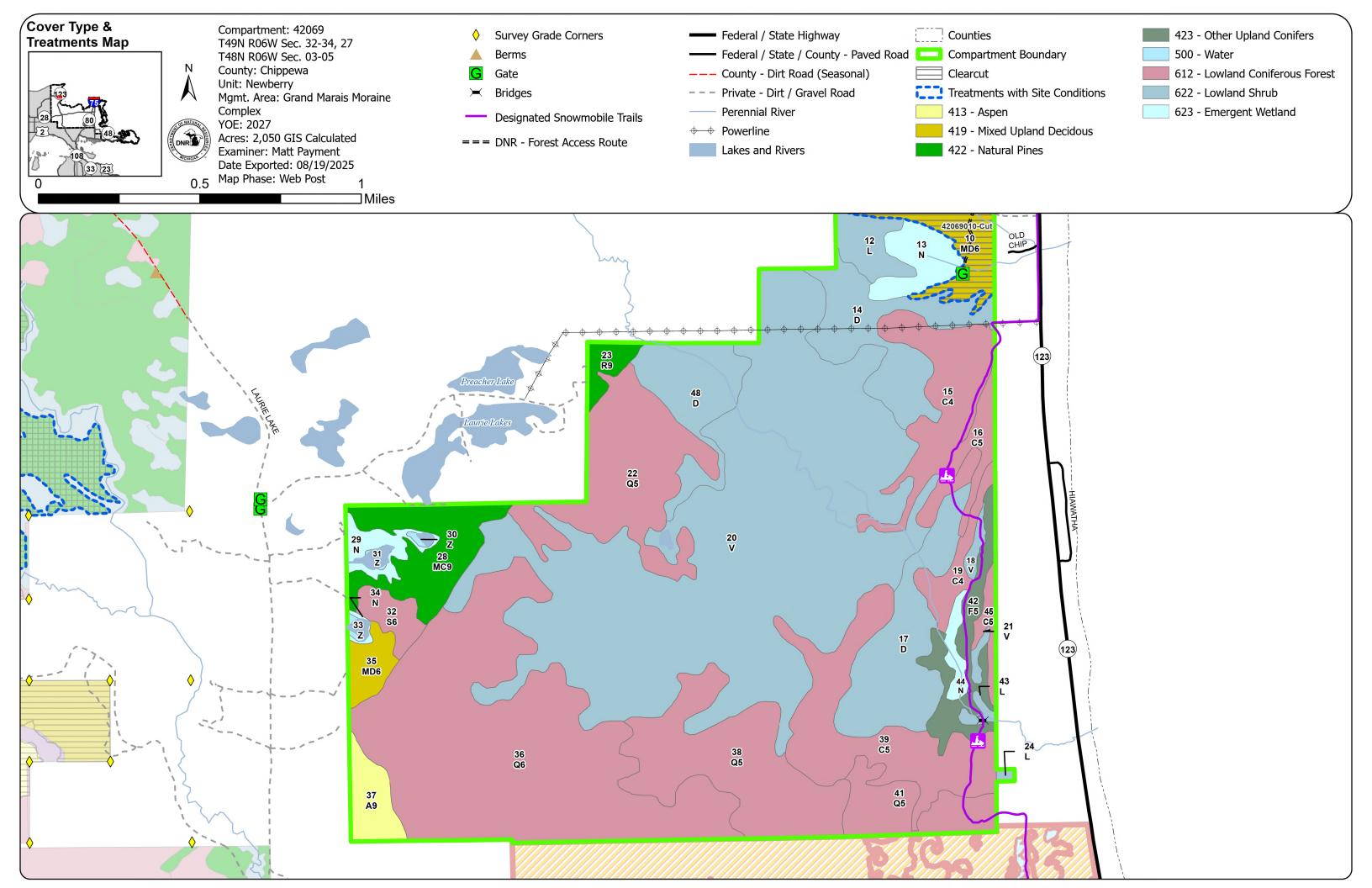
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

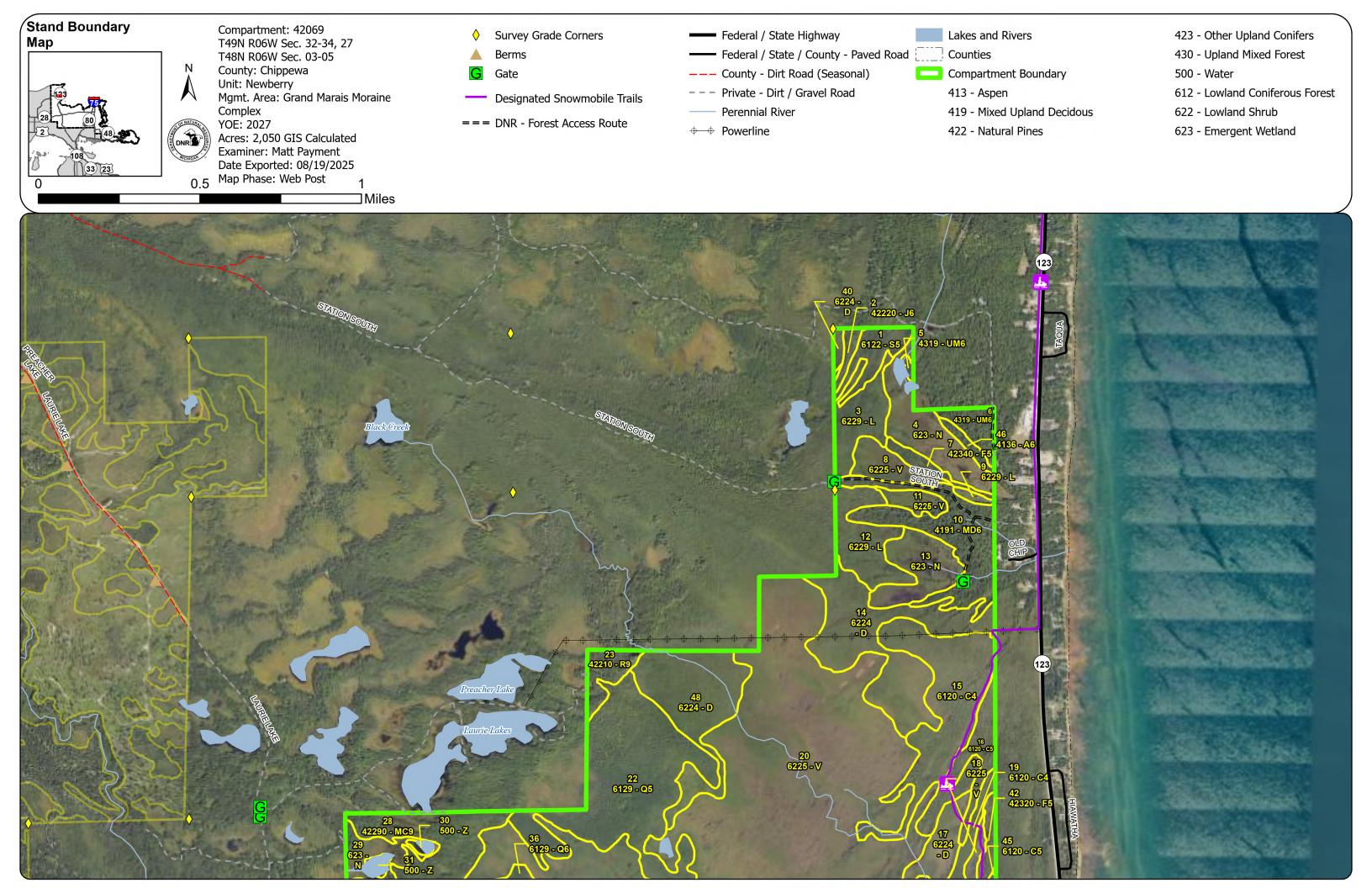
The following information is displayed, where pertinent, on the attached compartment maps:

