

Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61105
Entry Year 2025
Acreage: 2,004
County Kalkaska

Management Area: Kalkaska Sandy Moraines

Stand Examiner: Thomas Peterson III

Legal Description:

T28N, R5W, Sec's. 10, 11 & 12

Identified Planning Goals:

Located in the Grayling Ice Contact Managaement Area, and includes Kalkaska, Crawford and Otsego counties and contains 55,348 acres of state forest. Management in the Grayling Ice Contact management area (MA) will emphasize continuing to

balance the age class of aspen on suitable sites and thinning the northern hardwoods, balancing age classes of red pine and jack pine, and regenerating the aging oak resource. Management will strive to sustainably produce various timber products, enhance game and non-game wildlife habitat, protect areas of unique character, such as the historic Deward Tract, and provide for

forest-based recreational uses. With about 3% of the MA being lowland, management activities will be minimally constrained. Expected trends within the next decade are increased recreational pressure, managing oil and gas development, introduced pests and diseases and the difficulty in regenerating oak.

Soil and topography:

Soils are Island Lake, Rubicon and Kalkaska Sands. The terrain is flat to very steep, ranging anywhere from 6 - 35% slope.

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

This compartment is a solid block of State Land. There is oil and gas development in the eastern edge of the compartment along Deward Road. Land use is recreation with the ATV trail and route running through the compartment and the snowmobile trail just south of the compartment. South Crooked Lake is in the western edge of the compartment, just west of Blue Lake Road and is a very shallow lake, ~15 feet.

Unique Natural Features:

None listed within compartment.

Archeological, Historical, and Cultural Features:

Old logging camps.

Special Management Designations or Considerations:

Whithin the Deward tract, East side of Deward Road, it is unlawful to use or operate a motorized vehicle except on designated forest roads & to camp further than 50 feet from roads open to motorized vehicle use.

Watershed and Fisheries Considerations:

South Crooked Lake lies within Compartment 105. It is a small natural lake, with populations of largemouth bass, bluegill, and pumpkinseed sunfish. BMPs should be used if working near the lake.

Wildlife Habitat Considerations:

The bulk of this compartment falls on a series of ice contact ridges characterized by steep slopes and well drained sandy soils. Records of presttlement vegetation show this type of surface geology supported beech/maple forests (with some upland conifer dominated) forests. Northern hardwoods with scattered den and mast producing trees and shrubs provide habitat for a variety of wildlife species including pileated woodpeckers, broad-winged hawks, gray fox, four toed salamanders, white-tail deer, and wild turkeys.

Most of the openings and shrub communities in these ice contact ridges are the result of frost pockets and cold air drainages and typically need no maintenance. However, fire most likely ran through some of these low spots helping to reduce cold-resistant woody encroachment. Several openings that have a good cover of little bluestem and other grasses are prescribed for burning. As well, several shrub stands have been prescribed removal of select trees to set back encroachment. One of these latter stands was a Wildlife Division created opening from the 1970s. Many wildlife species take advantage of open and semi-open habitat, including white-tail deer, red fox, badger, Eastern bluebird, Eastern hognose snake, and broad-winged hawk.

The east and west ends of the compartment drop off into narrow outwash channels. Well drained sands in these formations typically supported mixed white pine forests with some northern hardwoods and scattered wetlands. Fires occasionally ran through outwash channels with the potential to sustain early successional communities.

Mineral Resource and Development Concerns and/or Restrictions

Sections 10-12, T28N-R5W, Kalkaska County

There is no known metallic mineral potential in this part of the state. The nearest active sand/gravel pit is more than five miles away. There may be some potential for sand & gravel within the compartment, but demand for aggregate material may be low in the area. The compartment is on the edge of the current extent of the Antrim Shale gas play. No Antrim production has occurred in the compartment and future Antrim wells are unlikely. There has been extensive exploration for and production from Silurian reefs in the area. Most of the test wells in the compartment were dry holes, but there were four that were successful, three of which have since been plugged and the third is shut in. Potential for additional reef discoveries beneath the compartment is considered low but cannot be ruled out without access to industry data. There may be potential for future underground gas storage and/or CO2 sequestration projects. All State-owned mineral rights are currently leased and held by the one aforementioned shut-in well.

Vehicle Access:

No new roads needed

Survey Needs:

No surveys needed.

Recreational Facilities and Opportunities:

A large segment of the Kalkaska ORV trail runs East/West & North/South in this compartment. Proposed timber management activities should include trail protection specifications to reduce impacts, as well as serve as an example of how silviculturally sound timber harvesting practices can co-exist, and often improve recreation and hunting experiences for future generations. Treatments proposed directly adjacent to the ORV trail tread should include either a "flush cut" specification, or be stumped high enough (3 feet) to avoid being hidden by perennial flora (ferns).

Fire Protection:

Fire Protection is out of Kalkaska Field Office. Compartment is on Kalkaska County / Crawford County Line. Grayling Field Office is nearby for any extra needs for fire suppression.

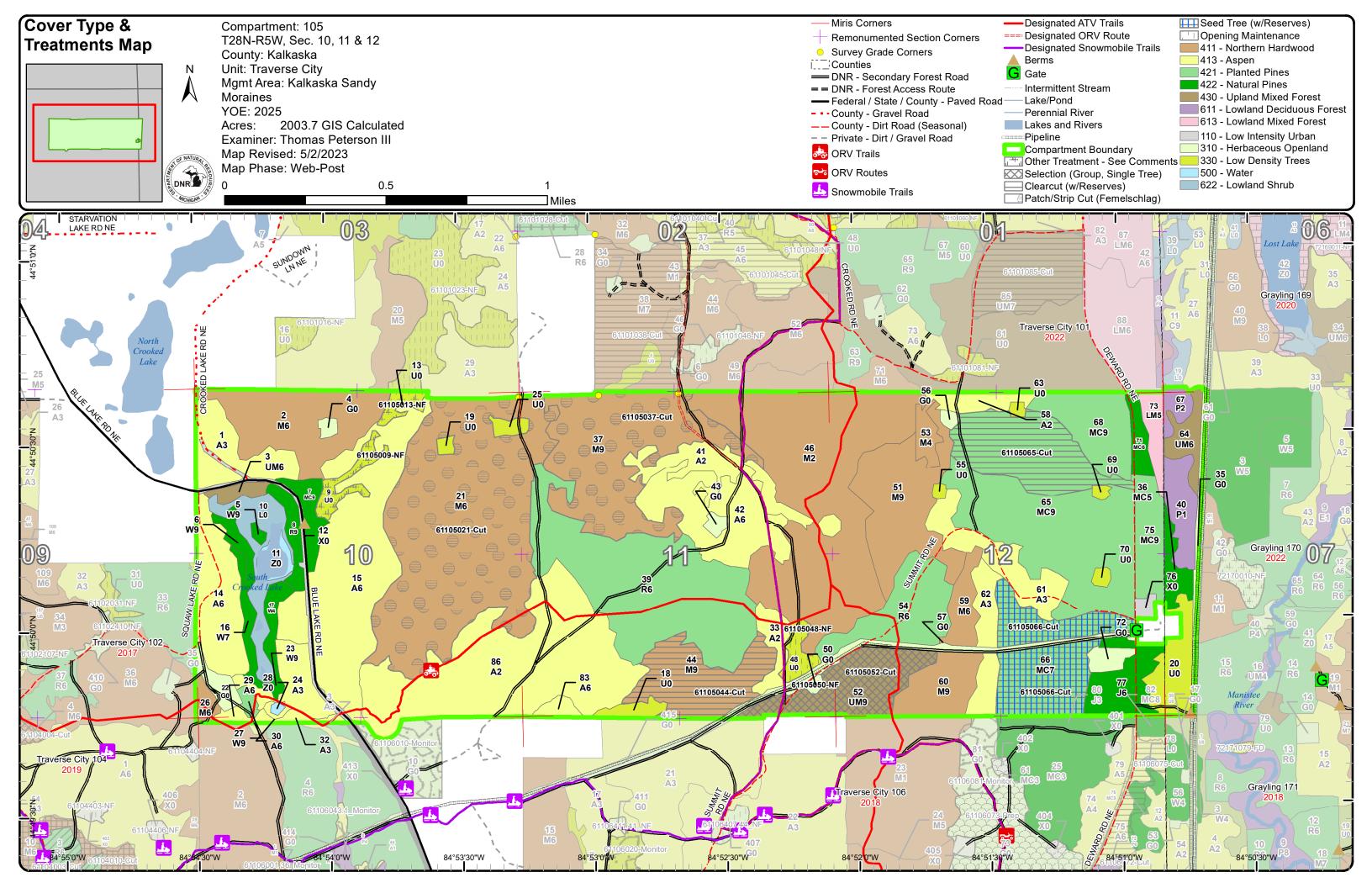
Additional Compartment Information:

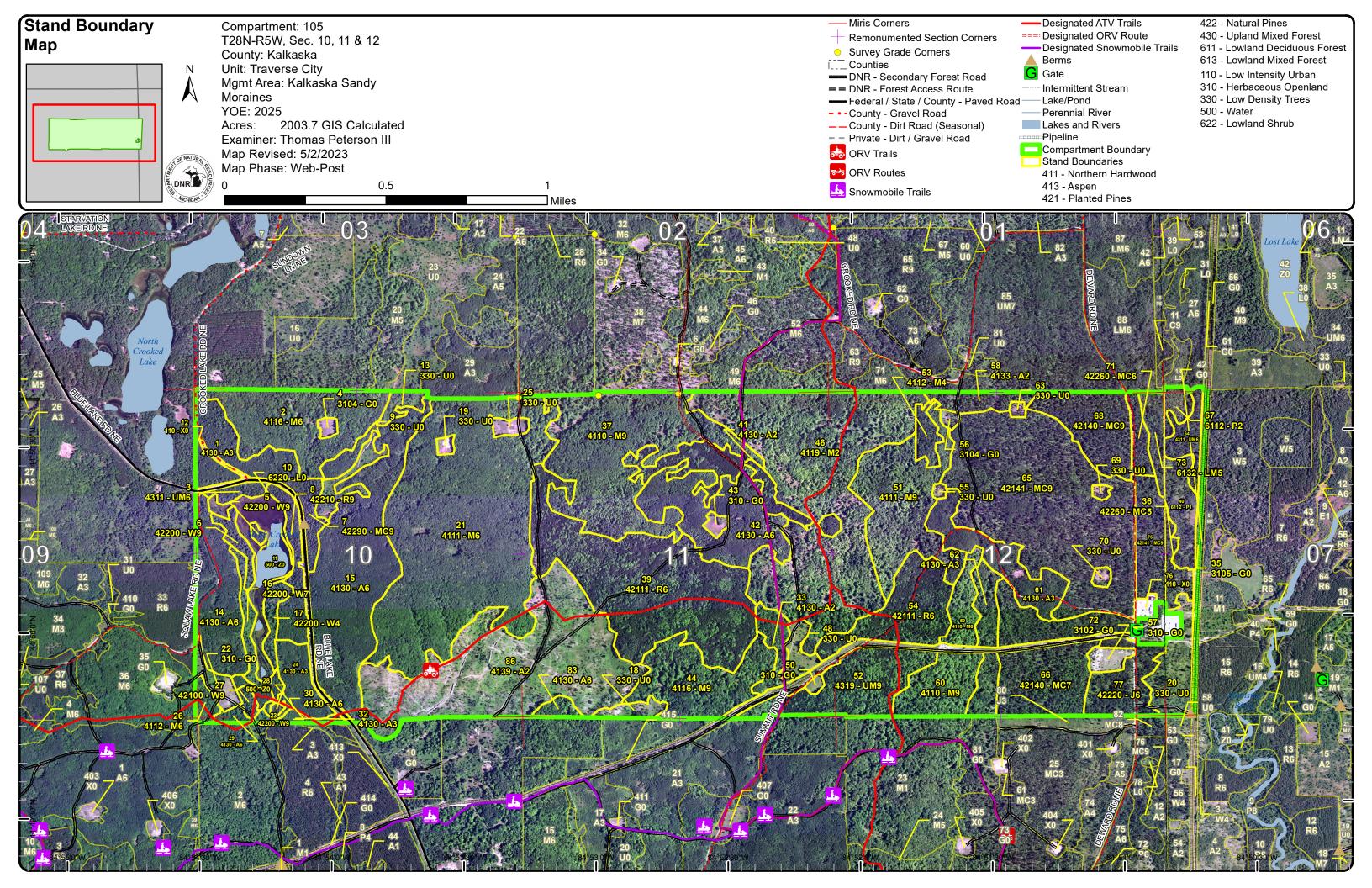
The following reports from the Inventory are attached:

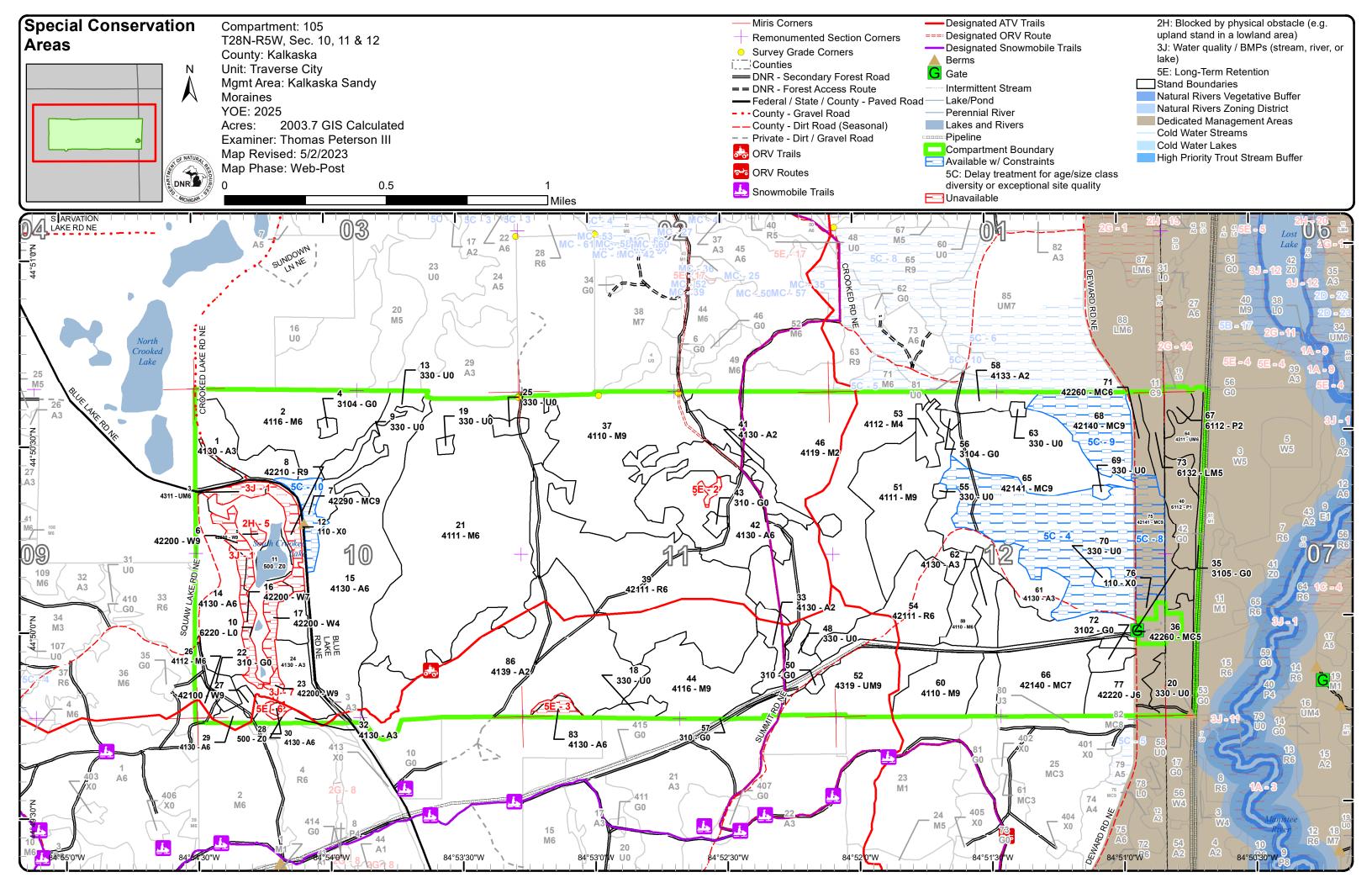
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Traverse City Mgt. Unit

Compartment 105 Year of Entry 2025

Thomas Peterson III: Examiner



Age Class

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Aspen	0	214	4	48	198	41	1	4	0	0	0	0	0	0	0	0	0	3	513
Herbaceous Openland	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Jack Pine	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	24
Low-Density Trees	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
Lowland Aspen/Balsam Poplar	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Lowland Mixed Forest	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
Lowland Shrub	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Natural Mixed Pines	0	0	0	0	0	8	9	10	0	0	0	0	0	0	0	0	0	0	27
Northern Hardwood	0	0	0	0	0	176	0	0	0	33	0	0	0	0	0	0	0	501	710
Planted Mixed Pines	0	0	0	0	0	0	0	0	0	275	0	0	0	0	0	0	0	0	275
Red Pine	0	0	0	0	131	40	9	0	0	0	0	0	0	0	0	0	0	0	180
Upland Mixed Forest	0	0	0	0	0	0	17	44	0	0	0	0	0	0	0	0	0	0	60
Urban	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Water	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
White Pine	0	0	0	0	0	15	11	0	0	0	1	0	0	0	0	0	0	0	27
Total	154	214	4	48	352	315	47	58	0	308	1	0	0	0	0	0	0	504	2003



