Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32092
Entry Year 2017
Acreage: 2,393
County Alger
Management Area: Dead Horse Moraines

Revision Date: 2015-08-03

Stand Examiner: Ben Travis

Legal Description:

T44N R22W, Sections 20, 28, 29, 32, and 33

Identified Planning Goals:

Planning will focus on integrated timber management, forest recreation, fisheries management, and wildlife habitat management. Increasing public access is a high priority. Forest road maintenance, trespass incidents, forest regeneration, forest health, forest fire control, stream crossings, water quality, and any resource damage issues are critical assessments considered during the forest mapping, inventory, public comment, and forest management planning processes.

Soil and topography:

Terrain is mostly level to slightly rolling. Wetlands and drainages are common. Soils range from organic mucks and poorly drained loamy soils to well-drained loams. Major soil series include Kalkaska, Munising, and Keweenaw.

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

This compartment is adjacent to large blocks of state ownership. Delta county is adjacent to the north boundary. There are blocks of Plum Creek lands within and to the east of the compartment. Small private parcels are found along the east central compartment boundary and the north compartment boundary.

Unique Natural Features:

Werner Creek and Deer Creek.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Compartment 92 is found within the Dead Horse Moraines Management Area; on Ground Moraines in southeastern Marquette, southwestern Alger, and northwestern Delta Counties. The dominant Natural Communities are poor conifer swamps, mesic northern forests, and dry northern forests. Major forest cover types include Northern Hardwood, Aspen, and Mixed Lowland Conifer. This management area contains a large proportion of hardwood forest which regenerates well partly due to the heavier snow cover and lower deer numbers than the southern portion of this Management Area. The most significant wildlife management issues in the management area are: mast (hard and soft); mature forest (upland deciduous, especially aspen and mixed forest with little understory); course woody debris, early successional forest, and deer wintering complexes.

The following have been identified as featured species for the Dead Horse Moraines Management Area: black bear, pileated woodpecker, ruffed grouse, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Sections 20, 28, 29, 32, & 33, T44N R22W, Alger County
Surface sediments consist of medium-textured till. There is insufficient data to determine the glacial drift thickness (typically less than 25 feet). The Ordovician Trenton Group subcrops below the glacial drift. The Trenton and Black River groups are quarried for stone/dolomite elsewhere in the UP. There are no gravel pits in the area, and potential appears to be limited. There is no history of mineral leasing in this area. There is no economic oil and gas production in the UP.

Vehicle Access:

Vehicle access to the north and west portions of the compartment are limited. Diffin Road is the north boundary of this compartment, and becomes inaccessible to all wheeled vehicles just past the portable bridge crossing Werner Creek. Two poor forest roads extend south off of Diffin Rd. One is bermed and the other has major resource damage due to extremely wet, ponded conditions and an un-authorized bridge. However, this road provides access to a camp which has been very cooperative with past timber management activities operating across the private parcel. The Deadhorse Road provides the main access through the center of the compartment. A large DNR bridge provides a crossing over Werner Creek. Access to the state 40 east of Thornton Road is problematic.

Survey Needs:

Several survey monuments will need to be placed.

Recreational Facilities and Opportunities:

There are no formal recreation facilities in this compartment. Snowmobiles and ATVs utilize the forest roads. Hunting and wildlife observation are important recreational activities. Fishing opportunities also exist in Werner and Deer Creeks.

Fire Protection:

This compartment has a relatively low risk for wildfire.

Additional Compartment Information:

The Deadhorse Road provides access from Alger county into the large block of state land in Delta county. Compartment falls within Deer Wintering Complex - use winter cut harvesting restrictions on all treatments.

The following reports from the Inventory are attached:

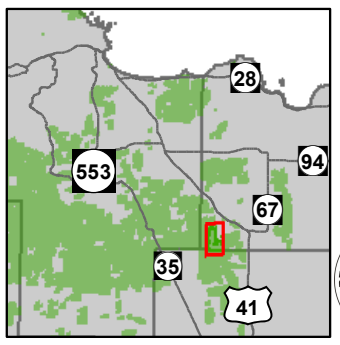
- **Total Acres by Cover Type and Age Class**
- **Cover Type by Harvest Method**
- **Proposed Treatments – No Limiting Factors**
- **Proposed Treatments – With Limiting Factors**
- **Stand Details (Forested and Nonforested)**
- **Dedicated and Proposed Special Conservation Areas**
- **Site Condition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

Cover Type & Treatments

Compartment: 92
T44N, R22W
Sections. 20, 28, 29, 32, 33
County: Alger
Unit: Gwinn
Mgmt Area: Dead Horse Moraines
YOE: 2017
Acres: 2393 GIS Calculated
Examiner: Ben Travis
Map Revised: 8/7/2015
Map Phase: Pre-Review



