

Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12189 Entry Year: 2027 Acreage: 1,794 County: Iron

Management Area: Way Dam Complex

Stand Examiner: Ed Rice

Legal Description:

T45N R31W section 14, 15, 22 - 24

Identified Planning Goals:

Optimize sustainable timber production while enhancing and protecting wildlife habitat. Continue to sustainably balance the aspen age class acres. Get the hardwood stands on a 20 year alternating cutting cycle towards regulation. Protect the riparian areas and transition zones during management activity.

Soil and topography:

Large areas in the center of the compartment have very fine sandy loams. The remainder of the area has a mix of sandy/stoney complexes. The lowland areas are muck soils. There are extensive areas of large steep hills throughout.

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

The compartment itself is contiguous in state ownership. Surrounding it is industrial forestland and private recreational land holdings. There is an agriculture land base towards the south end.

Unique Natural Features:

None identified

Archeological, Historical, and Cultural Features:

There is one low value archeological feature within the compartment.

Special Management Designations or Considerations:

Deer winter habitat along the Fence River and adjoining timber types.

Watershed and Fisheries Considerations:

The Mitchigan and Fence Rivers are cold water trout streams. Any aspen management should utilize a 300 foot buffer set back. All other BMP guidelines should be followed. Streams, regardless of their size or frequency of flow, are connected to downstream waters and strongly influence their function. Additionally, wetlands and open waters in riparian areas and floodplains are physically, chemically, and biologically integrated with rivers via functions that improve downstream water quality. These systems act as effective buffers to protect downstream waters from pollution and are essential components of river food webs. BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

Wildlife Habitat Considerations:

Portions of the compartment are core deer wintering areas, notably so along the Fence River.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and minor end moraine of coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Precambrian Michigamme Formation subcrops below the glacial drift. There is no current economic use for these rocks. The abandoned Republic iron mine is located ten miles to the northeast. There are no visibly active or inactive gravel pits in the area. There is no economic oil and gas production in the UP.

Vehicle Access:

Good to fair. Many unimproved two track roads are throughout the compartment.

Survey Needs:

Sec 23: SW 1/16

Recreational Facilities and Opportunities:

None present

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Fire Protection:

There are areas of dense upland spruce/fir fuel types with spruce budworm mortality, notably in section 14. These areas could present small acre control problems give the alignment of weather. Much of the above areas are bounded by water/swamp and young aspen types, providing natural fuel breaks or the very least a less volatile fuel type. Water sources are present with good access to the Fence River near by.

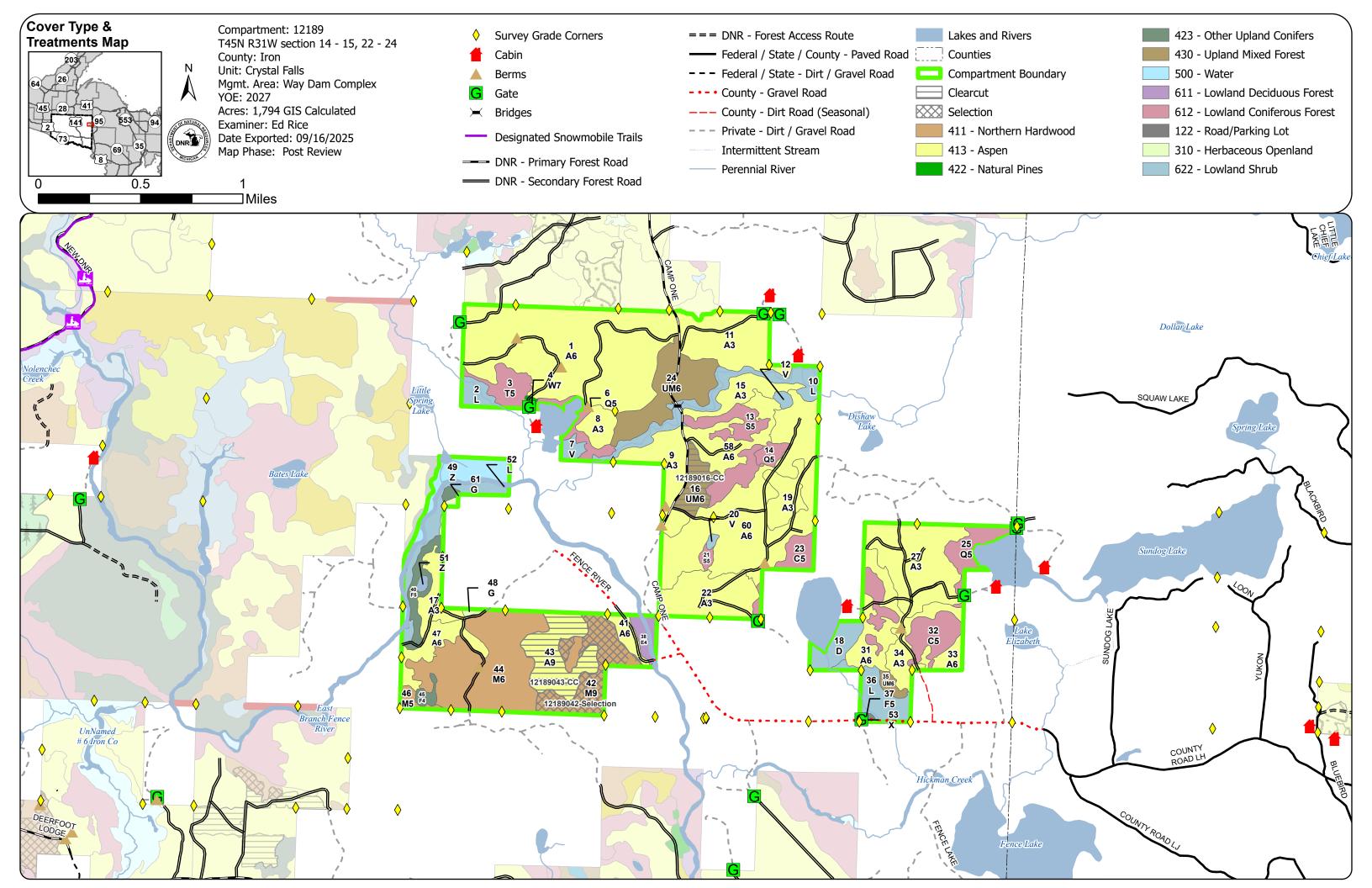
Additional Compartment Information:

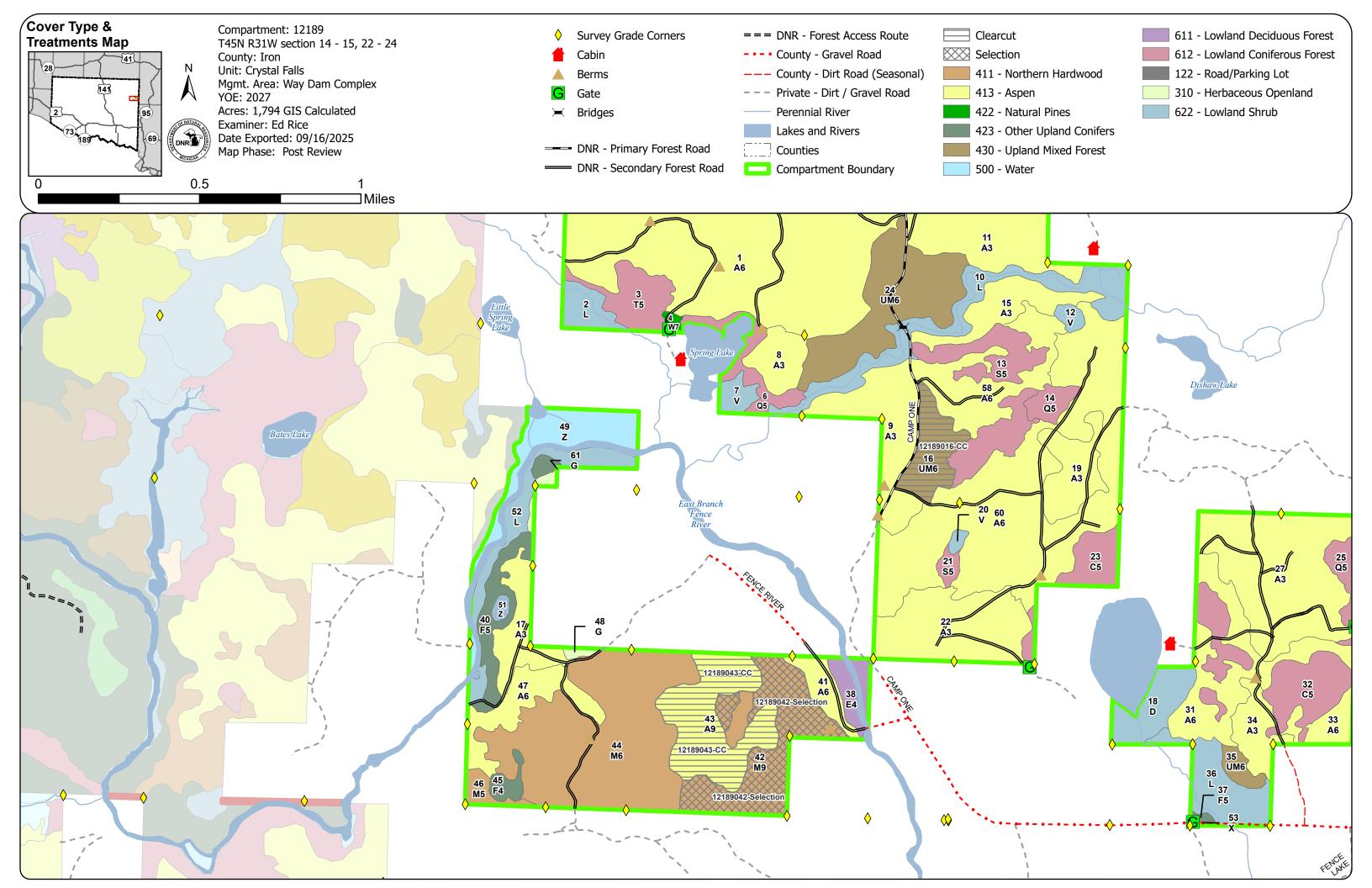
The following reports from the Inventory are attached:

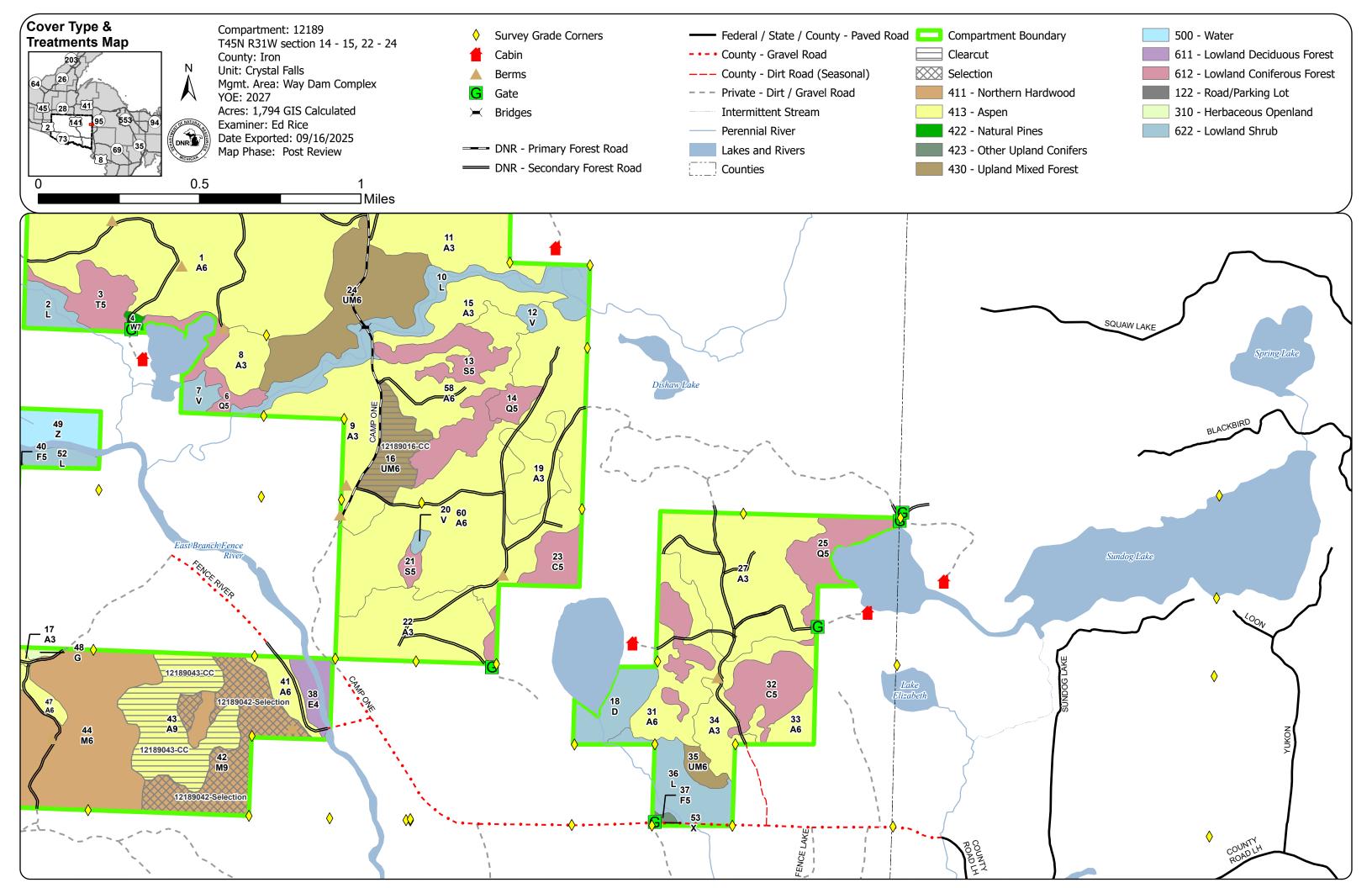
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