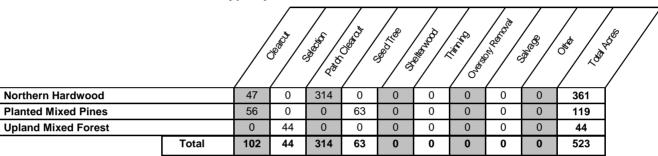
Report 2 - Treatment Summary

Traverse City Mgt. Unit

Year of Entry: 2025 **Total Compartment Acres: 2,004 Acres of Harvest**

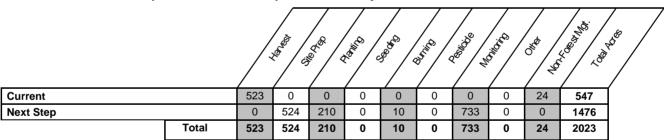
> Commercial Harvest - 523 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Compartment 105

Proposed and Next Step Treatments by Method



Traverse City Mgt. Unit

Report 3 -- Treatments

Compartment: 105 Year of Entry: 2025

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

Proposed Treatments:

61105009-NF 9.5 330 - Low-Density Nonstocked Trees

NonForestMgt Fruit Tree/Shrub Planting

3205 - Mixed No Upland Shrub

Specs:

Prescription This opening is a WLD opening created in the 1970s. Selectively fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. As needed, treat site to remove exotics. Then seed to site appropriate grasses for wildlife food and cover. Consider seeding in native grasses and forbs.

Next Step Treatments:

<u>Acceptable</u> Regen:

Other

Comment: Site Condition

Proposed Start Date: 10/1 /2024

61105013-NF 5.3 330 - Low-Density Nonstocked Trees

NonForestMgt Fruit Tree/Shrub 3205 - Mixed Upland Shrub Planting

No

Specs:

Prescription Selectively fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. As needed, treat site to remove exotics. Then seed to site appropriate grasses for wildlife food and cover. Consider seeding in native grasses and forbs.

Next Step Treatments:

<u>Acceptable</u> Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

61105021-Cut 209.8 4111 - S.Maple, Poletimber 60 81-110 Harvest Strip/Patch/Gap 411 - Northern Uneven-No Hard Mast Well Hardwood Cut Aged Association (Femelschlag)

Specs:

Prescription Create gaps in stand. The total acreage of the gaps should be between 8-15 % of total acres of the stand. These gaps should be spaced out systematically throughout stand, target beech regeneration pockets / beech overstory pockets for gap placement. Gaps should vary in size from 1 acre to no bigger than 4 acres. All tops must be removed from gaps during harvest. These tops can be piled on edge of gaps in order to promote hardwoods and protect sugar maple regeneration from browsing or chipped and used by producer. After harvesting the gaps, the gaps will be put on the cultivation plan of work for planting. Any of the following treatments are approved and can be utilized after harvest; roller chopping, site prep spray, release spray, trenching, or scarification. These gaps will be planted with any combination of red pine, white pine, or oak.

Next Step Treatments:

SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Regen:

Acceptable Not a regeneration cut, except for gaps created during timber sale. These gaps will be planted to any combination of white pine, or oak.

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Traverse	City	Mgt.	Uni

Report 3 -- Treatments



n Treatment Acres Stand of Name CoverType Density Age Range Type Method Objective Structure CoverType Density Age Range Type Range Type Method Objective Structure CoverType Density Repetition Density Repetition Density Repetition CoverType Density Repetition Density Reptition CoverType Density Reptition Density Reptition Density Reptition CoverType Density Reptition Density	S t				, g e	'	Коро		reatments		Year of Entr		DNR MICHIGAN
Prescription Systematically establish regeneration gaps of 1-1.5 acres in size throughout the stand. Treat 12-18 gaps of 1-1.5 acres in size throughout the stand. Treat 12-18 gaps of stablish the skidt or under the gaps. Do not thin the stand between gaps. Cut all trees within the gap rope on the stand cought 12-18 gaps or chipped by producer. Any of the following treatments can be implemented after harvest to get desirable species: Scarffication; trenching, roller chopping, spraying to kill beech / ironwood regeneration or any other means needed to accomplish reforestation goals. Next Step SitePrep, Scarffication; Monitoring, Other - Specify SitePrep, Scarffication; Monitoring, Other - Specify SitePrep, Scarffication; Monitoring, Other - Specify Site Condition Proposed Start Date: 10/1/2024 44 61105044-Cut 46.8 4116 - Mixed N. Sawtimber 60 111 Harvest Clearcut with 4139 - Aspen, Even-Aged N. Retention on indige with decent hardwood crop trees established in it. Cut all tree 2 inch more in DBH. In addition to retention leave all maple trees 8 inches and under and mark to leave some big wolfy sugar maples as seed source for stand. Next Step Treatments: Next Step Treatments: Prescription Chief Comment: Site Condition Proposed Start Date: 10/1/2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop (Grass Planting) Trees Prescription In previous years this opening had an excellent crop of little bluestern. Maintain as needed with mowing, native shrub planting, seeding of native grasses/folts, burning, or removal of woody encroachment. Site Condition Prococcurs. Site Condition Site Condition Prococcurs. Site Condition Site Condition Prococcurs. Site Condition Prococcurs. Site Condition Prococcurs. Site Condition Site Condition Prococcurs. Site Condition Site Condition Prococcurs. Site Condition Prococcurs. Site Condition Prococcurs. Site Condition				Acres							• • • • • • • • • • • • • • • • • • • •	_	Habita Cut
Special Establish the skid trail to connect the gaps. Do not thin the stand between gaps. Cut all trees within the gap. Tops can be stacked outside ago or chipped by producer. Any of the following treatments can be implemented after harvest to get desirable species. Scarlication, trenching, roller chopping, spraying to kill beech? ironwood regeneration or any other means needed to accomplish reforestation goals. Next Step. Next Step. Proposed Start Date: 10/1 /2024 44 61105044-Cut 48.8 4116 - Mixed N. Sawtimber 60 111 - Harvest Clearcut with Alardwood - Aspen Well 140 Retention Desicuous Prescription Clearcut stand with retention. Clearcut stand leave retention on ridge with decent hardwood crop trees established in it. Cut all tree 2 inch or more in DBH. In addition to retention leave all maple trees 8 inches and under and mark to leave some big wolfy sugar maples as seed with more for stand. Next Step. Next Step. Fully Stocked Aspen Stand, With any component of sugar maple, red maple, cherry or basswood. Regen: Chercut stand Date: 10/1 /2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop 3105 - Mixed Density Research Comment. Site Condition Presposed Start Date: 10/1 /2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop 3105 - Mixed Upland Herbaceous Press; Supposed Start Date: 10/1 /2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop 3105 - Mixed Upland Herbaceous Press; Supposed Start Date: 10/1 /2024 89 Charles Condition Presposed Start Date: 10/1 /2024 80 Service Pressor. Receptable. Burn, Opening Treatments: Site Condition	37	611050	37-Cut	104.2 4			r 60	81-110	Harvest	Cut			No
Acceptable Fully Stocked Regeneration gaps, with sugar maple, basswood, red maple, Black Cherry or any other desirable species. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 44 61105044-Cut 46.8 4116 - Mixed N. Sawtimber 60 111- Harvest Clearcut with Mixed Deciduous Prescription Clearcut stand with retention. Clearcut stand leave retention on ridge with decent hardwood crop trees established in it. Cut all tree 2 inchesses: or more in DBH. In addition to retention leave all maple trees 8 inches and under and mark to leave some big wolfy sugar maples as seed source for stand. Next Step Treatments: Acceptable Fully Stocked Aspen Stand, With any component of sugar maple, red maple, cherry or basswood. Site Condition Proposed Start Date: 10/1 /2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop / Grass Planting Upland Herbaceous Frescription In previous years this opening had an excellent crop of little bluestem. Maintain as needed with mowing, native shrub planting, seeding of native grasses/forbs, burning, or removal of woody encroachment. Site Condition Proposed Start Step Burn, Opening Treatments: Acceptable Regen: Other Comment: Site Condition	Spe	CS:	Establis gap or o trenchir	sh the skid chipped by ng, roller c	trail to connect the producer. Any of the hopping, spraying to	gaps. Do i he followin kill beech	not thin g treatr / ironw	the stand nents can	between gaps. be implemented	Cut all trees within d after harvest to ge	the gap. Tops ca et desirable spec	n be stacked es: Scarifica	l outside of tion,
44 61105044-Cut 46.8 d116 - Mixed N. Sawtimber 60 111 - Harvest Clearcut with Hardwood - Aspen Well 140 Retention Mixed Deciduous Prescription or more in DBH. In addition to retention leave all maple trees 8 inches and under and mark to leave some big wolfy sugar maples as seed source for stand. Monitoring, Natural Regen (Re-Inventory) Fully Stocked Aspen Stand, With any component of sugar maple, red maple, cherry or basswood. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop / Grass Planting Upland Herbaceous Prescription Specs: In previous years this opening had an excellent crop of little bluestem. Maintain as needed with mowing, native shrub planting, seeding of native grasses/forbs, burning, or removal of woody encroachment. Site Condition Proposed Start Date: 10/1 /2024 Burn, Opening Treatments: Acceptable, Regen: Other Comment: Site Condition	Acce Reg Othe Com	eptable en: er nment:	·	ocked Re	generation gaps, wit	th sugar m	aple, ba	asswood,	red maple, Black	k Cherry or any oth	er desirable spec	ies.	
Hardwood - Aspen Well 140 Retention Mixed Deciduous Prescription Clearcut stand with retention. Clearcut stand leave retention on ridge with decent hardwood crop trees established in it. Cut all tree 2 inch or more in DBH. In addition to retention leave all maple trees 8 inches and under and mark to leave some big wolfy sugar maples as seed source for stand. Monitoring, Natural Regen (Re-Inventory) Fully Stocked Aspen Stand, With any component of sugar maple, red maple, cherry or basswood. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop Jupland Herbaceous Prescription Specs: In previous years this opening had an excellent crop of little bluestem. Maintain as needed with mowing, native shrub planting, seeding of native grasses/forbs, burning, or removal of woody encroachment. Next Step Treatments: Acceptable Regen: Other Comment: Site Condition	Prop	osed Sta	art Date:	10/1 /20	24								
Specs: or more in DBH. In addition to retention leave all maple trees 8 inches and under and mark to leave some big wolfy sugar maples as seed source for stand. Mext Step Treatments: Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked Trees /Grass Planting Upland Herbaceous Prescription In previous years this opening had an excellent crop of little bluestem. Maintain as needed with mowing, native shrub planting, seeding of native grasses/forbs, burning, or removal of woody encroachment. Site Condition Specs: Burn, Opening Treatments: Acceptable Regen: Other Comment. Site Condition	44	611050	44-Cut				r 60		Harvest		Mixed	Even-Aged	d No
Regen: Other Comment: Site Condition Proposed Start Date: 10/1/2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop 3105 - Mixed NonForestMgt Herbaceous/Crop 3105 - Mix	Spe Nex	cs: t Step	or more source	in DBH. I for stand.	n addition to retention	on leave al							
Proposed Start Date: 10/1 /2024 48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop 3105 - Mixed National Press Maintain as needed with mowing, native shrub planting, seeding of native grasses/forbs, burning, or removal of woody encroachment. Next Step Treatments: Acceptable Regen: Other Comment: Site Condition	Reg Othe	en: er	Fully St	ocked Asp	oen Stand, With any	compone	nt of su	gar maple	e, red maple, che	erry or basswood.			
48 61105048-NF 8.1 330 - Low-Density Nonstocked NonForestMgt Herbaceous/Crop Jupland Upland Herbaceous Prescription Specs: In previous years this opening had an excellent crop of little bluestem. Maintain as needed with mowing, native shrub planting, seeding of native grasses/forbs, burning, or removal of woody encroachment. Next Step Treatments: Acceptable Regen: Other Comment: Site Condition	Site	Conditio	<u>n</u>										
Trees /Grass Planting Upland Herbaceous Prescription Specs: In previous years this opening had an excellent crop of little bluestem. Maintain as needed with mowing, native shrub planting, seeding of native grasses/forbs, burning, or removal of woody encroachment. Next Step Treatments: Acceptable Regen: Other Comment: Site Condition	Prop	osed Sta	art Date:	10/1 /20	24								
Specs: native grasses/forbs, burning, or removal of woody encroachment. Next Step Treatments: Acceptable Regen: Other Comment: Site Condition	48	611050)48-NF	8.1 3	•	Nonstocke	ed		NonForestMgt		Upland		No
Treatments: Acceptable Regen: Other Comment: Site Condition			•	,	, ,					as needed with mo	wing, native shru	o planting, se	eding of
Regen: Other Comment: Site Condition			Burn, O	pening									
Comment: Site Condition													
Proposed Start Date: 10/1 /2024	Site	Conditio	<u>n</u>										
	Prop	osed Sta	art Date:	10/1 /20	24								