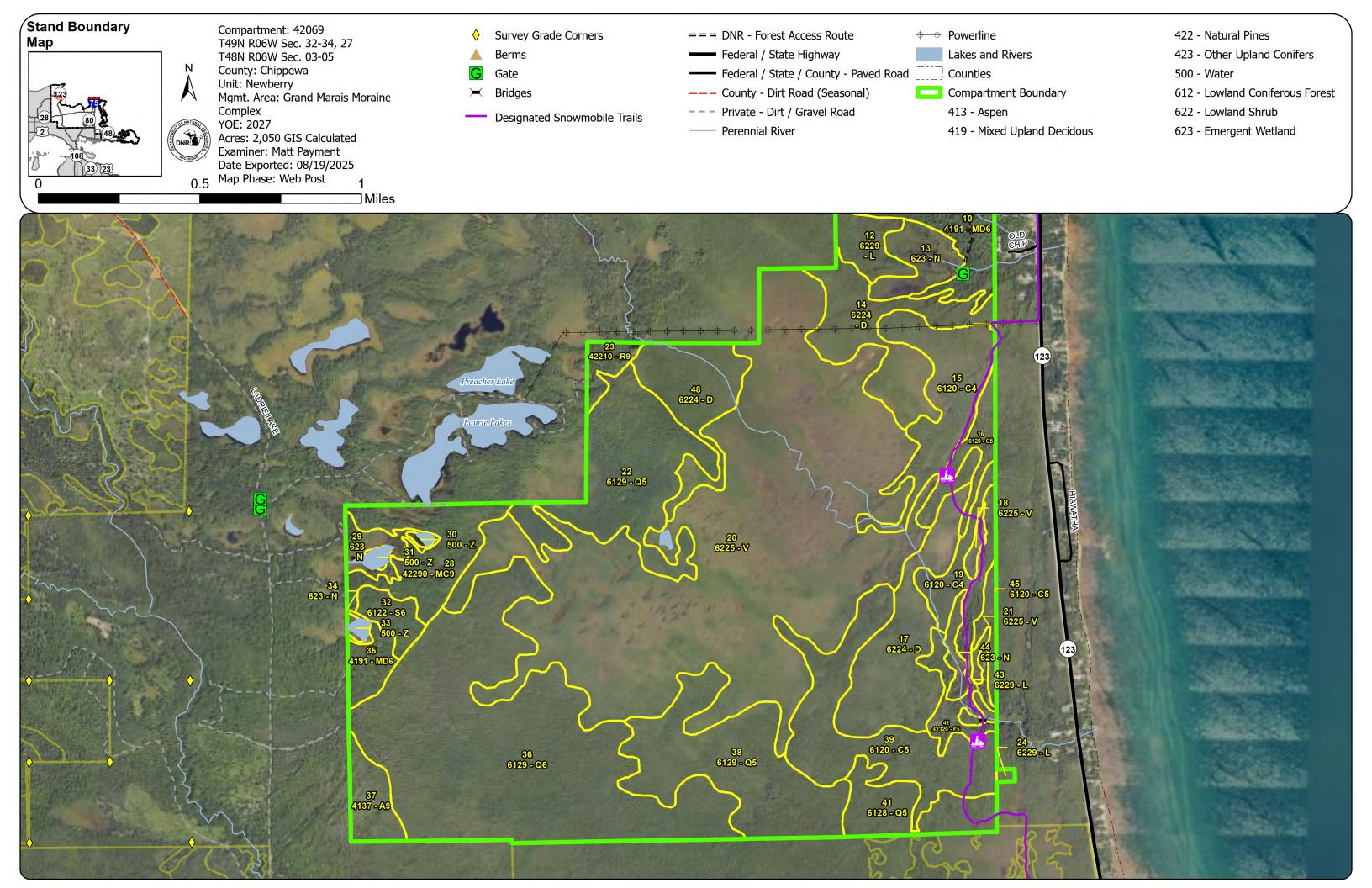
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