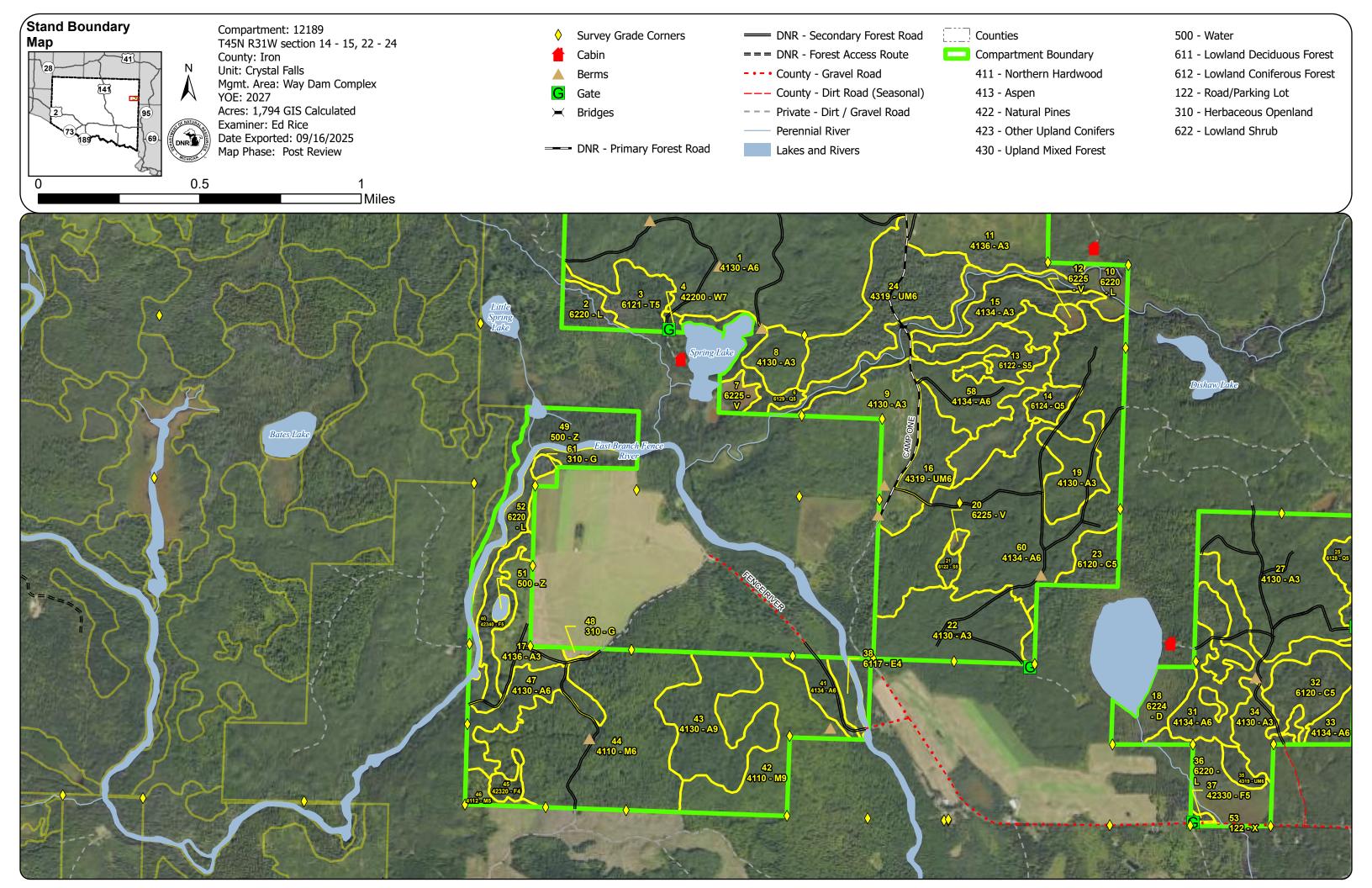
The following information is displayed, where pertinent, on the attached compartment maps: Base feature information, stand boundaries, cover types, and numbers

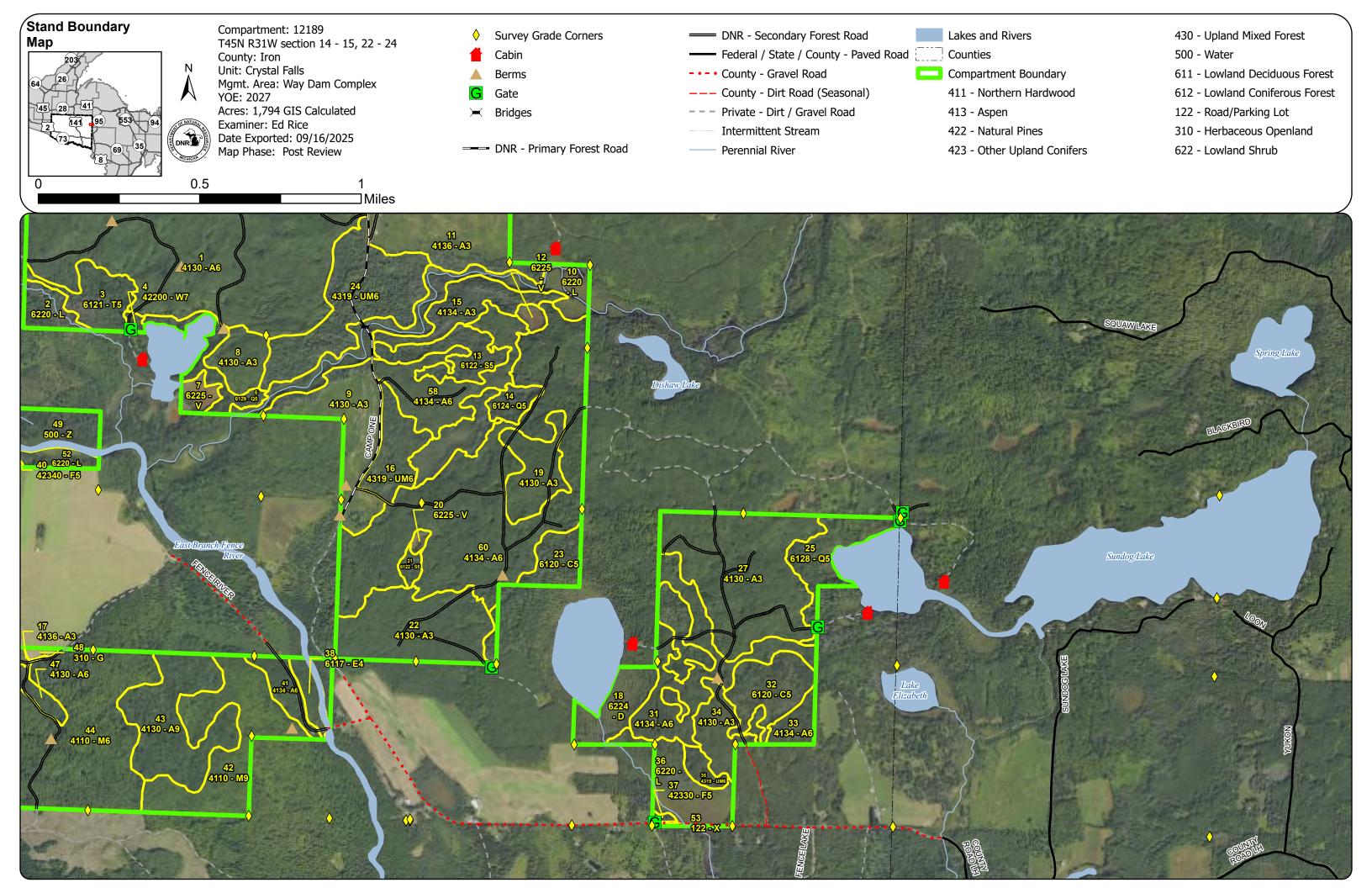
Proposed treatments
Site condition boundaries
Details on the road access system