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 105 S Year of Entry: 2025 t а Treatment Size Stand RΔ **Treatment** Treatment **Cover Type** Acres Stand Age Habitat n Name Method Objective CoverType Density Age Range Type Structure Cut d 61105050-NF 50 1 4 310 - Herbaceous Nonstocked NonForestMqt Herbaceous/Crop 3105 - Mixed Nο /Grass Planting Openland Upland Herbaceous Prescription In previous years this opening had an excellent crop of little bluestem. Maintain as needed with mowing, native shrub planting, seeding of Specs: native grasses/forbs, burning, or removal of woody encroachment. Next Step Burn, Opening Treatments: <u>Acceptable</u> Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 52 61105052-Cut 43.6 4319 - Mixed Sawtimber 60 111-Harvest Single Tree 42211 - Natural Uneven-No Red Pine, **Upland Forest** Well 140 Selection Aged Mixed Deciduous Prescription Thin stand down to an average of 80 BA. Red Pine areas where BA is currently very high do not take over half the volume out at any given Specs: spot within stand. Were the stand is dominated to hardwoods thin stand down to 80. Some spots are currently at 80 walk through these areas. Add 3-6 gaps in hardwood portion of stand that are between 1/2 to 1 acre in size. Shoot for all gaps to equal about 10 % of the stand Monitoring, Natural Regen (Re-Inventory) Next Step **Treatments:** Acceptable Minimal stocking of Red Pine, Sugar Maple, Basswood, cherry, aspen or white pine. Regen: Other Comment: Site Condition

Proposed Start Date: 10/1 /2024

42141 - Planted Sawtimber 84 1-50 Clearcut with 4133 - Aspen, No 61105065-Cut 55.6 Harvest Even-Aged Mixed Pine, Mixed Well Retention Mixed Pine Deciduous

Prescription Clearcut stand with retention. Clearcut stand and leave standard area retention in stand. Cut all trees down to 2 inches in stand, except do not cut any pine or oak under 6 inches in stand. Oak and pine should be protected during harvest. In addition, mark to leave a few scattered Specs: trees for seed source in stand.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Fully stocked aspen stand, with any component of red pine, white pine, red maple, cherry or oak.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 105 Year of Entry: 2025 s t а **Treatment** Size Stand BA **Treatment Treatment Cover Type** Stand n Acres Age Habitat Name CoverType Density Age Range Туре Method Objective Structure Cut d 66 61105066-Cut 42140 - Planted 84 Seed Tree with 63.1 Sawtimber 1-50 Harvest 4133 - Aspen, Even-Aged No Mixed Pine Poor Retention Mixed Pine Prescription Seed Tree with retention. Leave standard area retention in stand. Protect all advanced regeneration during harvest. Mark to leave less than Specs: 1 tree per acre as a seed source and vertical structure. Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable Fully Stocked stand of aspen, oak, red maple and any amount of pine is acceptable. Regen: <u>Other</u> Comment:

Total Treatment Acreage Proposed: 547.4

Proposed Start Date: 10/1 /2024

Site Condition

Traverse City Mgt. Unit

Thomas Peterson III: Examiner

Compartment: 105
Year of Entry: 2025

Availability for Management Total Acres Acres Avail Acres **Dominant Site Conditions** With Condition Not Available 2H 3J 5E Acres Available Aspen Herbaceous Openland Jack Pine **Low-Density Trees** Lowland Aspen/Balsam Poplar Lowland Mixed Forest Lowland Shrub Natural Mixed Pines Northern Hardwood **Planted Mixed Pines Red Pine Upland Mixed Forest** Urban Water White Pine 2,004 1,790 **Total Forested Acres** 89% 2% 8% 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	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	36	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
2	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Traverse City Mgt. Unit
Thomas Peterson III: Examiner

3	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	102	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	1	3K: Rare or unique landforms	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
	Comments: Stand is Island in C	Crooked Lake.					
6	Unavailable	5E: Long-Term Retention	1	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	22	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Traverse City Mgt. Unit

Compartment: 105 Year of Entry: 2025 **Thomas Peterson III: Examiner**

9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	33	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						

5/2/2023 10:52:34 AM - Page 3 of 3 **POLEYN** 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				

Traverse City Mgt. Unit Compartme



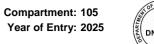


Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* 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.