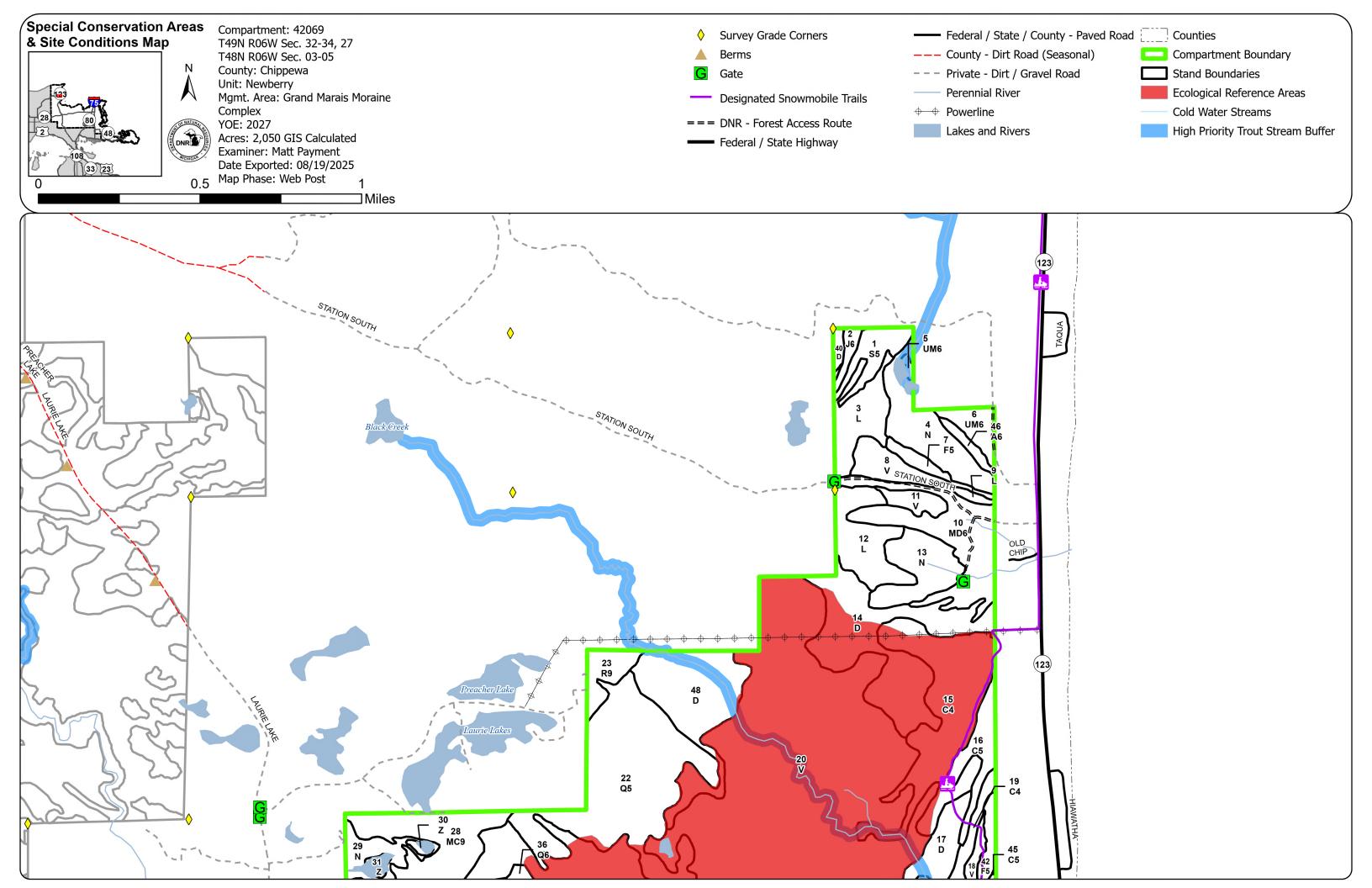


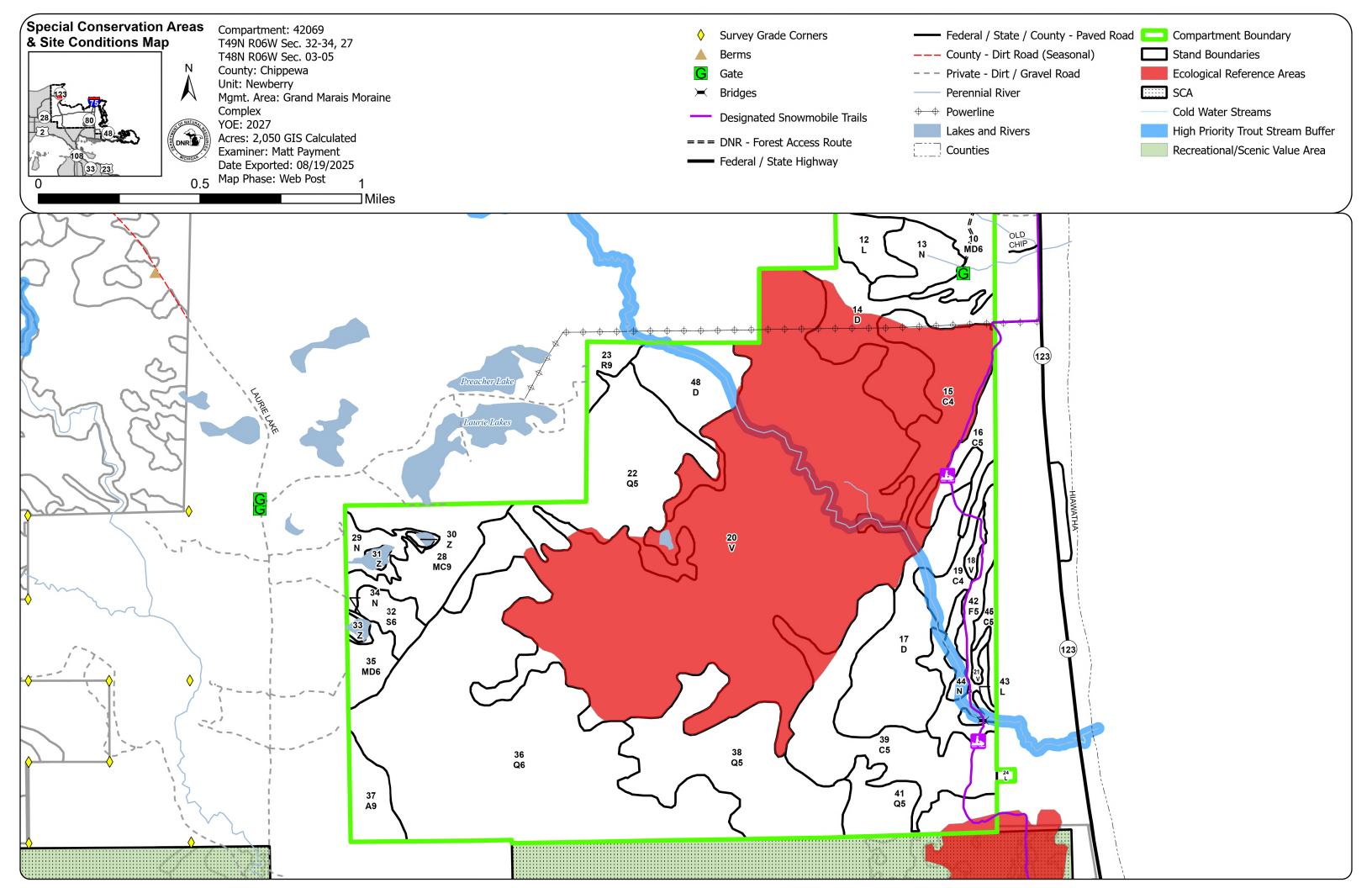












Compartment 69 Year of Entry 2027

Newberry Mgt. Unit
Matt Payment: Examiner

Age Class

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Aspen	0	0	0	0	0	0	0	0	0	24	0	4	0	0	0	0	0	0	28
Bog	615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	615
Cedar	0	0	0	0	0	0	0	0	0	16	104	102	0	0	0	0	0	0	222
Jack Pine	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
Lowland Conifers	0	0	0	0	0	0	0	0	0	118	440	43	0	0	0	0	0	0	601
Lowland Shrub	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	14	16	0	0	0	0	0	0	0	30
Marsh	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	48	17	0	0	0	0	0	0	0	0	65
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	58
Red Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12
Treed Bog	209	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209
Upland Mixed Forest	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	12
Upland Spruce/Fir	0	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	44
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Total	975	0	0	0	0	0	0	0	104	189	560	153	0	0	0	0	0	70	2050

Report 2 – Treatment Summary

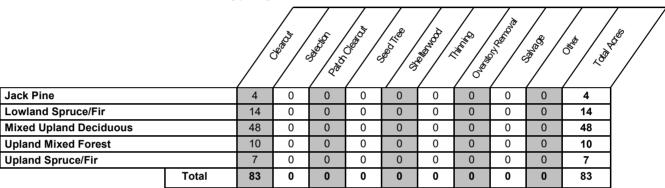
Newberry Mgt. Unit Year of Entry: 2027

Acres of Harvest

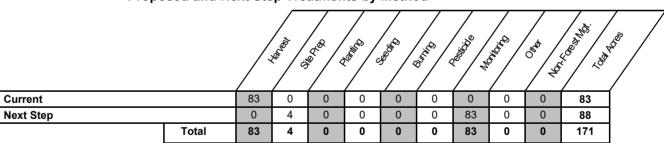
Compartment 69
Total Compartment Acres: 2,050

Commercial Harvest Harvests with Site Condition - 168
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



s		N	lewberry	y Mgt. Unit		Repo	rt 3 '	Treatments		Compartmer Year of Entr		
t a n d	Treatme Name		Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habi Cu
pose 1	ed Treat 4206900			100 Plack Spruc	e 5	80	51-80	Harvest	Clearcut	6122 - Black	Dianting	N
1	4206900	1-Cut	14.4 0	122 - Black Spruc	e 5	80	31-60	narvest	Clearcut	Spruce	Planting Record	IN
Pres Spec		Clearcut he red lir		erves. Retain 3%	of stand ac	reage in	a retention	on pocket. Leave	e 1 per 2 acre of w	hite pine and spru	uce, birch, red	maple i
	<u>: Step</u> N .tments:	Monitorin	g, Natura	al Regen (Re-Inve	ntory)							
Rege	en:	olack spr	uce with	a lowland conifer	mix							
Othe Com	<u>er</u> iment:											