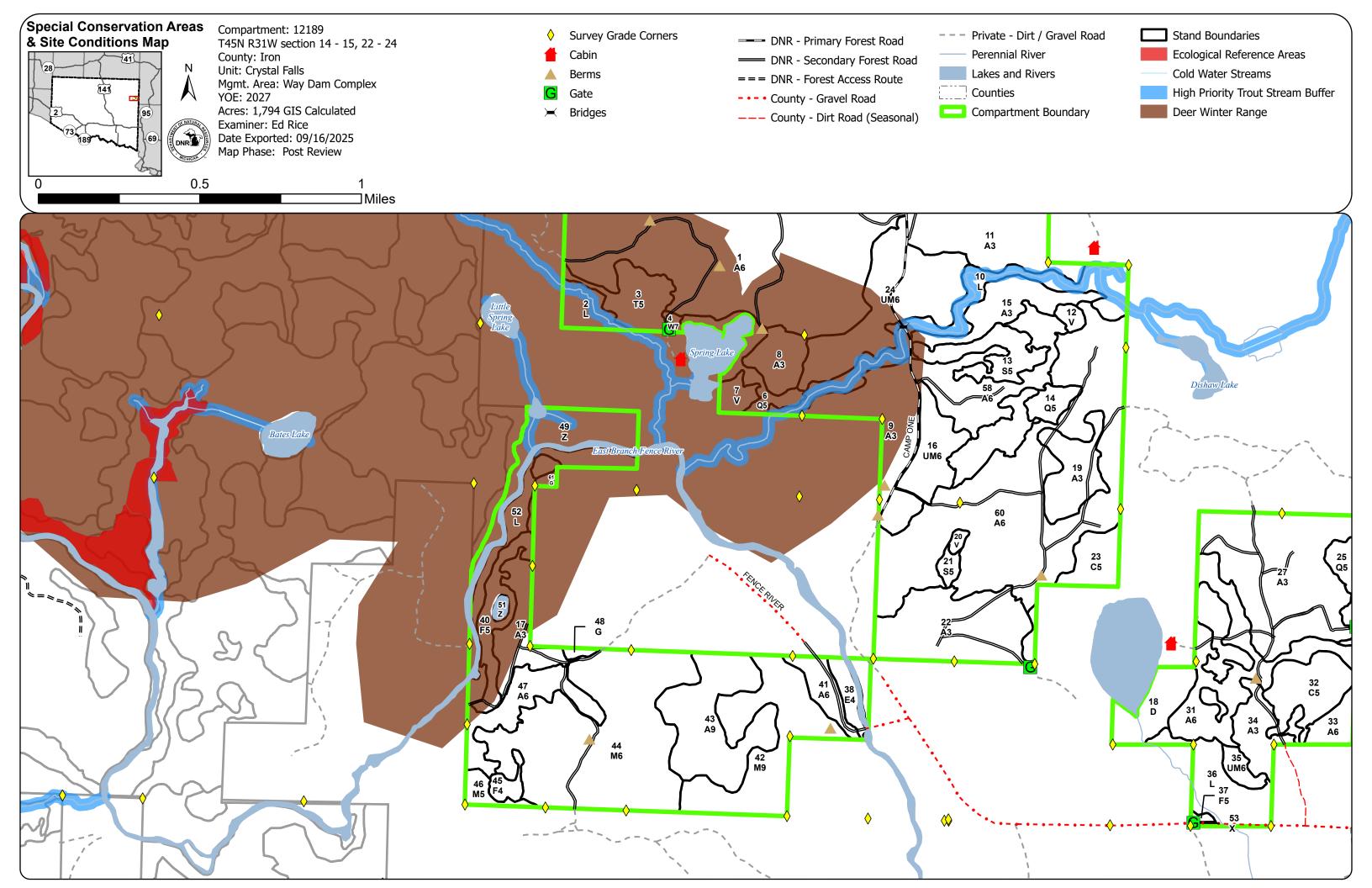


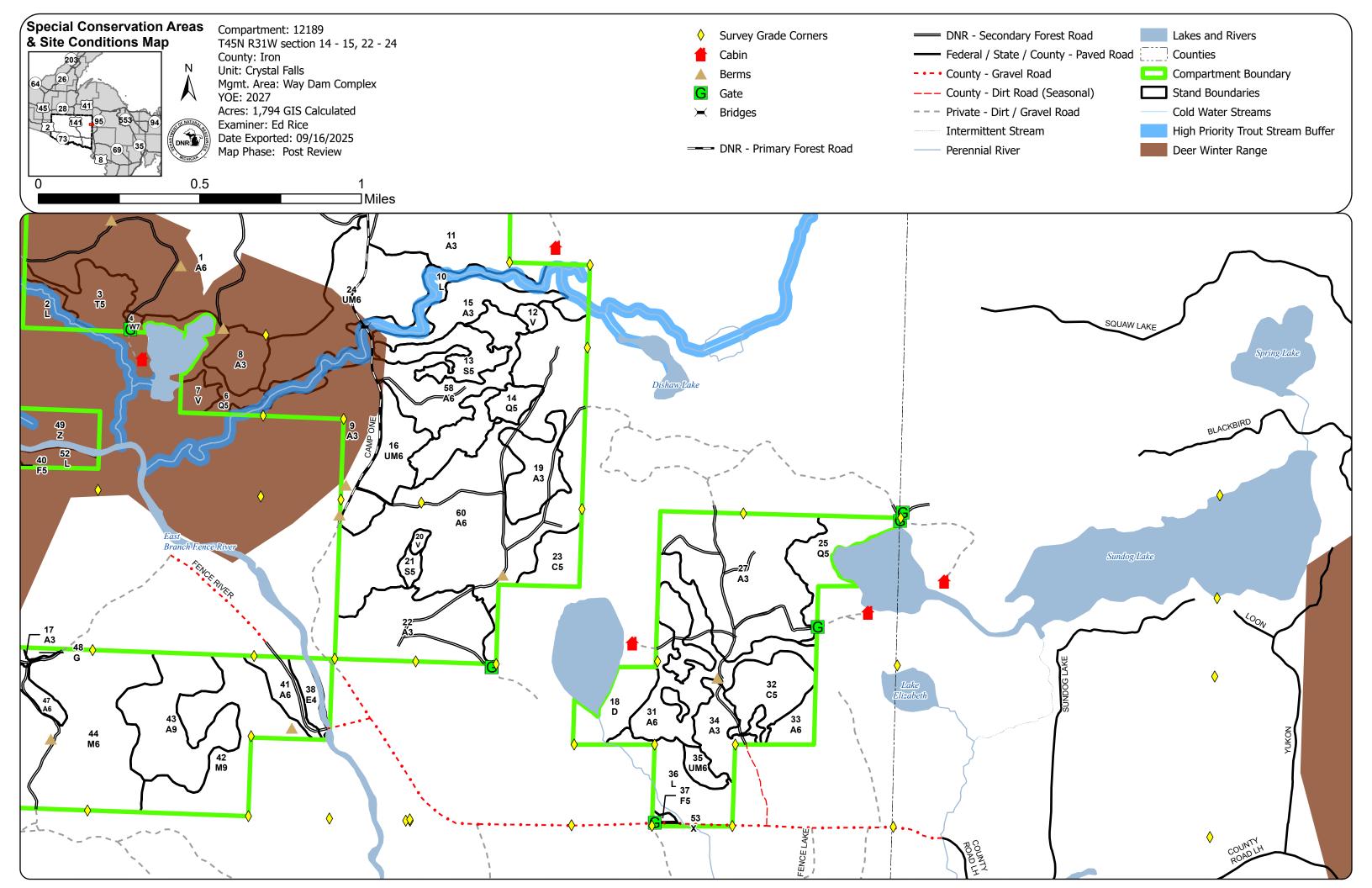












Report 1 – Total Acres by Cover Type and Age Class

Crystal Falls Mgt. Unit

Ed Rice: Examiner

Compartment 189 Year of Entry 2027



Age Class

	Age.	Kor C	3 /2		\$ \ \disp\{\din\{\disp\{\disp\{\disp\{\disp\{\disp\{\disp\{\disp\{\disp\{\din\{\\\\\\\\\\	3/8		3/8	\$ / K	R &			S Z Z	& /s	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	is &	No. of the second secon	St Tres	N. S.
Aspen	0	148	220	29	585	0	71	0	0	0	0	0	0	0	0	0	0	0	1053
Bog	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	65
Herbaceous Openland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Conifers	0	0	0	0	0	0	9	17	27	0	0	0	0	0	0	0	0	0	52
Lowland Deciduous	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Lowland Shrub	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	115
Lowland Spruce/Fir	0	0	0	0	0	0	0	43	4	0	0	0	0	0	0	0	0	0	47
Northern Hardwood	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	206	213
Tamarack	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	23
Treed Bog	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Upland Mixed Forest	0	0	0	0	0	0	31	66	0	0	0	0	0	0	0	0	0	0	97
Upland Spruce/Fir	0	0	0	0	0	0	8	23	0	0	0	0	0	0	0	0	0	0	31
Urban	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
White Pine	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Total	202	148	220	29	585	0	154	149	38	0	2	0	65	0	0	0	0	206	1797



Report 2 – Treatment Summary

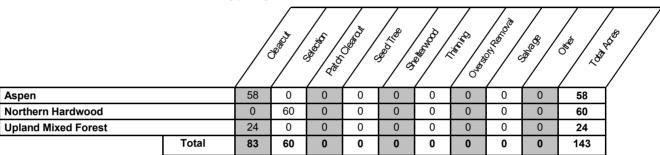
Crystal Falls Mgt. Unit Year of Entry: 2027