Conservatio	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition 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	es 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 speci 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.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
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 effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific mana rules, as governed by Part 5, Department of Natural Resources, 324.504). Section 38 of the Administrative Procedures Act (MCL the promulgation of rules. This is an active program, with one pro DNR.	of the NREPA (MCL 324.502(2) and 24.238) provides for public requests for
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10	Zoning District is a 400 foot buffer for

Report 7 - Stands



Stand	Level 4 C	over Type		Size Density	Acres	Stand Age B	A Range	Managed S	Site	General Comments
1	4130	- Aspen		Sapling Well	28.4	25 I	mmature	N/A		2023 - Stand has some scattered larger white pine. Aspen still sapling size at this time.
	Canopy Species	% Cover	Size Class	DBH Age						2013 - Cut in 1997. Sale #66-95.
	Bigtooth Aspen	85	Sapling	3 25						
	Red Maple	5	Pole	8						
	White Pine	10	Pole/Log	8						
2	4116 - Mixed N.	Hardwood	- Aspen P	oletimber Well	59.5	60	81-110	N/A		2023 - Lots of aspen clones scattered throughout stand. Stand has rolling hills. Hardwood is mostly multi stem trees with some nice poles coming
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	in. Stand should bump up to log size next year of entry.
	Paper Birch	2	Pole	8	Irc	nwood	High	Variable	Sapling	The Galla Ground Ballip up to log 6.25 hom your or only.
	Beech	5	Pole/Log	8	Sug	ar Maple	Low	Variable	Sapling	
	Bigtooth Aspen	25	Pole	9	Е	Beech	High	Variable	Sapling	
	Red Oak	1	Log	12	Re	d Maple	Low	Variable	Sapling	
	White Pine	3	Log/Pole	12					1	
	Red Maple	15	Pole/Log	9						
	Sugar Maple	46	Pole/Log	9 60						
	Red Pine	3	Log/Pole	12						
3		e, Aspen M		Poletimber Well	5.0	57	1-50	N/A		2023 - Stand is in-between Blue Lake Road and South Crooked Lake Road. Stand appears to have all aspen and maple cut out from past
	Canopy Species White Pine	% Cover	Size Class Log/Pole/XLog	DBH Age 16 57						treatment with white pine and oak being much larger at this time. No
	Red Oak	5	XLog/Log	20						records could be found of past cut. Small inlet stream to crooked lakes runs through this stand.
		45	Pole/Sapling	5						Talle allough and status
	Bigtooth Aspen	43	Pole/Sapiling	5						
4	3104 -	Degraded		Nonstocked	2.0					2023 - Abandon oil well pad.
5	42200 - Natu	ural White F	Pine S	Sawtimber Well	1.3	90	111-140	N/A		2023 - Stand is an island in South Crooked Lake. Stand in accessible to 1 cut. Stand Vegetation was a guess from shore of Crooked Lake
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	cut. Stand vegetation was a guess from shore of Grooked Lake
	White Pine	98	Log/Pole	16 90	Chol	ke Cherry	Low	Variable	Tall Shrub	
	Red Maple	2	Pole/Log	8	Wh	nite Pine	Low	Variable	Sapling	
6	42200 - Natı			Sawtimber Well	6.3	57	51-80	N/A		1
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	2	Pole/Log	8		nite Pine	Low	Variable	Sapling	
	White Pine	98	Log/Pole/XLog	g 16 57	Chol	ke Cherry	Low	Variable	Tall Shrub	



Stan	d Level 4 C	over Type	ı	Size De	nsity	Acres	Stand Age I	BA Range	Managed S	iite	General Comments
7	42290 - Natu	ural Mixed	Pine S	Sawtimb	er Well	10.3	69	111-140	N/A		2023 - Stand is sitting at a basal area around 120. Leave stand till it hits
	Canopy Species	% Cover			Age		nopy Species		Avg. Height	Size	basal area of 160 than thin it.
	White Pine	50	Log	16	69		nite Pine	Medium	Variable	Sapling	
	Red Pine	43	Log/Pole	12		Quak	ing Aspen	Low	Variable	Sapling	
	Red Oak	2	Pole/Log	8							
	Quaking Aspen	3	Pole	8							
	Red Maple	2	Pole	8							
8	42210 - Na	tural Red F	Pine S	Sawtimb	er Well	9.2	57	111-140	N/A		2023 - Stand is between Blue Lake Road and South Crooked Lake.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stand drops off on steep hill to South Crooked Lake. Maybe could thin the flat top with stand nearby in future. BMP guidelines will need to be
	Red Maple	2	Pole	8		Wh	nite Pine	High	Variable	Sapling	followed for any future harvest in this stand.
	White Pine	15	Log/Pole/XLo	g 16	57						-
	Red Oak	3	Log	16							
	Red Pine	60	Log/Pole	12	57						
	Bigtooth Aspen	20	Pole	8							
9	330 - Low-	Density Tre	ees	Nonsto	cked	9.5			Managed Op	pening	2023 - Stand has trees slowly seeding in. Scattered black cherry with some steep bowls within it.
10	6220 - A	Alder/willow	ı	Nonsto	cked	23.3	l	Jnspecified	No		2023 - Wetland that surround South crooked lake. Stand does have a few scattered trees on edge of it.
11	500	- Water		Nonsto	cked	7.9			No		2023 - South Crooked Lake.
12	110 - Low II	ntensity Ur	ban	Nonsto	cked	10.7	ι	Jnspecified	No		2023 - Blue lake road
13	330 - Low-l	Density Tre	ees	Nonsto	cked	5.3			Managed Op	pening	2023 aspen is creeping into stand. stand has scattered black cherry in it.
14	4130	- Aspen	F	Poletimb	er Well	40.9	47	51-80	N/A		2023 - Stand is 47 years old and could be harvested at this time. Stand
	Canopy Species	% Cover	Size Class	DBH	Age						should be fine for anther 10 years putting on good growth.
	Bigtooth Aspen	90	Pole	8	47						
	White Pine	10	Log/Pole	12							
15	4130	- Aspen	F	Poletimb	er Well	114.3	38	51-80	N/A		2023 - Stand has transitioned into pole stand this year of entry. Parts of
	Canopy Species	% Cover	Size Class	DBH	Age						stand look like failed red pine planting.
	Red Pine	5	Log/Pole	12	-5-						
	White Pine	5	Log/Pole	12							
	Bigtooth Aspen	90	Pole/Sapling		38						
	= :3:00 / iop o		. 0.0, 0 % 511119	,							



Stand	Level 4 C	over Type		Size Density	Acres	Stand Age	BA Range	Managed	Site	General Comments
16	42200 - Natu	ıral White F	Pine	Sawtimber Poor	7.9	40	1-50	N/A		2023 - Stand is adjacent to South Crooked Lake. Part of stand is steep
	Canopy Species	% Cover		DBH Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	hill down to lake. Stand cannot be cut do to BMP guidelines and protecting South Crooked Lake.
	White Pine	97	Log/Pole	12 40	WI	nite Pine	Low	Variable	Sapling	
	Red Maple	3	Pole/Sapling	g 7	Cho	ke Cherry	Medium	Variable	Tall Shrub	
17	42200 - Natu			Poletimber Poor	7.1	40	1-50	N/A		2023 - Stand is adjacent to South Crooked Lake. Part of stand is steep hill down to lake. Stand cannot be cut do to BMP guidelines and
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	protecting South Crooked Lake.
	White Pine	100	Pole/Sapling	g 6 40	WI	nite Pine	Medium	Variable	Sapling	
					Cho	ke Cherry	Medium	Variable	Tall Shrub	
18	330 - Low-I	Density Tre	ees	Nonstocked	5.8	0	Unspecified	Managed C	pening	2023 - Stand has a few scattered trees and his is hilly.
19	330 - Low-I	Density Tre	ees	Nonstocked	1.7					2023 - Abandon oil well pad
20	330 - Low-I	Density Tre	ees	Nonstocked	21.5	0	Immature	Managed C	pening	2023 - Stand is filling in with White Pine, Jack Pine and black cherry. Stand has old large pine stumps in it. 2013 - Sedge field with scattered stunted black cherry and bushy white pine. There are a few small aspen clones on the north end. Manistee river fishing access with parking area on the south end.
21	4111 - S.Maple, H			Poletimber Well	209.8	60	81-110	N/A		2023 - Stand current Basal Area is 87. Stand has some areas of decent sugar maple poles scattered throughout it. Stand has a good amount of
	Canopy Species		Size Class	DBH Age		nopy Specie		Avg. Height	Size	beech in it as well, beech is starting to show mortality at this time. The
	Sugar Maple	65	Pole/Log	9 60		Beech	High	Variable	Sapling	understory has a high amount of beech in some areas as well. Stand has rolling hills throughout it. The quality of timber is better on the east side
	Bigtooth Aspen	5	Pole/Log	8						of stand, with more of an aspen component on the western side of stand.
	Black Cherry	5	Pole/Log	9						
	Red Maple	10	Pole/Log	8						
	Beech	15	Pole/Log	8						
22	310 - Herbac	eous Open	lland	Nonstocked	7.6					2023 - Abandon oil well pad.plugged in 2003
23	42200 - Natu	ıral White F	Pine	Sawtimber Well	1.9	57	111-140	N/A		2023 - Stand is adjacent to South Crooked Lake. Part of stand is steep
	Canopy Species	% Cover	Size Class	DBH Age						hill down to lake. Stand cannot be cut do to BMP guidelines and protecting South Crooked Lake.
	Quaking Aspen	3	Pole/Log	8						
	White Pine	95	Log/Pole	12 57						
	Red Maple	2	Pole	8						
24	4130	- Aspen		Sapling Well	19.3	25	Immature	N/A		2023 - Stand is pole size aspen with some scattered large white pine2013- Cut in 1997. Sale #66-95.
	Canopy Species	% Cover	Size Class	DBH Age						piilo2010 Out III 1991. Oale #00-90.
	White Pine	10	Log/Pole	12						
				3 25						