Site	Condition:	Surve	y Neede	d								
Prop	osed Star	t Date:	10/01/20)26								
2	4206900		4.1	42220 - Natural Jack Pine	6		51-80	Harvest	Clearcut	4222 - Natural Jack Pine	Planting Record	N
Pres Spec		Clearcut.	Remov	e all jack pine, and	d spruce. S	Small ac	reage, no	retention neede	ed. Leave a few wh	ite pine and spruc	e along edges	
	Step S	SitePrep,	Scarific	ation; Monitoring,	Natural Re	gen (Int	ermediate	;)				
	eptable J	lack Pine	e with sp	ruce								
Rege			, sp									
Othe Com	e <u>r</u> iment:											
	Condition:	Surve	v Neede	d								
	osed Star		-									
6	4206900	6-Cut	10.3	4319 - Mixed Upland Forest	6	76	81-110	Harvest	Clearcut	4319 - Mixed Upland Forest	Planting Record	N
_	•	Clearcut,	no reter	ntion. Small acreaç	ge. Leave a	all super	canopy w	hite pine. Leave	e aspen in red line	and leave all hem	llock	
		/Jonitorin	g, Natura	al Regen (Re-Inve	ntory)							
	eptable N	/lixed up	land with	n aspen								
Othe												
Site	Condition:	Surve	y Neede	d								
Prop	osed Star	t Date:	10/01/20)26								
7	4206900	7-Cut	6.5	42340 - Upland Spruce/Fir	5	75	51-80	Harvest	Clearcut	42330 - Upland Fir	Planting Record	N
Pres Spec		Clearcut,	no reter	ntion. Small acrea	ge. Leave \	white pin	ie over 22	".		1 11	record	
	Step N	∕lonitorin	g, Natura	al Regen (Re-Inve	ntory)							
Trea	eptable N	∕lix of up	land con	ifers with deciduo	us compon	ent						
Acce Rege Othe	eptable N en:	∕lix of up	land con		us compon	ent						
Acce Rege Othe Com	eptable N en: er	·		ifers with deciduou	us compon	ent						

s t		Newberry Mgt. Unit				rt 3 '	Treatments		•	mpartment: 42069 ar of Entry: 2027		
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut	
10	42069010-Cut		4191 - Mixed Upland Deciduous with Conifer	6	76	111- 140	Harvest	Clearcut	4199 - Other Mixed Upland Deciduous	Planting Record	No	
Next Trea Acce Rege	Step Monitor tments: eptable mixed cen:	rd BMP 10 ring, Natui	ention. Harvest all s 00-foot RMZ betwee ral Regen (Re-Inven ciduous species with	n the clea	rcut trea	itment an					hemlock.	
Site	ment: Condition: Sur osed Start Date	vey Neede : 10/01/2										

Total Treatment 83.4 Acreage Proposed:

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Availability for Management

Total	Acres	Acres Avail	Acres		Domina	nt Sit	e Con	dition	s		
Acres	Available	With Condition	Not Available		2B	21	2A	3A	3B	3L	5D
28	0	28	0	Aspen	24	4					
595	28	0	566	Bog				478		89	
222	10	0	212	Cedar				72	119	22	
4	0	4	0	Jack Pine		4					
600	0	0	600	Lowland Conifers			69	3		488	40
59	59	0	0	Lowland Shrub							
30	0	30	0	Lowland Spruce/Fir	16	14					
84	85	0	0	Marsh							
65	0	65	0	Mixed Upland Deciduous	17	48					
58	0	58	0	Natural Mixed Pines	58						
12	0	0	12	Red Pine			12				
207	0	0	207	Treed Bog				41			167
11	0	11	0	Upland Mixed Forest		11					
44	0	7	38	Upland Spruce/Fir		7			38		
7	7	0	0	Water							
2,027	188	203	1,636	Total Forested Acres	115	88	82	593	157	598	207
	9%	10%	81%	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	2l: Survey needed	88	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
	Comments:						
2	Available	2B: Unknown if access through adjacent landowner(s) is possible	115	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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3	Unavailable	2A: Adjacent landowner denied access	82	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	3B: Threatened, endangered, and special concern species	70	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3B: Threatened, endangered, and special concern species	38	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3A: Conservation values incompatible with harvest at this time	593	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: ERA						
7	Unavailable	5D: Unproductive forest land	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	3A: Conservation values incompatible with harvest at this time	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: ERA						

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9	Unavailable	5D: Unproductive forest land	225	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	3L: Other wildlife concerns	598	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Habitat consideration	ons.					
11	Unavailable	3B: Threatened, endangered, and special concern species	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	3B: Threatened, endangered, and special concern species	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
13	Unavailable	3B: Threatened, endangered, and special concern species	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
15	Unavailable	3A: Conservation values incompatible with harvest at this time	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: ERA	_					

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Unspecified
Unspecified
Unspecified
Unspecified
Unspecified

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23	Unavailable	3A: Conservation values incompatible with harvest at this time	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: ERA						
24	Unavailable	3A: Conservation values incompatible with harvest at this time	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: ERA						
25	Unavailable	3A: Conservation values incompatible with harvest at this time	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: ERA						
26	Unavailable	3A: Conservation values incompatible with harvest at this time	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: ERA						

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 Report 7 – Stands

Stand	Level 4 C	over Type		Size Density	Acres	Stand Age B	A Range	Managed S	ite	General Comments
1	6122 - Bl Canopy Species White Pine	ack Spruce % Cover 5	Size Class	DBH Age	Sub-Ca	80 nopy Species	51-80 Density Low	N/A Avg. Height Variable	Size Variable	Small diameter spruce stand. Some white birch and red maple along the east edge. Pockets of sapling size spruce. Only access is through private to the north. Stand is healthy. Kinross-Dawson complex of soils.
	Black Spruce	95	Seedling	6 80	Ta	ag Alder	Medium	5 - 10 feet	5 - 10 feet	
2	42220 - Nat	ural Jack F	Pine I	Poletimber Well	4.1	105	51-80	N/A		Small ridge of mature jack pine intermixed with adjacent spruce
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stand. Nice tall, jack pine. Jack pine is mature. Access could be a problem. Deer Park-Kinross complex
	Jack Pine	95		9 105	Blad	ck Spruce	Low	Variable	Variable	problem. Deer and anti-tunious complex
	Black Spruce	5	Seedling	7	Ва	lsam Fir	Medium	Variable	Variable	
3	6229 - Mixed	Lowland S	hrub	None	23.3			No		Markey and Carbondale mucks
4	623 - Emer	gent Wetla	nd	None	33.1			No		Beaver marsh. Ponded areas. Old wood duck boxes along the edges
5	4319 - Mixed	Upland Fo	orest I	Poletimber Well	1.3	76	81-110	N/A		Large diameter white pine over lower quality red maple, white birch,
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	spruce and balsam. Similar to stand 10 without the pockets of birch. Access is questionable across various land owners. Very small
	Paper Birch	20	Seedling	8	Re	d Maple	Medium	10 - 20 feet	10 - 20 feet	acreage. Limiting factors. Halfaday sands.
	Red Maple	30		9 76	Ва	lsam Fir	High	Variable	Variable	
	Quaking Aspen	5		10						
	White Spruce	20		9						
	Balsam Fir	15	Seedling	8						
	White Pine	10		12						
6	4319 - Mixed	Upland Fo	orest I	Poletimber Well	10.3	76	81-110	N/A		Large diameter white pine over lower quality red maple, white birch,
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	spruce and balsam. Similar to stand 10 without the pockets of birch. Access is questionable (whitefish township schools).
	White Pine	10		12	Ва	lsam Fir	High	Variable	Variable	
	Quaking Aspen	5		10	Re	d Maple	Medium	10 - 20 feet	10 - 20 feet	
	Balsam Fir	15	Seedling	8						
	Red Maple	30		9 76						
	White Spruce	20		9						
	Paper Birch	20	Seedling	8						
7	42340 - Upla	and Spruce	e/Fir Po	oletimber Medium	6.5	75	51-80	N/A		Narrow ridge of small diameter black spruce, balsam, red maple and white birch with a thick F3 understory.
	Canopy Species		Size Class	DBH Age		nopy Species	Density	Avg. Height	Size	Thinks Short Man a think to directory.
	Quaking Aspen	5	Seedling	7		per Birch	Medium	10 - 20 feet	10 - 20 feet	
	White Pine	5		9		lsam Fir	High	>20 feet	>20 feet	
	Paper Birch	25	Sapling	7		ed Maple	Medium	>20 feet	>20 feet	
	Balsam Fir	20	Sapling	6	Blad	ck Spruce	Medium	>20 feet	>20 feet	
	Red Maple	5	Seedling	7						
	Black Spruce	40	Seedling	7 75						