Acres of Harvest

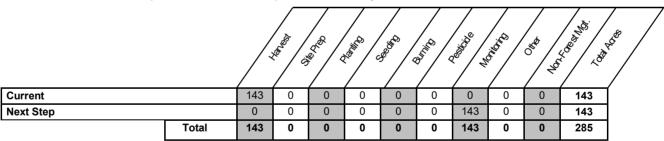
Compartment 189
Total Compartment Acres: 1,794

Commercial Harvest - 284 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



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Compartment: 12189 Year of Entry: 2027

Treatment Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat Density CoverType Method Name Objective Structure Age Range Type Cut

Approved Treatments:

12189016-CC 24.3 4319 - Mixed Upland 6 50 81-110 Harvest Clearcut 4319 - Mixed **Planting** No **Upland Forest** Record

Prescription Harvest all aspen, spruce, fir, tamarack, and jack pine that are 4.6" DBH and larger. Retain black cherry, paper birch and any associated red

pine/white pine. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, spruce, fir, pine

Regen:

Other Comment:

Site Condition:

Proposed Start Date: 10/01/2026

12189042-60.0 4110 - Sugar Maple 77 81-110 Harvest Selection 411 - Northern Current No Selection Association Hardwood

Selection harvest to 70 BA. Concentrate removals on trees that are high risk and/or will decrease in value. Where available, leave at least 2 large **Prescription**

crowned sugar maple per acre for viable seed source. Keep all species represented in the stand. Do not cut Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable N hardwoods

Regen:

Other Comment:

Site Condition:

Proposed Start Date: 10/01/2026

12189043-CC 58.2 56 Unspeci 4319 - Mixed 4130 - Aspen Harvest Clearcut **Planting** No fied Upland Forest Record

Prescription Harvest all aspen 4.6" dbh and larger, spruce/fir 10" stump and larger. Do not cut any other tree species. Protect any advanced regeneration and Specs: buffer vernal areas.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable mix of aspen, maple, spruce and fir.

Regen:

Other Comment:

Site Condition:

Proposed Start Date: 10/01/2026

Total Treatment 142.5 Acreage Proposed:

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Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	dition	S	
Acres	Available	With Condition	Not Available		2G	2H	3E	3H	3J	5D
939	903	0	36	Aspen					36	
13	13	0	0	Bog						
65	0	0	65	Cedar				65		
5	5	0	0	Herbaceous Openland						
52	0	0	53	Lowland Conifers	17				27	9
12	0	0	12	Lowland Deciduous					12	
115	115	0	0	Lowland Shrub						
47	0	0	47	Lowland Spruce/Fir	43					4
153	147	0	5	Northern Hardwood	5					
23	0	0	23	Tamarack	23					
22	22	0	0	Treed Bog						
97	31	0	66	Upland Mixed Forest		44			22	
30	6	0	24	Upland Spruce/Fir			2		23	
0	0	0	0	Urban						
47	47	0	0	Water						
2	2	0	0	White Pine						
1,621	1,291		330	Total Forested Acres	87	44	2	65	120	12
	80%		20%	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.

No.	Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3E: Easement/lease, non- military (e.g. Consumers Power red pine, etc.)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: undivided interest						

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2	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	23	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	46	5D: Unproductive forest land	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	17	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	44	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: very steep, inacces	ssible ridges combined with wet	swam	np at the base of ridges			
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	23	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
	2025 2:25:25 DM Dogs						HEINTZEI MAN

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8	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	10	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	9	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments:						
11	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	22	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	43	5D: Unproductive forest land	Unspecified	Unspecified	Unspecified
	Comments: multiple areas of st	and are stunted, bog type spru	ıce				
13	Unavailable	5D: Unproductive forest land	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: bog b spruce with o	cedar. see stand comments					
14	Unavailable	5D: Unproductive forest land	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: bog spruce, see st	tand comments					

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15	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	18	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments:						
16	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: hemlock vernal area	a					
18	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	27	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments: stand adjacent to Li	ttle Sundog Lake, wintering de	eer use	ı.			
19	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

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				



Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age I	BA Range	Managed S	ite	General Comments
1	4130	- Aspen		Poletimber Well	262.8	34	Immature	N/A		2027 YOE: Aspen has moved for the most part into small poletimber ¬ size class. There still remains high stocking of 4 inch trees.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	A6A22017 YOE: Aspen 2 - 4" dbh with scattered 6" trees. Much of
	Balsam Fir	10	Sapling	5	Hazel	nut (Beaked)	High	5 - 10 feet	5 - 10 feet	stand is just starting to move into poletimber. Small components
	Black Cherry	5	Log	3						scattered tamarack saplings. steep hills
	Paper Birch	10	Pole	3						
	Quaking Aspen	75	Sapling	6 34						
2	6220 - A	lder/Willow		None	12.7			No		creek bottom with heavy tag alder. associated scattered lowland
					Sub-Ca	nopy Species	Density	Avg. Height	Size	conifers
						Alder	Full	5 - 10 feet	5 - 10 feet	
3	6121 -	Tamarack	P	oletimber Mediun	n 22.7	51 l	Jnspecified	N/A		areas with less overstory and very dense regeneration - notably in the
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	north end
	Tamarack	70	Seedling	7 51		Alder	High	5 - 10 feet	5 - 10 feet	
	Black Spruce	20	Seedling	6	Ta	amarack	High	10 - 20 feet	10 - 20 feet	
N	orthern White Cedar	10		9						_
4	42200 - Nat	ural White F	Pine	Sawtimber Poor	2.0	97	51-80	N/A	.	stand lies on ridge top. aspen cut off in past harvest leaving large
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	diameter w pine residual. weak aspen regen overall with heavier fir component
	White Pine	100		18 97	Qua	king Aspen	Medium	5 - 10 feet	5 - 10 feet	
					Ва	alsam Fir	High	5 - 10 feet	5 - 10 feet	
6	6129 - Mixed Conif	erous Lowla	and Forest P	oletimber Mediun	n 16.6	67 l	Jnspecified	N/A		stand is transitional lowland swamp between uplands and bog, lake,
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	rceek
	Tamarack	30	Seedling	7	Bla	ck Spruce	Medium	10 - 20 feet	10 - 20 feet	
	Black Spruce	45	Seedling	7 67	Ва	alsam Fir	Medium	10 - 20 feet	10 - 20 feet	
No	orthern White Cedar	25		12	Т	ag Alder	Medium	5 - 10 feet	5 - 10 feet	
7	622	5 - Bog		None	7.0			No		water, cattails, leatherleaf bog
8	4130	- Aspen		Sapling Well	17.5	18	Immature	N/A		2027 YOE: Some aspen just moving into small poletimber class, A4A3.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	2017 YOE: scattered spruce/fir. steep hill
	Black Cherry	10	Log	2	Hazel	nut (Beaked)	Medium	5 - 10 feet	5 - 10 feet	· · ·
	Balsam Fir	5	Pole	4						
	Paper Birch	5	Log	2						
	White Spruce	5	Pole	3						
	Quaking Aspen	75	Pole	3 18						