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Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	SA Range	Managed Site		General Comments
25	330 - Low-l	Density Tree	es	Nonsto	ocked	3.6	U	Inspecified			2023 - Stand is old gas well site. Stand has a few trees seeding in.
26	4112 - Maple, Beed	h, Cherry A	ssociation	Poletimb	er Well	5.0	60	81-110	N/A		2023 - Lots of beech in understory
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Beech	5	Pole	6		Re	ed Maple	Medium	Variable	Sapling	
	Bigtooth Aspen	3	Pole/Log	8			Beech	High	Variable	Sapling	
	Red Maple	30	Pole/Log	8	60						-
	Sugar Maple	60	Pole/Log	8	60						
	Yellow Birch	2	Pole/Log	8							
27	42100 - Plan	ted White F	Pine	Sawtimb	er Well	2.7	57	81-110	N/A		2023 - Very small stand of planted white pine.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Pine	90	Log/Pole	13	57	Bigto	ooth Aspen	Medium	Variable	Sapling	
	Red Maple	10	Log/Pole	12			Beech	Medium	Variable	Sapling	
						W	hite Pine	Medium	Variable	Sapling	
28	500 -	- Water		Nonsto	ocked	0.8			No		2023 - No Name Small Lake.
29	4130	- Aspen		Poletimb	er Well	2.8	52	51-80	N/A		2023 - Fully Stocked aspen with a white pine and red maple component
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Pine	10	Log/Pole	10			Beech	Low	Variable	Sapling	
	Red Maple	30	Log/Pole	10		Re	ed Maple	Low	Variable	Sapling	
	Bigtooth Aspen	60	Pole/Log	9	52						
30	4130	- Aspen		Poletimb	er Well	1.2	52	51-80	N/A		2023 - Retention area around a wet area left when stand 32 was final
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	harvested.
	White Pine	10	Pole	8		Qual	king Aspen	Low	Variable	Sapling	
	Quaking Aspen	90	Pole	8	52	Re	ed Maple	Low	Variable	Sapling	
						W	hite Pine	Low	Variable	Sapling	
32	4130	- Aspen		Sapling	g Well	4.3	14	Immature	N/A		2023 Sapling aspen with some larger white pine, red maple and black
	Canopy Species	% Cover	Size Class	DBH	l Age						cherry. 2013 - Recently cut with adjacent compartment. Sale #56-08.
	White Pine	10	Log/Pole	10							20.0 . 1000, out min adjacont comparations. Calo not co.
	Bigtooth Aspen	80	Sapling	1	14						
	Red Maple	5	Pole/Saplin	g 7							
	Black Cherry	5	Pole/Saplin	g 7							
33	4130	- Aspen		Sapling I	Medium	10.7	5	Immature	N/A		2023 - North Part of Stand is fully Stocked Aspen Stand. South Part ha
	Canopy Species	% Cover	Size Class	DBH	l Age						some aspen clones, but also has a few open areas located in it. 2018 - stand cut winter of 2017/18. small area of aspen taken out of
	Cugar Manla	20	Sapling	2	19						larger maple stand, worked around understory maple where they c
	Sugar Maple	20	Sapility		19						should be mostly aspen with some maple pockets as well.



Stand	Level 4 Co	Cover Type		Size Density		Stand Age B	Managed S	Site	General Comments			
35	3105 - Mixed Up	oland Herba	aceous	Nonstocked	7.8					2023 - Trans Canada Pipeline. Has Trees Seeding in on it.		
					Sub-Ca	nopy Species	Density	Avg. Height	Size			
					Ja	ck Pine	Low		Sapling			
					Blad	ck Cherry	Medium		Sapling			
					Quak	ing Aspen	Low		Sapling			
					Wh	nite Pine	Low		Sapling			
36	42260 - Natural Pir	ne, Mixed D	eciduous Pole	etimber Mediu	m 9.2	50	1-50	N/A		2023 - Stand is poor quality bushy white pine at this time. Aspen is		
(Canopy Species	% Cover	Size Class	DBH Age						starting to compete with white pine at this time as well. Depending on how aspen grows aspen might start to over take pine by next year of		
В	igtooth Aspen	40	Pole/Sapling	5						entry.		
	White Pine	50	Log/Pole	10 50								
	Red Pine	5	Pole/Sapling	5								
	Jack Pine	5	Sapling/Pole	1								
37	4110 - Sugar M	laple Assoc	ciation Sa	awtimber Well	104.2	60	81-110	N/A		2023 - Stand has Beech and Ironwood in understory. Basal area around 101 at this time.		
(Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	101 at tills tille.		
	Yellow Birch	2	Log/Pole	10		Beech	High	Variable	Sapling			
	Paper Birch	3	Pole/Log	8	Iro	Ironwood		Variable	Sapling			
	Sugar Maple	80	Log/Pole	12 60								
	Beech	5	Log/Pole	13								
В	igtooth Aspen	10	Log	14								
39	39 42111 - Planted Red Pine, Mixed Poletimber Well Deciduous				130.9	37	81-110	N/A		2023 - Planted red pine with hardwood component scattered througho it. Basal area is low from last cut. Stand has filled in with beech regeneration with some desirable regeneration.		
(Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	regeneration with some desirable regeneration.		
	Sugar Maple	10	Log/Pole	12		Beech	High	Variable	Sapling			
	Red Pine	75	Pole	8 37	Wh	nite Pine	Low	Variable	Sapling			
В	sigtooth Aspen	10	Pole	8								
	Basswood	5	Log/Pole	12								
40	6112 - Lov	vland Aspe	n (Sapling Poor	17.2	30 I	mmature	N/A		2023 - Stand has scattered larger Aspen throughout it of various sizes.		
(Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Lots of open spots in stand due to standing water at certain times of year. Stand has a few larger legacy white pine trees in it. There is tag alder		
	Balsam Fir	10	Pole/Sapling	6	Wh	nite Pine	Low	Variable	Sapling	throughout most of stand.		
	White Pine	5	XLog/Log	18	Ta	ıg Alder	Medium	5 - 10 feet	Tall Shrub			
F	American Elm	5	Sapling/Pole	4					'	•		
	Black Cherry	10	Sapling/Pole	2								
Q	uaking Aspen	60	Sapling	1 30								
North	hern White Cedar	10	Pole	8								