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Stand	Level 4 C	over Type		Size Der	sity	Acres	Stand Age B	A Range	Managed Si	te	General Comments	
8	6225	5 - Bog		Non	Э	13.8			No		Open bog. Histosols and Aquents	
9	6229 - Mixed	Lowland S	hrub	Non	9	2.1			No		Open bog. Histosols and Aquents	
10	4191 - Mixed Upla Co	and Decidu onifer	ous with	Poletimbe	er Well	48.1	76	111-140	N/A		Mixed stand of maple, white birch, spruce, balsam, white pine, red pine, some red oak and some hemlock. Primarily red maple, mediur	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cai	nopy Species	Density	Avg. Height	Size	to low quality. Pockets of high BA of white birch with many dead tops. Mortality in the white birch throughout the stand. Access cou	
	White Pine	10		16	J .		Isam Fir	High	Variable	Variable	be possible via snowmobile trail off of M-123 across private land.	
	Balsam Fir	5	Seedling	8		Re	d Maple	Medium	10 - 20 feet	10 - 20 feet	as possible the shortmeans than on or in 125 dolone private talled	
	Red Maple	43		9	76	Pap	per Birch	Low	10 - 20 feet	10 - 20 feet		
	Red Oak	10		10							_	
	White Spruce	2		12								
	Quaking Aspen	5		10								
	Paper Birch	20	Seedling	8								
11	6225	5 - Bog		Non	Э	7.5			No		Open bog. Histosols and Aquents	
12	6229 - Mixed	Lowland S	hrub	Non	9	28.2			No		Open lowland shrubs with some sparse trees scattered throughout. Markey and Carbondale mucks	
13	623 - Emer	gent Wetla	nd	Non	Э	26.3			No		Open marsh with areas of tag alder. Lots of water	
14	6224 - 1	Treed Bog		Non	e	71.9			No		Patterned Fen association/adjacency. MNFI comments are included in the compartment file and some notes included with stand 20. Sm spruce and cedar throughout. Trees are stunted and a good percentage of mortality. More cedar in northern portion and more spruce in the southern portion. Markey and Carbondale muck soils.	
15	6120 - Lo	wland Ceda	ar	Poletimbe	r Poor	75.1	95	1-50	N/A		SCA - Patterned Fen association/adjacency. MNFI comments are	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	included in the compartment file and some notes are included with	
No	rthern White Cedar	100	Sapling	6	95		White Cedar	High	5 - 10 feet	5 - 10 feet	stand 20. Many areas with dead cedar or dead tops. Some areas a mainly a C3. Fingers of cedar out within the treed bog. Markey and Carbondale muck soils.	
16	6120 - Lo	wland Ceda	ar P	oletimber	Mediun	n 16.3	87	1-50	N/A		Lower areas are more of a C3. Very slight ridges of thicker cedar.	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Lots of cedar with dead tops. Scattered black spruce. Snowmobile	
No	orthern White Cedar	95	Sapling	6	87		White Cedar	High	5 - 10 feet	5 - 10 feet	trail runs north-south through stand. Markey and Carbondale muck soils.	
110	Black Spruce	5	Seedling	6		rtortion	TTTILLO COUGI	1 11911	0 101000	0 101000	30113.	
17	6224 - ⁻	Treed Bog		Non	 -	80.0			No		Patterned Fen association/adjacency. MNFI comments are included in the compartment file and some notes are included with stand 20. Small spruce and cedar throughout. More cedar in northern portion and more spruce in the southern portion. Markey and Carbondale muck soils.	

Stand	Stand Level 4 Cover Type		Size De	nsity	Acres	Stand Age B	A Range	Managed Site		General Comments	
18	6225	- Bog		Nor	е	4.2			No		Stand is adjacent to Patterned Fen, possible buffer or inclusion in the complex. Markey-Kinross-Au Gres soil complex.
19	6120 - Lov	vland Ceda	r i	Poletimber Poor		19.0	95	1-50	N/A		Many areas with dead cedar or dead tops. Some areas are mainly a
	Canopy Species % Cover Size		Size Class	Class DBH Age		Sub-Can	opy Species	Density	Avg. Height	Size	C3. Fingers of cedar out within the treed bog. Markey and Carbondale muck soils.
No	orthern White Cedar	100	Sapling	6	95	Northern	White Cedar	High	5 - 10 feet	5 - 10 feet	Carbondale Mack cons.
20	6225	i - Bog		Nor	е	586.5			No		ERA - Patterned Fen complex. Large open wetland complex. Series of small water holes and areas of "drier" ground situated in a NE-SW pattern. Field survey with MNFI (Josh Cohen) determined the area to be a Patterned Fen since last inventory. Discussion with MNFI (Josh Cohen) determined that the patterning from the documented patterened fen south of Section 3 extends into sections 3,4, 33 and 34. The survey that documented the patterned fen to the south was limited to the Tahquamenon Falls State Park boundary. Markey and Carbondale muck soils.
21	6225	- Bog		Nor	е	2.8			No		SCA - stand is adjacent to Patterned Fen area, possible buffer/inclusion to the complex. Markey-Kinross-Au Gres soil complete
22	6129 - Mixed Conife	oletimber	Mediur	n 111.2	111.2 91 51-80		N/A		SCA = Patterned fen association/adjacency. MNFI comments are nicluded in the compartment file and some notes are included with		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	stand 20. Markey and Carbondale muck soils. BA and quality are
	Tamarack	15	Seedling	6		Northern	White Cedar	Medium	5 - 10 feet	5 - 10 feet	better in western portions of the stand.
No	rthern White Cedar	40	Sapling	6		Black	Spruce	Medium	Variable	Variable	
	Red Maple	2	Seedling	6							
	Black Spruce	40	Seedling	7	91						
	White Pine	3		10							
23	42210 - Natural Red Pine			Sawtimber Well		12.2 120		81-110	N/A		Natural red pine stand along ridges. Primarily red pine with jack pine
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	and white pine throughout. Understory is fairly open. No access. Blocked off by gated/fenced private sanctuary. Deer park-Kinross so
	Black Spruce	5	Seedling	8		Bals	am Fir	Medium	Variable	Variable	complex.
	Jack Pine	10		9	90	Red	Maple	Medium	10 - 20 feet	10 - 20 feet	
	Red Pine	65		14	120	Black	Spruce	Low	10 - 20 feet	10 - 20 feet	
	White Pine	20		11							
24	6229 - Mixed	Lowland Sh	nrub	Nor	е	1.4			No		Parcel up for disposal. Small acreage low wet ground.
28	42290 - Natu	ural Mixed Pine		Sawtimber Well		58.4	58.4 160 1	111-140	N/A		Ridges of natural white pine and red pine with a mix of white birch,
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	spruce, maple and some red oak. Cedar along the edges of the lowe ground. Mostly a red pine stand. Pockets of white birch and red
	Red Pine	40		12	160	Bals	am Fir	Medium	Variable	Variable	maple. Rolling ridges.
	White Pine	35		12		Black	Spruce	Medium	10 - 20 feet	10 - 20 feet	
	Red Oak	15		9							•
	Black Spruce	10	Seedling	8							