DNR

Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments	
9	4130	- Aspen		Sapling	g Well	48.4	6	Immature	N/A	A	2027 YOE: as below. cut left 10-20 foot diameter patches of conifer roughly every 200 feet.2017 YOE: cut in 2018. regenerating to	
	Canopy Species		Size Class		I Age		nopy Species		Avg. Height	Size	aspen, riparian buffer to Mitchigan River is mature aspen, spruce, fir.	
	White Spruce	5	Log	2			sam Fir	Medium	10 - 20 feet	10 - 20 feet		
	Quaking Aspen	80	Log	1	6	Whit	e Spruce	Medium	10 - 20 feet	10 - 20 feet		
	Black Cherry	5	Seedling	6								
	Balsam Fir	5	Log	2								
	Paper Birch	5	Seedling	8								
10	6220 - A	lder/Willow		No	ne	46.4			No)	Mitchigan Creek bottom land. dense tag alder with associated scattered fir and b. ash.	
11	4136 - Aspen	, Mixed Co	nifer	Saplino	g Well	74.5	5	Unspecified	N/A	4	aspen 1" diameter, fully regenerated. scattered small pockets of conifer,	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	s Density	Avg. Height	Size	one + per acre left in prior timber sale. scattered w pine.	
	White Pine	5		20		Blac	k Spruce	Low	10 - 20 feet	10 - 20 feet		
	Balsam Fir	5	Pole	4		Bal	sam Fir	Low	10 - 20 feet	10 - 20 feet		
	Black Spruce	10	Sapling	5		Blac	k Cherry	Low	5 - 10 feet	5 - 10 feet	*	
	Quaking Aspen	80	Log	1	5						•	
12	6225	5 - Bog		No	ne	3.7			No)	small leatherleaf bog opening. seasonally ponded	
13	6122 - Bl	ack Spruce	P	oletimbe	r Mediur	n 42.8	68	Unspecified	N/A	A	scattered open areas with higher stocking of b spruce saplings. center of	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	s Density	Avg. Height	Size	stand is lower stocked and holds more stunted bog spruce sphagnum/leatherleaf	
	Tamarack	10	Seedling	7		Blac	k Spruce	High	10 - 20 feet	10 - 20 feet	priagrammationour	
	Black Spruce	90	Seedling	7	68						•	
14	6124 - Lowla	and Spruce	-Fir P	oletimbe	r Mediur	n 8.5	55	Unspecified	N/A	4	open tag alder in center of the stand edged with cedar, b spruce and	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	s Density	Avg. Height	Size	tamarack. stand edges transition to uplands where buffer was left from pervious cut.	
	Balsam Fir	20	Sapling	5		Bal	sam Fir	Full	10 - 20 feet	10 - 20 feet	por viole out.	
	Tamarack	10	Sapling	5			Alder	High	5 - 10 feet	5 - 10 feet		
	Black Spruce	40	Seedling	6	55						•	
No	orthern White Cedar	30		14								
15	4134 - Aspe	en, Spruce/	Fir	Sapling	g Well	26.5	34	Immature	N/A	A	2027 YOE: Aspen has higher component in small poletimber size class.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	s Density	Avg. Height	Size	fairly well stocked fir in understory. w spruce has been impacted by SBW in past years ago.2017 YOE: some of the aspen is just movin	
	Black Cherry	5	Pole	4		Bal	sam Fir	High	>20 feet	>20 feet	into poletimber size class. pockets of conifer scattered throughout with	
	Balsam Fir	20	Sapling	5							scattered spruce/fir 7 - 9" dbh. inclusions of upland tamarack	
	Tamarack	2	Log	3							regeneration - notably along roads. occasional w birch saplings. steep hills throughout	
	White Spruce	15	Sapling	5							Timo di lougitodi.	
	Paper Birch	3	Log	3								
	Quaking Aspen	55	Sapling	6	34							
	White Spruce Paper Birch	15	Sapling Log	5	34						hills throughout.	



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	ite	General Comments
16	4319 - Mixed			Poletimb		24.3	50	81-110	N/A		2027 YOE: low quality aspen roughly 9" dbh, only 3-4 sticks tall. pine 3 site. moderate to high mortality on w spruce from past SBW2017
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	YOE: poor aspen site. areas heavier to w spruce with little fir. SBW
	Balsam Fir	10	Sapling	5		Wh	ite Spruce	Full	10 - 20 feet	10 - 20 feet	present in stand - tip damage on trees. very scattered w spruce log sized trees and scattered upland tamarack
	White Spruce	20	Sapling	5							sized trees and scattered upland tamarack
	Red Pine	5		12							
	White Pine	5		14							
	Jack Pine	10		11							
	Black Cherry	5	Seedling	6							
	Quaking Aspen	45		8	50						
17	4136 - Aspen			Sapling		24.9		Inspecified	N/A		2027 YOE: good aspen regeneration, scattered spruce/fir and cherry.2017 YOE: nearer to river stand is heavily stocked with
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	spruce/fir. stand showing some SBW damage on tips.
	White Spruce	10	Pole	3			ck Cherry	Medium	5 - 10 feet	5 - 10 feet	
	Balsam Fir	5	Pole	3		Hazel	nut (Beaked)	Full	5 - 10 feet	5 - 10 feet	
	Quaking Aspen	75	Log	1	6						
	White Pine	5		20							
	Black Cherry	5	Log	3							
18	6224 - 1	reed Bog		Nor	ne	22.3			No		treed bog leading to Lake edge. 6-8" dbh towards upland edges but
						Sub-Ca	nopy Species	Density	Avg. Height	Size	quickly transitions to non productive forest land - stunted bog b spruce/tamarack. heavy leatherleaf
						Ta	amarack	Medium	10 - 20 feet	10 - 20 feet	
							Alder	Full	5 - 10 feet	5 - 10 feet	
						Bla	ck Spruce	Medium	5 - 10 feet	5 - 10 feet	
19	4130	- Aspen		Sapling	y Well	26.1	18	Immature	N/A		2027 YOE: scattered trees 4-5" dbh. A3A4
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Balsam Fir	10	Sapling	5		Hazel	nut (Beaked)	Full	5 - 10 feet	5 - 10 feet	
	Quaking Aspen	85	Log	3	18						
	Black Cherry	5	Sapling	5							
20	6225	i - Bog		Nor	ne	2.0			No		small leatherleaf bog opening
21	6122 - Bl	ack Spruce	P	oletimbe	⁻ Medium	n 3.8	77 L	Jnspecified	N/A	<u> </u>	more open area towards center of stand
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Tamarack	10	Seedling	6		Bla	ck Spruce	High	10 - 20 feet	10 - 20 feet	
	Black Spruce	90	Seedling	6	77					ı	1
22	4130	- Aspen		Sapling	y Well	60.7	19	Immature	N/A		2027 YOE: Aspen just starting to move into some smaller poletimber, 4
	Canany Species	% Cover	Size Class	DDL	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	5" dbh. A3A52017 YOE: small pockets of tag alder scattered throughout
	Canopy Species	70 COVE	Oize Olass	DDL	- Age		mopy opecies				
	Balsam Fir	5	Log	3	Age		nut (Beaked)	Medium	5 - 10 feet	5 - 10 feet	tilloughout
					Age						tilloughout