Stand	d Level 4 Co	Size Density			Acres	Stand Age B	A Range	Managed S	ite	General Comments	
41	4130			Sapling Medium		5 I	Immature	N/A		2023 - West end of stand is fully stocked at this time. East Side of Stand is poorly stocked at this time. Stand should continue to fill in over the	
	Canopy Species	% Cover			Age						next 10 years.
	Bigtooth Aspen	80	Sapling	1	5						
	Sugar Maple	10	Sapling	1							
	Black Cherry	5	Sapling	1							
1	Beech	5	Sapling	1							
42		- Aspen		Poletimb	er Well	53.6	39	51-80	N/A		2023 - Fully stocked aspen stand with maple coming up under it.
	Canopy Species	% Cover	Size Class	DBH	Age		nopy Species	Density	Avg. Height	Size	
	Black Cherry	5	Pole/Log	8		Su	gar Maple	Low	Variable	Sapling	
	Paper Birch	3	Pole/Log	8		Re	ed Maple	Low	Variable	Sapling	
	Red Maple	5	Pole/Log	8			Beech	Low	Variable	Sapling	
	Sugar Maple	5	Pole/Log	8		Bla	ck Cherry	Low	Variable	Sapling	
	Bigtooth Aspen	80	Pole/Log	8	39						
	Red Pine	2	Pole	8							
43	310 - Herbac	·		Nonsto		2.5					2023 - Abandon oil well pad.
44	4116 - Mixed N.	Hardwood -	- Aspen	Sawtimb		46.8	60	111-140	N/A		2023 - Stand has several different aspen clones throughout stand. Larger sugar maple and basswood are clumpy poor quality trees. Stand
	Canopy Species	% Cover	Size Class		Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	does have some decent sugar maple poles in it as well.
	Red Maple	5	Log/Pole	12			Beech	Medium	Variable	Sapling	
	Bigtooth Aspen	33	Log/Pole	12		Su	gar Maple	Medium	Variable	Sapling	
	Beech	2	Log/Pole	13		Ir	onwood	Medium	Variable	Sapling	
	Sugar Maple	35	Log/Pole	13	60						
	Basswood	25	Log/Pole	13							
46	4119 - Mixed No	orthern Hard	dwoods	Sapling I	/ledium	175.5	40	1-50	N/A		2023- Stand appears to be some sort of old Shelter wood / Seed Tree
	Canopy Species	% Cover	Size Class	DBH	Age						Cut. Stand has a lot of open areas in it but these opening are filling in nicely. Stand has a lot of desirable regeneration scattered throughout it.
	White Pine	2	Log	12							Stand should reach pole size by next year of entry. Stand has rolling hills;
	Red Pine	2	Log	13							hillsides contain more desirable regeneration than other spots of the
	Black Cherry	5	Sapling/Pol	e 4							stand.
	Red Maple	10	Sapling/Pol	e 4							
	Sugar Maple	35	Sapling	3	40						
	Bigtooth Aspen	15	Sapling/Pol	e 4							
	Ironwood	3	Sapling/Pol								
	Paper Birch	2	Sapling/Pol	e 4							
	Sugar Maple	15	Log	14							
	Beech	11	Sapling/Pol	е 3							
48	330 - Low-I	Density Tre	es	Nonsto	ocked	8.1			Managed Op	ening	2023 - Stand has some Scattered Black Cherry and Pine seeding in at this time.



Stand	Level 4 C	over Type		Size Density		Acres	Stand Age BA Range		Managed S	iite	General Comments		
50	310 - Herbaceous Openland			Nonstocked		1.4		51-80	N/A		2023 - Abandon oil well pad		
51	4111 - S.Maple, H	4111 - S.Maple, Hard Mast Association				62.1	60				2023 - Stand has some very steep hills in it. Stand has a good amount of		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	sugar maple regeneration on the hillsides, as where beech has dominated the other areas. Stand basal area varies from 30 to 100 at		
	Black Cherry	5	Log/Pole				Beech	High	Variable	Sapling	this time depending on where you are in the stand.		
	Beech	10	Log/Pole	10		Sug	gar Maple	Medium	Variable	Sapling			
	Red Pine	5	Log	12									
	Sugar Maple	60	Log/Pole	10	60								
	Bigtooth Aspen	15	Pole	8									
	White Pine	5	Log/Pole	12									
52	4319 - Mixed	d Upland Fo	orest	Sawtimb	er Well	43.6	60	111-140	N/A		2023 - Stand is planted red pine that is converting to hardwoods. We're there is red pine planted the basal area is 150- 160, red pine has never		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	been third row thinned. Hardwoods pockets are much lighter with basal		
I	Bigtooth Aspen	5	Pole/Log	8		Sug	gar Maple	Medium	Variable	Sapling	areas ranging from 50 -120		
	Red Pine	43	Log/Pole	10	45	R	ed Pine	Medium	Variable	Sapling	2013 - Areas of this stand is planted red pine, but hardwoods has taken over most of stand.		
	Red Maple	2	Log/Pole	12			Beech	Medium	Variable	Sapling	over most of stand.		
	Sugar Maple	50	Log/Pole	12	60								
	•		2 - Maple, Beech, Cherry Association Poletiml opy Species % Cover Size Class DBI		er Poor	7.1	84	1-50	N/A		2023 - Stand does not have much desirable regeneration at this time. Stand has several open areas with some overstory trees left. Stand		
	Canopy Species White Pine	10	Log	14	84						should fill in more as time goes by. 2018 - Stand was clear cut as part of Sale Hogenose Jaw (61-150-15).		
	Black Cherry	5	Log	12	04						2010 - Stand was clear cut as part of Sale Hogeriose saw (01-130-13).		
	Beech	35	Sapling	1	6								
	Sugar Maple	40	Pole/Log		84								
	White Pine	5	Sapling	1	0.								
	Black Cherry	5	Sapling	1									
54	, , , , , ,		1 3					39.5	45	81-110	N/A		2023 - Stand appears to be thinned only once at this time. leave 4 or 5 remove 2 rows. Beech seedling throughout stand. Some areas do have sugar maple seedling as well. Some big pockets of log size Hardwoods
	Canopy Species		Size Class		Age		nopy Species		Avg. Height	Size	located throughout stand as well. Stand is very hilly.		
	Red Maple	5	Pole	8			Beech	High	Variable	Sapling	2013 - cut half the red pine out this area will be pushed to maple regen		
	Beech	8	Log/Pole			Sug	gar Maple	Low	Variable	Sapling	over the course of next 10-20 years. likely take the top off after the site has fully regenerated, some areas of aspen as well that will likely push to		
	Bigtooth Aspen	8	Pole	8							aspen eventually.		
	Basswood	10	Log/Pole										
	Sugar Maple	9	Log/Pole	12									
55	330 - Low-	Density Tre	es	Nonsto	ocked	1.2					2023 - Abandon oil well pad.		
56	3104 -	Degraded		Nonsto	ocked	1.8					Abandon oil well site.		

Report 7 - Stands



Stand	Level 4 C	over Type		Size Density	Acres	Stand Age E	BA Range	Managed S	ite	General Comments
57	310 - Herbac	eous Oper	lland	Nonstocked	17.8		Immature			2023 - TC energy Pipeline runs through stand
58	4133 - Aspe	en, Mixed F	ine S	Sapling Medium	10.9	5	Immature	N/A		2023 - Stand has some nice aspen clones. Stand has some open areas.
	Canopy Species	% Cover	Size Class	DBH Age						Jack Pine seedling staring to poke up through snow. 2018 - Stand was clear cut as part of Sale Hogenose Jaw (61-150-15).
	Bigtooth Aspen	50	Sapling	1 5						2010 Claira mac dear car ac pair of Care Fregoricae carr (c Fredorica).
	Red Pine	15	Log	12						
	Jack Pine	15	Sapling	1						
	Black Cherry	10	Sapling	1						
	Red Maple	10	Sapling	1						
59	4110 - Sugar N	/laple Asso	ciation F	Poletimber Well	13.6	40	1-50	N/A		2023 - Stand is on steep hill. Stand has transitioned to pole size stand
	Canopy Species	% Cover	Size Class	DBH Age						since last year of entry.
	Basswood	10	Log/Pole	13						
	Sugar Maple	70	Pole/Sapling	5 40						
	Beech	10	Pole/Sapling							
	Bigtooth Aspen	10	Pole/Sapling	7						
60	0 4110 - Sugar Maple Association		ciation S	Sawtimber Well		84	81-110	N/A		2023 - Entire stand on steep hill. This is the transition stand between hardwoods and pine /oak flats in compartment. Most trees are poor
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	quality being multi stem tress. lots of beech in understory. Hold stand for
	Basswood	20	Log/Pole	13		Beech	Full	5 - 10 feet	Sapling	skyline considerations till adjacent stands have put on growth.
	Bigtooth Aspen	10	Pole/Sapling		Sug	gar Maple	Low	Variable	Sapling	
	Sugar Maple	60	Log/Pole	10 84						
	Beech	10	Log/Pole	10						
61	4130	- Aspen	Aspen Sapling Well			37	1-50	N/A		2023- Just over half the the aspen is sapling size at this time. Stand will be pole stand next year of entry. Scattered larger red pine throughout
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stand.
	Bigtooth Aspen	85	Sapling/Pole	4 37		ick Pine	Low	Variable	Sapling	
	Jack Pine	10	Sapling/Pole		R	ed Pine	Low	Variable	Sapling	
	Red Pine	5	Log/Pole	12						
62	4130	- Aspen		Sapling Well	20.1	5	Immature	N/A		2023 - Fully stocked aspen stand with some white pine and oak left in overstory from clearcut 5 years ago. 2018 - Stand was clear cut as part
	Canopy Species	% Cover	Size Class	DBH Age						of Sale Hogenose Jaw (61-150-15).
	Red Maple	5	Sapling	1 5						
	White Pine	5	Log/Pole/XLo	0						
	Red Oak	5	Log/Pole	10						
	Bigtooth Aspen	85	Sapling	1 5						
63	330 - Low-	Density Tre	ees	Nonstocked	1.4				_	2023 - Abandon oil well site.