Report 7 - Stands

Stand	Level 4 Co	ver Type		Size Densit	y Acres	Stand Age E	BA Range	Managed S	ite	General Comments
29	623 - Emerç	jent Wetlai	nd	None	15.2			No		Marsh/bog surrounding the small lakes. Dawson and Loxley peats.
30	500 - Water		None	1.5			No		small marsh/bog lakes	
31	500 -	Water		None	2.6			No		small marsh/bog lakes
32	6122 - Black Spruce			oletimber V	/ell 16.0	95	81-110	N/A		Nice quality spruce stand. Cedar, red maple and tamarack. Some
	Canopy Species	% Cover	Size Class	DBH Ag	e Sub-C	anopy Species	Density	Avg. Height	Size	white pine. Scattered white birch on edges. Access is a problem. Kinross-Wainola soil complex.
	Black Spruce	70	Seedling	8 95		ack Spruce	Low	10 - 20 feet	10 - 20 feet	Killioss-wainola soli complex.
	Red Maple	10	Seedling	6		'				
	White Pine	15		12						
	Hemlock	5	Seedling	9						
33	500 -	Water		None	2.5			No		small marsh/bog lakes
34 35	4191 - Mixed Upland Deciduous with P			None oletimber V	1.5 /ell 16.9	87	81-110	No N/A		Marsh/bog surrounding the small lakes. Dawson and Loxley peats. White birch, red maple, large diameter white pine, some spruce and
	Conifer Canopy Species % Cover Size Class			DBH Ag	e Sub-C	Sub-Canopy Species		ty Avg. Height Size		balsam. Scattered hemlock mainly in lower areas. Some mortality ir white birch. Access through private. Deer park-Kinross soil complex
	Black Spruce	5	Seedling	7		led Maple	Medium	10 - 20 feet	10 - 20 feet	
	White Pine	10		9		alsam Fir	High	Variable		
	Paper Birch	40	Seedling	-					variable	
	Red Maple	30		8 87	'	Hemlock	Low		Variable Variable	
	•		Seedling	8 87		Hemlock /hite Pine	Low	Variable	Variable	
	Quaking Aspen		Seedling	8		Hemlock /hite Pine	Low			
	Quaking Aspen Hemlock	5	Seedling					Variable	Variable	
36		5 10		8 9 9	V	/hite Pine		Variable	Variable 5 - 10 feet	Patterned fen association/adjacency. MNFI notes are included in the
	Hemlock 6129 - Mixed Conife	5 10 rous Lowla	and Forest P	8 9 9	/ell 329.0	/hite Pine	51-80	Variable 5 - 10 feet N/A	Variable 5 - 10 feet	compartment comments and some notes are included with stand 20.
	Hemlock	5 10 rous Lowla		8 9 9	/ell 329.0	/hite Pine	51-80	Variable 5 - 10 feet	Variable 5 - 10 feet	compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and
36	Hemlock 6129 - Mixed Conife Canopy Species	5 10 rous Lowla	and Forest P	8 9 9 oletimber W	/ell 329.0	/hite Pine 91 anopy Species	51-80 Density	Variable 5 - 10 feet N/A Avg. Height	Variable 5 - 10 feet	compartment comments and some notes are included with stand 20.
36	Hemlock 6129 - Mixed Conife Canopy Species Tamarack	5 10 rous Lowla % Cover 30	and Forest P Size Class Seedling	8 9 9 oletimber W	/ell 329.0	/hite Pine 91 anopy Species	51-80 Density	Variable 5 - 10 feet N/A Avg. Height	Variable 5 - 10 feet	compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and tamarack. Pockets of solid cedar (C6) within the stand. Lots of
36	Hemlock 6129 - Mixed Conife Canopy Species Tamarack thern White Cedar	5 10 rous Lowla % Cover 30 20	and Forest P Size Class Seedling Seedling	8 9 9 Oletimber W DBH Ag 8 7	/ell 329.0	/hite Pine 91 anopy Species	51-80 Density	Variable 5 - 10 feet N/A Avg. Height	Variable 5 - 10 feet	compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and tamarack. Pockets of solid cedar (C6) within the stand. Lots of
36	Hemlock 6129 - Mixed Conife Canopy Species Tamarack thern White Cedar Red Maple Black Spruce	5 10 rous Lowlar 30 20 10	and Forest P Size Class Seedling Seedling Seedling Seedling	8 9 9 Oletimber W B Ag 8 7 7 7	Vell 329.0 Black	/hite Pine 91 anopy Species	51-80 Density	Variable 5 - 10 feet N/A Avg. Height	Variable 5 - 10 feet Size 10 - 20 feet	compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and tamarack. Pockets of solid cedar (C6) within the stand. Lots of blowdown in areas. Markey and Carbondale muck soils. Old, mature aspen stand with mortality in the aspen throughout.
36 Nor	Hemlock 6129 - Mixed Conife Canopy Species Tamarack thern White Cedar Red Maple Black Spruce	5 10 rous Lowlar 30 20 10 40	size Class Seedling Seedling Seedling Seedling	8 9 9 soletimber W BH Ag 8 7 7 7 8 9 9	/ell 329.0 Bli /ell 23.5	hite Pine 91 anopy Species ack Spruce	51-80 5 Density Low 81-110	Variable 5 - 10 feet N/A Avg. Height 10 - 20 feet	Variable 5 - 10 feet Size 10 - 20 feet	compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and tamarack. Pockets of solid cedar (C6) within the stand. Lots of blowdown in areas. Markey and Carbondale muck soils. Old, mature aspen stand with mortality in the aspen throughout. Some white birch mortality. Thick understory of balsam. Pockets of
36 Nor	Hemlock 6129 - Mixed Conife Canopy Species Tamarack thern White Cedar Red Maple Black Spruce 4137 - As	5 10 rous Lowlater % Cover 30 20 10 40 pen, Birch	and Forest P Size Class Seedling Seedling Seedling Seedling	8 9 9 oletimber W DBH Ag 8 7 7 8 9 9 awtimber W	/ell 329.0 Black /ell 23.5 e Sub-C	91 anopy Species ack Spruce	51-80 5 Density Low 81-110	Variable 5 - 10 feet N/A Avg. Height 10 - 20 feet	Variable 5 - 10 feet Size 10 - 20 feet	compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and tamarack. Pockets of solid cedar (C6) within the stand. Lots of blowdown in areas. Markey and Carbondale muck soils. Old, mature aspen stand with mortality in the aspen throughout. Some white birch mortality. Thick understory of balsam. Pockets of
36 Nor	Hemlock 6129 - Mixed Conife Canopy Species Tamarack thern White Cedar Red Maple Black Spruce 4137 - As Canopy Species	5 10 rous Lowlar % Cover 30 20 10 40 pen, Birch % Cover	size Class Seedling Seedling Seedling Seedling Seedling Seedling	8 9 9 Oletimber W DBH Ag 8 7 7 8 9 9 Awtimber W DBH Ag	/ell 329.0 Black /ell 23.5 e Sub-C	hite Pine 91 anopy Species ack Spruce 89 anopy Species	51-80 Density Low 81-110 Density	Variable 5 - 10 feet N/A Avg. Height 10 - 20 feet N/A Avg. Height	Variable 5 - 10 feet Size 10 - 20 feet	compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and tamarack. Pockets of solid cedar (C6) within the stand. Lots of blowdown in areas. Markey and Carbondale muck soils. Old, mature aspen stand with mortality in the aspen throughout. Some white birch mortality. Thick understory of balsam. Pockets of
36 Nor	Hemlock 6129 - Mixed Conife Canopy Species Tamarack thern White Cedar Red Maple Black Spruce 4137 - As Canopy Species Balsam Fir	5 10 rous Lowlar 30 20 10 40 pen, Birch 7	size Class Seedling Seedling Seedling Seedling Seedling Seedling	8 9 9 oletimber W DBH Ag 8 7 7 7 8 9 9 awtimber W DBH Ag	/ell 329.0 Black /ell 23.5 e Sub-C	hite Pine 91 anopy Species ack Spruce 89 anopy Species	51-80 Density Low 81-110 Density	Variable 5 - 10 feet N/A Avg. Height 10 - 20 feet N/A Avg. Height	Variable 5 - 10 feet Size 10 - 20 feet	compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and tamarack. Pockets of solid cedar (C6) within the stand. Lots of blowdown in areas. Markey and Carbondale muck soils. Old, mature aspen stand with mortality in the aspen throughout.