Stand	d Level 4 Co	ver Type		Size Density	Acres Stand	Age BA Range	Managed	Site	General Comments
23	6120 - Low	land Ceda	r Po	oletimber Medium	19.0 115	Unspecified	N	I/A	fairly open canopy - heavy tag alder. higher stocking of tamarack in mid
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Canopy Sp	ecies Density	Avg. Height	Size	to south part of stand.
	Tamarack	40	Seedling	7	Balsam Fir	High	10 - 20 feet	10 - 20 feet	
	Black Spruce	10	Seedling	6	Northern White 0	Cedar Low	5 - 10 feet	5 - 10 feet	
No	orthern White Cedar	50		11 115	Alder	Full	5 - 10 feet	5 - 10 feet	
24	4319 - Mixed	Upland Fo	rest I	Poletimber Well	66.3 62	81-110	N	I/A	2027 YOE: w spruce and much of the fir has mainly died out from SBW
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Canopy Sp	ecies Density	Avg. Height	Size	a few years ago. the associated upland black spruce was unaffected. small lowland inclusions in NW and SE of the stand. Very steep ridges in
	Black Spruce	25	Sapling	6 59	Black Cherr	y Medium	5 - 10 feet	5 - 10 feet	W portion of the stand. stand is limited in accessibility from very steep
	Paper Birch	5	Seedling	7	Balsam Fir	Low	10 - 20 feet	10 - 20 feet	ridges and tamarack/black spruce inclusions 2017 YOE: Overall aspen is poor 2 - 3 sticks tall at 50 years old. pockets of better formed
	Balsam Fir	5	Sapling	6	Black Spruc	e Full	10 - 20 feet	10 - 20 feet	aspen is poor 2 - 3 sticks tall at 50 years old, pockets of better formed aspen 4 - 5 sticks tall on hills in center of stand. Jack pine fair to good.
	Tamarack	20	Seedling	8					dense, stunted upland b spruce saplings throughout. small lowland
	Quaking Aspen	35		10 62					conifer inclusion having lowland b spruce/tamarack just east of the road
	Jack Pine	5	Seedling	7					in south part of the stand. very scattered r pine, w pine and upland tamarack.
	Black Cherry	5		8					
25	6128 - Lowland (Deci	Coniferous, duous	Mixed Po	oletimber Medium		Unspecified	N	I/A	2027 YOE: per below. shows signs of winter deer use2017 YOE: lowland along Little Sundog Lake with high ground ridges interspersed. High ground has aspen, w birch, r maple and hazel with fir understory.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Canopy Sp	ecies Density	Avg. Height	Size	High ground has aspen, w birch, i maple and hazer with ill understory.
	White Pine	5		14	Alder	Medium		5 - 10 feet	
	Tamarack	20	Seedling	7	Hazelnut (Beak	, ,	5 - 10 feet	5 - 10 feet	
	Black Spruce	45	Seedling	6 77	Yellow Birch		10 - 20 feet	10 - 20 feet	
	Red Maple	10	Seedling	6	Balsam Fir	Full	10 - 20 feet	10 - 20 feet	
	Paper Birch	10	Seedling	9					
	Quaking Aspen	10		12					
27	4130 -	Aspen		Sapling Well	96.9 18	Immature	N	I/A	2017 YOE: aspen with scattered small conifer pockets throughout.
	Canopy Species	% Cover		DBH Age	Sub-Canopy Sp		Avg. Height		
	Balsam Fir	5	Pole	3	Hazelnut (Beak	(ed) High	5 - 10 feet	5 - 10 feet	
	Red Maple	10	Log	1					
	White Spruce	5	Pole	3					
	Quaking Aspen	80	Log	3 18					
31	4134 - Aspe	n, Spruce/	Fir I	Poletimber Well	51.7 35	Unspecified	N	I/A	2027 YOE: scattered 8-9" dbh trees. areas of open understory where stand is about pure to aspen. fair amount of spruce/fir throughout the
									i stand is about buile to aspent rail annount of spilice/ill tilloudillout tile
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Canopy Sp	ecies Density	Avg. Height	Size	stand.2017 YOE: 3 - 4 stick trees. small pockets of lowland conifers
	Balsam Fir	% Cover 20	Sapling	5	Sub-Canopy Sp Balsam Fir		>20 feet	Size >20 feet	
									stand.2017 YOE: 3 - 4 stick trees. small pockets of lowland conifers



Stand	I Level 4 C	over Type		Size Density	Acres	Stand Age E	BA Range	Managed Site		General Comments		
32	6120 - Lowland Cedar		r P	Poletimber Medium		115 L	Inspecified	N/A		W edge holds higher stocking of b spruce and tamarack but quickly nove to heavy cedar 12 - 16" dbh.		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	move to heavy octain 2 - 10 april.		
	Tamarack	10	Seedling	9	Ва	lsam Fir	High	10 - 20 feet	10 - 20 feet	winter deer usage.		
	Black Spruce	10	Seedling	8		Alder	Full	5 - 10 feet	5 - 10 feet			
No	orthern White Cedar	80		12 115								
33	4134 - Asp	en, Spruce/	Fir	Poletimber Well	12.6	35 l	Jnspecified	N/A	\	2027 YOE: A6F4/3. Tag alder drainage isolates east part of stand. smal		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	inclusion of A3 along southern line2017 YOE: tag alder drainage inclusion running N - S in SW part of stand.		
	Balsam Fir	30	Pole	4	Ва	lsam Fir	Low	10 - 20 feet	10 - 20 feet	,		
	Black Cherry	5	Pole	3	Hazelr	nut (Beaked)	Medium	5 - 10 feet	5 - 10 feet			
	Quaking Aspen	60	Seedling	7 35						•		
	Red Maple	5	Pole	4								
34	4130 - Aspen			Sapling Well	18.8	18	Immature	N/A	\	scattered aspen just moving into small poletimber size class, 4-5".		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	overall stand averages 2-3" dbh		
	Balsam Fir	5	Pole	3	Hazelr	nut (Beaked)	Medium	5 - 10 feet	5 - 10 feet			
	Quaking Aspen	90	Pole	3 18					1	•		
	Black Spruce	5	Pole	4								
35	4319 - Mixed	d Upland Fo	rest	Poletimber Well	6.4	55	81-110	N/A		2027 YOE: Aspen 8-11" dbh, fir 1-6" dbh. some tip flagging evident fro prior SBW. only stand in area with conifer component.2017 YOE: pockets of smaller dbh where site quality is poorer - mixed with higher		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Canopy Species		Density	Avg. Height	Size			
	White Spruce	5	Seedling	8	Ва	lsam Fir	Full	>20 feet	>20 feet	stocked fir saplings		
	Quaking Aspen	50		9 55	Blad	ck Cherry	Medium	>20 feet	>20 feet			
	Balsam Fir	45	Sapling	6								
36	6220 - A	lder/Willow		None	29.8			No		tag alder, leatherleaf and snags. flooded		
37	42330 - Upland Fir		P	oletimber Medium	1.5	53 L	Jnspecified	N/A	Λ	2027 YOE: undivided interest parcel2017 YOE: large aspen has		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	basically fallen out of the stand - a few scattered trees remaining. large w spruce have been hit by SBW - some SBW in fir canopy. dense fir		
	Balsam Fir	90	Sapling	6 53	Ва	lsam Fir	Full	10 - 20 feet	10 - 20 feet	sapling understory		
	Quaking Aspen	5		14	Whi	te Spruce	Full	10 - 20 feet	10 - 20 feet			
	White Spruce	3		12					,			
	Paper Birch	2	Sapling	5								
38	6117 - Lowland Cor	Mixed	Poletimber Poor	11.9	51		N/A	١	flood plain to Fence River			
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Red Maple	20	Seedling	7		Alder	High	5 - 10 feet	5 - 10 feet			
	Black Ash	40	Sapling	6 51	<u></u>	<u></u>				-		
	Yellow Birch	5	Seedling	8								
	Balsam Fir	10	Sapling	6								
	Black Spruce	25	Seedling	6								