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Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments			
64	4311 - Pin	lix P	oletimb	er Well	11.5	55	51-80	N/A		2023 - Stand has a lot of Legacy White Pine in stand. These White pine				
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	need to be protected in future if stand is every prescribed. Due to sma size of stand this might be a good place to let old growth trees grow ar			
	Quaking Aspen	25	Pole	6	55	Е	Beech	Low	Variable	Variable Sapling	not disturb this stand in future.			
	Red Pine	5	Pole/Sapling	6		Wh	ite Pine	Low	Variable	Sapling				
	Red Maple	15	Pole/Log	9		Wh	ite Oak	Low	Variable	Sapling				
	Paper Birch	5	Pole	8		Blac	k Cherry	Low	Variable	Sapling				
	White Pine	50	Pole/Log	9	55						•			
65	42141 - Planted Dec	Mixed Pine iduous	e, Mixed S	awtimb	er Well	157.3	84	1-50	N/A		2023 - Stand is a planted red pine stand with a fully stocked understory under it. Part of understory are merchantable part are not merchantable			
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Cut 1/3 of stand this year, 1/3 of stand in 10 years and the rest of the			
	Black Cherry	6	Pole/Sapling	6			oth Aspen	High	Variable	Sapling	stand in 20 years to give 3 different age classes. 2013 - Very old plantation. Planted as a mix of red, jack and white in			
	Bigtooth Aspen	20	Pole/Sapling	6	37	Re	ed Pine	Low	Variable	Sapling	1938. Aspen, hardwoods, white and jack pine were cut out in 1986, sale			
	Red Maple	10	Log/Pole	12		Wh	ite Pine	Low	Variable	Sapling	#002-85.			
	Red Pine	35	Log/Pole/XLog	16	84									
66	42140 - Plan	ted Mixed I	Pine Sa	awtimb	er Poor	63.1	84	1-50	N/A		2023 - Aspen clones established throughout stand. We're there is asper			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	stand is fully stocked. Jack pine seedlings sticking up through snow in open areas. Stand should continue to fill in nicely. Some parts of stand			
	Red Oak	10	Log/Pole/XLog				Jack Pine		< 5 feet	Sapling	are open, other parts have overstory pine.			
	Red Pine	35	Log/Pole/XLog	_	84	Red Maple		Low	Variable	Sapling	2018 - 2018 - Stand had all jack pine, aspen and red maple removed			
	White Pine	50	Log/Pole/XLog		84		ite Pine	Low	Variable	Sapling	during Sale Hogenose Jaw (61-150-15).			
	Jack Pine	5	Pole	8		Е	Beech		Variable	Sapling	2012 - Very old plantation. Planted as a mix of red, jack and white ir 1938.			
						Bigto	oth Aspen	Medium	5 - 10 feet	Sapling				
67	6112 - Lov	wland Aspe	en Sa	apling	Medium	6.2 30 lm		mmature	N/A		2023 - Stand has indicators that it is wet at certain times of the year. Stand has larger aspen of various sizes scattered throughout it. Stand has a lot of Tag Alder.			
	Canopy Species	% Cover	Size Class	DBH Age		Sub-Canopy Species		Density	Avg. Height	Size				
	Quaking Aspen	100	Sapling	2	30		g Alder	Medium	5 - 10 feet	Tall Shrub				
	<u> </u>						sam Fir	Medium	Variable	Sapling				
68	42140 - Plan	ted Mixed I	Pine S	awtimb	er Well	33.2	84	81-110	N/A		2023 - Planted stand with mostly red and white pine in overstory. Stand			
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	does have a lot of desirable species in understory. Consider Removing top of stand in the future.			
	White Pine	42	Log/XLog	16			ite Pine	Low	Variable	Sapling	2013 - Very old plantation. Planted as a mix of red, jack and white in			
	Red Maple	3	Log/Pole	10		Bigto	oth Aspen	Low	Variable	Sapling	1938. Lots of old stumps in stand.			
	Jack Pine	10	Pole/Log	8		E	Beech	Low	Variable	Sapling				
	Red Pine	45	Log/XLog	16	84	Re	Red Pine		Variable	Sapling				
				I			d Maple	Medium	Variable	Sapling				
69	330 - Low-I	Density Tre	ees	Nonst	ocked	1.4					2023 - Abandon oil well site.			
70	330 - Low-l	Density Tre	ees	Nonst	ocked	1.9					2023 - Abandon oil well site.			



Stand	Level 4 Co	Level 4 Cover Type Size Density Acres Stand Age BA Range		A Range	Managed S	Site	General Comments				
71	42260 - Natural Pine, Mixed Deciduous				er Well	8.3	48	1-50	N/A		2023 - Stand could be clearcut this year of entry but is in good shape at this time. Hold stand 10 years and clearcut it. Consider cutting part of
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stand 73 that are not to wet to cut during future harvest.
	Red Pine	15	XLog/Log	18		Blac	k Spruce	Low	Variable	Sapling	3
	White Pine	10	XLog/Log	18		Ва	lsam Fir	Low	Variable	Sapling	
	Red Maple	5	Pole/Sapling	5		Re	d Maple	Medium	Variable	Sapling	
	Jack Pine	35	Pole	8	48						
	Bigtooth Aspen	30	Pole/Sapling	5	48						
	Black Cherry	5	Pole/Sapling	5							
72	2 3102 - Grass Nonstocked			5.7	I	mmature			2023 Jack pine trees slowly seeding in. Some fenced off trees in site. Wildlife planted apple trees in fenced areas? 2013 - Abandon oil well pad with monitoring wells.		
73 6132 - Mixed Lowland Fo		nd Forest	with Cedar Po	letimbe	r Medium	n 9.9	47	1-50	N/A		2023 - Tag alder throughout stand. Cut portions of stand that are not to
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	wet when stand 71 is harvested next time.
	Bigtooth Aspen	50	Pole	8	47	Ta	g Alder	Medium	Variable	Tall Shrub	
	White Pine	10	XLog/Log	18							
	Balsam Fir	20	Pole	8							
No	rthern White Cedar	20	Pole	8							
75	42141 - Planted Mixed Pine, Mixed Sawtimber Well Deciduous		er Well	21.5	84	111-140	N/A		2023 - Stand basal area various throughout stand. Were Red and Whit Pine are the more dominate species it is much higher than aspen / jack		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	pine dominated areas.
	Bigtooth Aspen	25	Pole	8		Wh	nite Pine	Medium	Variable	Sapling	
	Red Pine	25	XLog/Log	18		Blac	ck Cherry	Low	Variable	Sapling	
	Jack Pine	20	Pole	8							
	White Pine	30	Log/Pole	12	84						
76	110 - Low In	tensity Urb	oan	Nonst	ocked	2.8					2023 - Fenced off Oil facility
77	42220 - Natu	ıral Jack P	ine F	Poletimb	er Well	24.5	49	51-80	N/A		2023 - Jack Pine is in Good Shape at this time. Stand can hold for
	Canopy Species	% Cover	Size Class	DBH	l Age						anther 10 years. Consider Clearcutting net year of entry.
	Jack Pine	95	Pole/Log	8	49						
	Bigtooth Aspen	5	Pole/Sapling	6							
83	4130 -	Aspen	F	Poletimb	er Well	4.3	65		N/A		2023 - Retention from 105 Aspen Hill stand 86
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	75	Pole/Sapling	8	65	Che	rry (spp.)	Medium	Variable	Sapling	
	Basswood	5	Log/Pole	12				1			
	Sugar Maple	20	Log/Pole	12							

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Stand	Level 4 C	over Type		Size D	ensity	Acres	Stand Age BA Range		Managed Site	General Comments		
86	4139 - Aspen,	Mixed Deci	Sapling Medium		144.4	8	Immature	N/A	2023 - A few scattered saw log size sugar maples throughout stand.			
	Canopy Species	% Cover	Size Class	DB	H Age					Stand has regenerated to mostly aspen with a hardwood component in several areas of stand. Stand does have a few open spots in it but these		
	Black Cherry	20	Sapling	1	8					should continue to fill in nicely over the next 10 years.		
	Red Pine	3	Log/Pole	12	!					2017 - Stand was clear cut sale 105 Aspen Hil (61-171-15).		
	Ironwood	10	Sapling	4								
	Bigtooth Aspen	50	Sapling	1	8							
	White Pine	5	Log/Pole	12	!							
	Red Maple	12	Sapling	1	8							