7

Seedling

Black Spruce

Level 4 Cover Type Size Density **Managed Site General Comments** Stand Acres Stand Age BA Range 6129 - Mixed Coniferous Lowland Forest Poletimber Medium 118.2 87 51-80 N/A SCA - stand is adjacent to Patterned Fen, possible buffer/inclusion to 38 the complex. Lower basal area than stand 36 but same species % Cover Size Class Size **Canopy Species DBH Age Sub-Canopy Species** Density Ava. Heiaht (spruce, cedar and tamarack). Wet, mixed conifer stand. Lots of 7 Northern White Cedar Northern White Cedar 87 Medium 5 - 10 feet 5 - 10 feet 40 Seedling blowdown in areas. 30 7 Tamarack Seedling Black Spruce Medium Variable Variable Black Spruce 30 Seedling 7 6120 - Lowland Cedar Poletimber Medium 101.9 100 51-80 N/A SCA - stand is adjacent to Patterned Fen, possible buffer/inclusion to 39 the complex. Wet ground, poor quality cedar. Scattered pockets of **DBH Age Canopy Species** % Cover Size Class **Sub-Canopy Species** Size Density Avg. Height black spruce. Dead tops and mortality throughout stand. Black Spruce 10 Seedling 6 Northern White Cedar Medium Variable Variable 7 Northern White Cedar 90 100 Seedling 6224 - Treed Bog 40 None 2.5 No Scattered, small diameter stunted spruce. 6128 - Lowland Coniferous, Mixed Poletimber Medium 43 4 100 N/A SCA - northern reaches of a documented Patterned Fen complex to 41 Deciduous the south of the compartment. Also adjacency to documented patterned fen to the west. Treed bog filling in with stunted cedar and % Cover Size Class **Canopy Species DBH Age** tamarack. Northern White Cedar 20 5 Sapling White Pine 2 10 Paper Birch 10 5 Sapling 6 Yellow Birch 5 Sapling 38 5 100 Black Spruce Sapling 5 Red Maple 10 Sapling 42 42320 - Upland Spruce Poletimber Medium 37.7 79 51-80 N/A SCA - stand is adjacent to Patterned Fen area, possible buffer. Small, open ridges of mainly spruce and scattered larger white pine. **Canopy Species** % Cover Size Class **DBH Age Sub-Canopy Species Density** Avg. Height Size Pockets of higher BA of spruce. Snowmobile trail runs through stand. 8 79 Black Spruce Medium Black Spruce 85 Seedling Variable Variable 5 7 Northern White Cedar Seedling 10 10 White Pine 43 6229 - Mixed Lowland Shrub None 3.6 No SCA - stand is adjacent to Patterned Fen area, possible buffer/inclusion to the complex. Black Creek flows through stand. 623 - Emergent Wetland None 8.4 No SCA - stand is adjacent to Patterned Fen area, possible 44 buffer/inclusion to the complex. Beaver activity. 9.5 95 6120 - Lowland Cedar Poletimber Medium Unspecified N/A SCA - stand is adjacent to Patterned Fen area. Low wet ground 45 mainly spruce and cedar. **Canopy Species** % Cover Size Class **DBH Age Sub-Canopy Species** Size Density Avg. Height 7 Northern White Cedar 90 Seedling 95 Northern White Cedar Medium Variable Variable

Medium

Variable

Black Spruce

10

Variable

Compartment: 69

Year of Entry: 2027

Stand	Level 4 Cover Type 4136 - Aspen, Mixed Conifer			Size Density Poletimber Well		Acres Stand Age BA Range		Managed Site		General Comments	
46						4.1	101	81-110	N/A		Small acreage of mature aspen along the edge of a marsh. Red
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cano	opy Species	Density	Avg. Height	Size	maple, large diameter white pine and scattered white birch, balsam and a few red oak. Access is guestionable (Whitefish Township
	Red Maple	10	Seedling	9		Red	Maple	Medium	5 - 10 feet	5 - 10 feet	School property).
I	Bigtooth Aspen	65		11	101	Balsa	am Fir	Full	Variable	Variable	
	Paper Birch	4	Seedling	8				<u> </u>			
	Balsam Fir	5	Seedling	7							
	White Spruce	3		10							
	White Pine	10		16							
	Hemlock	3		12							
48	6224 -	Treed Bog		Non	9	54.4			No		SCA - Patterned Fen association/adjacency. MNFI comments are included in the compartment file and some notes are included with stand 20. Small spruce and cedar throughout. More cedar in northern portion and more spruce in the southern portion.