Stand	Level 4 Co	evel 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		iite	General Comments						
40	42340 - Upla	/Fir P	Poletimber Medium		n 22.7	62 Unspecifie		ed N/A		2027 YOE: moderate prior SBW mortality on w spruce2017 YOE:	
	Canopy Species	% Cover	Size Class	lass DBH Age		Sub-Car	nopy Species	Density	Avg. Height	Size	nearer to river stand is heavily stocked with spruce/fir. stand showing some SBW damage on tips.
	White Pine	5		20		Hazelnut (Beaked) Full			5 - 10 feet	5 - 10 feet	Johns OBW damage on app.
	Balsam Fir	20	Seedling	8		Blac	k Cherry	Medium	5 - 10 feet	5 - 10 feet	
	Quaking Aspen	35		12	71						-
	White Spruce	40	Seedling	8	62						
41	4134 - Aspe	en, Spruce/l	Fir	Poletimber Well		12.7 52 Unspecified		N/A		2027 YOE: most spruce/fir reflushed from SBW. stand is sole stand with	
	Canopy Species	% Cover	Size Class	DBH Age		Sub-Cai	nopy Species	Density	Avg. Height	Size	a sizeable conifer component in the area. heavy deer use.2017 YOE: larger spruce is being heavily hit by SBW. small component of
	Balsam Fir	20	Seedling	7		Hazeln	ut (Beaked)	High	5 - 10 feet	5 - 10 feet	balm
	White Spruce	10		12		Ba	lsam Fir	High	10 - 20 feet	10 - 20 feet	
	Black Cherry	5	Seedling	7							_
	Quaking Aspen	65		9	52						
42	4110 - Sugar M	iation	Sawtimber Well		65.3 77 81-110		N/A		2027 YOE: h maple ranges from 8 - 16" dbh, with scattered lower		
	Canopy Species % Cover Size Class		Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	quality (cull) 18-20" dbh trees2017 YOE: scattered H maple saplings 8 - 20' tall. R maple is in more marginal areas and along stand
	Basswood	10		11		Leat	herwood	Low	5 - 10 feet	5 - 10 feet	transitional areas. very widely scattered spruce and upland cedar.
	Sugar Maple	70		10	77	Sug	ar Maple	Low	>20 feet	>20 feet	vernal ponds distributed throughout stand
	Red Maple	15		11		Ironwood		Low	5 - 10 feet	5 - 10 feet	
	Yellow Birch	5		10						1	-
43	4130 - Aspen Sawt				er Well	58.2	58.2 56 Unspecified		N/A		2027 YOE: along E "arm" the stand transitions to n hardwoods - smaller
	Canopy Species % Cover Size Class		Size Class	DBH Age		Sub-Canopy Speci		Density	Avg. Height Size	diameter aspen with hardwood more prevalent. 2017 YOE: Aspen 5 - 8" dbh. small inclusions of open areas. hills	
	Black Cherry	5		10		Ba	lsam Fir	Low	5 - 10 feet	5 - 10 feet	
	Balsam Fir	10	Seedling	6		Sug	ar Maple	Medium	>20 feet	>20 feet	
	Sugar Maple	15	Sapling	6		Hazeln	ut (Beaked)	Full	5 - 10 feet	5 - 10 feet	
	Red Maple	5	Seedling	8							-
	Paper Birch	5	Sapling	7							
	Quaking Aspen	60		10	56						
44	4110 - Sugar M	ciation	Poletimber Well		140.7	140.7 77 81-1		N/A		2027 YOE: scattered upland cedar. N end had lower stand stocking with	
	Canopy Species	% Cover	Size Class	DBH	Age		nopy Species	Density	Avg. Height	Size	higher incidence of h maple and ironwood saplings 30 feet + due to windthrow 15 years ago. N end looks to be slightly lower quality site for i
	Black Cherry	5		11		Sug	ar Maple	Medium	>20 feet	>20 feet	hardwoods - hazel more prevalent. 2017 YOE: far N end of stand
	Basswood	10		12			<u></u>				has lower stocking with more open grown quality trees associated in this
	Sugar Maple	65		10	77						area is a pocket of mature aspen and scattered large w pine. rolling hills and scattered vernal ponds
	Red Maple	15		10							
	Yellow Birch	5		10							

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Stand	Level 4 C	over Type		Size Density	Acres	Stand Age B	A Range	Managed Si	te	General Comments		
45	42320 - Upland Spruce			Poletimber Poor	5.6	55 U	nspecified	N/A		semi open stand - open grown conifers, heavy limbs to ground level		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Black Cherry	5	Seedling	6	Ва	ılsam Fir	High	5 - 10 feet	5 - 10 feet			
	Balsam Fir	30	Seedling	8	Hazelı	nut (Beaked)	Full	5 - 10 feet	5 - 10 feet			
	Sugar Maple	5		12								
	White Spruce	60		9 55								
46	4112 - Maple, Beed	h, Cherry A	ssociation Po	oletimber Medium	n 6.7	6.7 77 51-8		N/A		2027 YOE: r maple stump sprouting heavily browsed. light to moderate		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	aspen sprouting where aspen was concentrated in original stand. raspberry, scattered cherry saplings2017 YOE; very low quality h		
	Sugar Maple	60		14 77	Re	ed Maple	Medium	5 - 10 feet	5 - 10 feet	maple - open grown, multiple stemmed with low limbs.		
	Red Maple	35		11	Qual	king Aspen	Low	5 - 10 feet	5 - 10 feet			
	Paper Birch	5		12	Wh	te Spruce	Low	10 - 20 feet	10 - 20 feet			
					Black	Raspberry	Medium	< 5 feet	< 5 feet			
47	4130	- Aspen	F	Poletimber Well	28.8	24 Immature		N/A		2027 YOE: stand just moved into small poletimber size class. still a fairly		
	Canopy Species % Cover Size Clas		Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	high percentage of submerchantable trees. A6/5A22017 YOE: small pockets of conifer in valleys throughout.		
	Quaking Aspen	85	Sapling	5 24	Hazelı	nut (Beaked)	Full	5 - 10 feet	5 - 10 feet	position of cormor in validys arroughous.		
	White Spruce 15 Seedling 7											
48	310 - Herbac	eous Open	land	None	2.0			No		open field		
49	500 -	Water		None	45.3			No		Fence River and small acreage adjacent tag alder lowland		
51	500 -	500 - Water None			2.0 No					bog pond and adjacent leatherleaf.		
52	6220 - A	6220 - Alder/Willow None			25.7			No		tag alder river bottom adjacent to Fence R. scattered balm, b ash and lowland conifers		
	122 - Road/Parking Lot None		0.3 No					Fence River Rd				
53												
53 58	4134 - Aspe	en, Spruce/	Fir F	Poletimber Well	43.9	34 U	nspecified	N/A		2027 YOE: aspen averages 6-7" dbh with smaller diameter trees and		
		· '	Fir F	Poletimber Well		34 U	nspecified Density	N/A Avg. Height	Size	scattered 8-9" diameter trees. fairly dense fir understory in		
	4134 - Aspe	· '			Sub-Ca							
	4134 - Aspo	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	scattered 8-9" diameter trees. fairly dense fir understory in areas2017 YOE: some of the aspen is just moving into poletimber size class. pockets of conifer scattered throughout with scattered spruce/fir 7 - 9" dbh. inclusions of upland tamarack regeneration -		
	4134 - Aspo Canopy Species Black Cherry	% Cover	Size Class Log	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	scattered 8-9" diameter trees. fairly dense fir understory in areas2017 YOE: some of the aspen is just moving into poletimber size class. pockets of conifer scattered throughout with scattered spruce/fir 7 - 9" dbh. inclusions of upland tamarack regeneration -		
	4134 - Aspe Canopy Species Black Cherry Paper Birch	% Cover 5 3	Size Class Log Log	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	scattered 8-9" diameter trees. fairly dense fir understory in areas2017 YOE: some of the aspen is just moving into poletimber size class. pockets of conifer scattered throughout with scattered		
	4134 - Aspe Canopy Species Black Cherry Paper Birch Quaking Aspen	% Cover 5 3 55	Size Class Log Log Sapling	DBH Age 2 3 6 34	Sub-Ca	nopy Species	Density	Avg. Height	Size	scattered 8-9" diameter trees. fairly dense fir understory in areas2017 YOE: some of the aspen is just moving into poletimber size class. pockets of conifer scattered throughout with scattered spruce/fir 7 - 9" dbh. inclusions of upland tamarack regeneration -		

Report 7 - Stands



Stand	Level 4 Cover Type 4134 - Aspen, Spruce/Fir			Size Density Poletimber Well		Acres Stand Age B		BA Range Managed Site		ite	General Comments
60						187.3	34	Unspecified	N/A		2027 YOE: aspen seems to have stagnated in growth. average dbh 6-
	Canopy Species	% Cover	Size Class	DBH Age		Sub-Car	opy Species	s Density	Avg. Height	Size	7". Scattered single trees and clumps of 8-10" diameter, mainly adjacer to roads/more open inclusions. SBW has caused mortality of some of
	Balsam Fir	10	Sapling	5		Whit	te Spruce	Full	10 - 20 feet	10 - 20 feet	
	White Spruce	20	Sapling	5							dbh.2017 YOE: poor aspen site. areas heavier to w spruce with little
	Quaking Aspen	60	Seedling	6	34						fir. SBW present in stand - tip damage on trees. very scattered w spruce log sized trees and scattered upland tamarack
	White Pine	3		14							sprace log sized trees and southered apiana tamarack
	Jack Pine	5	Seedling	8							
	Red Pine	2		12							
61	310 - Herbad	ceous Oper	nland	Nor	ne	2.9			No		field