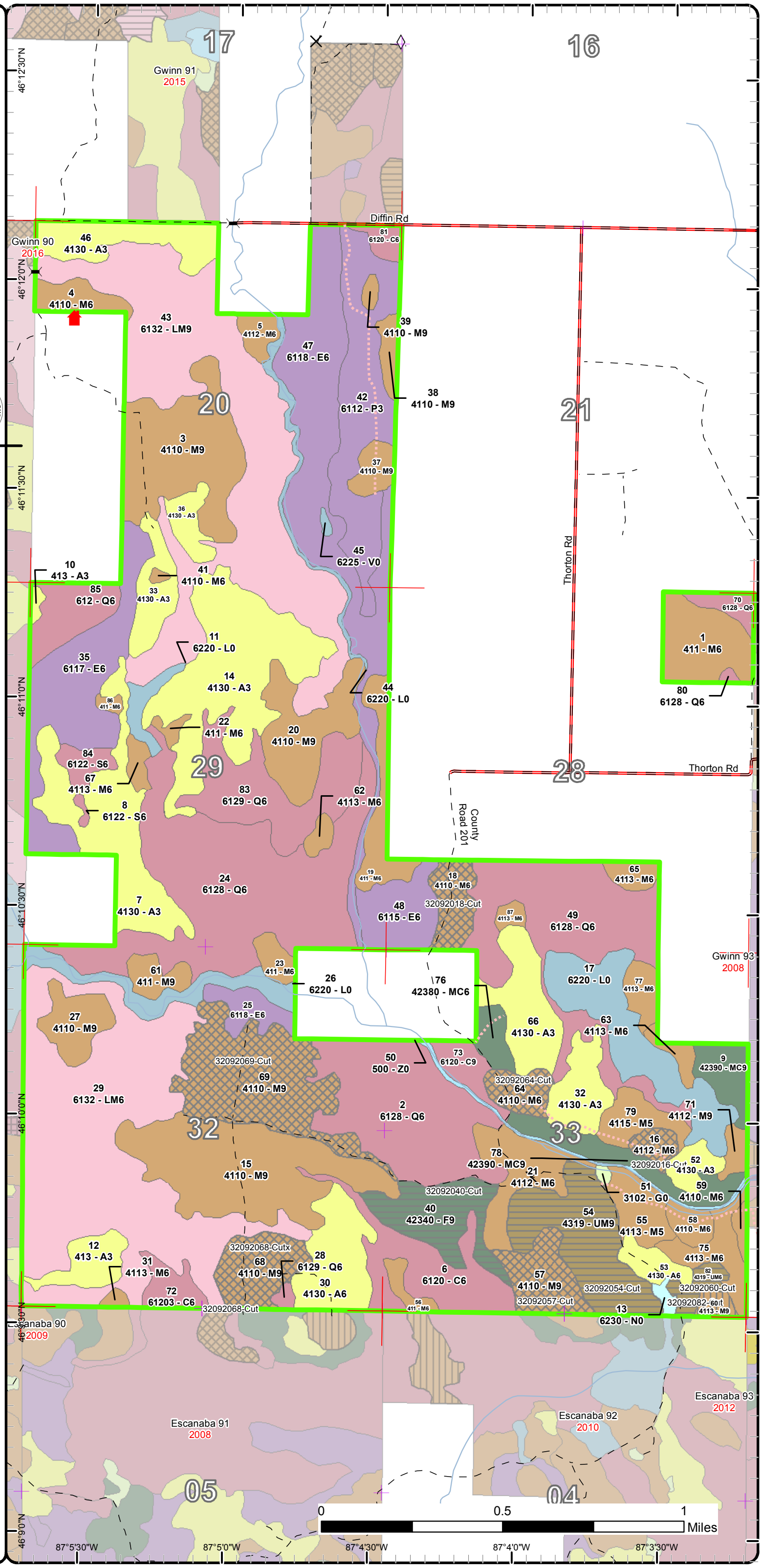
N

- Remonumented Section Corner
- Field Grade GPS Corners
- Miris Corners
- County Gravel Roads
- Poor Dirt Roads
- Closed Roads
- Gate
- Bridges
- Rivers
- Lakes

Treatments
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Shelter Wood (w/Reserves)

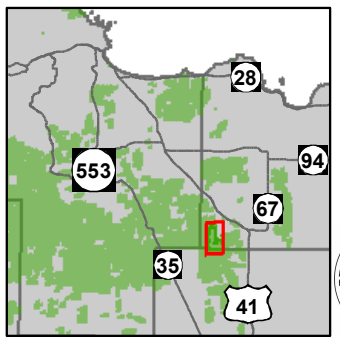
Forest Covertype
- 411 - Northern Hardwood
- 413 - Aspen
- 423 - Other Upland Conifers
- 430 - Upland Mixed Fores
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Covertype
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



Stand Boundary Map

Compartment: 92
T44N, R22W
Sections. 20, 28, 29, 32, 33
County: Alger
Unit: Gwinn
Mgmt Area: Dead Horse Moraines
YOE: 2017
Acres: 2393 GIS Calculated
Examiner: Ben Travis
Map Revised: 8/9/2015
Map Phase: Pre-Review



N

Remonumented Section Corner
Field Grade GPS Corners
Miris Corners
County Gravel Roads
Poor Dirt Roads
Closed Roads
Gate
Bridges
Rivers
Stand Boundaries

Forest Covertype
- 411 - Northern Hardwood
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Special Conservation Areas & Site Conditions Map

Compartment: 92
T44N, R22W
Sections. 20, 28, 29, 32, 33
County: Alger
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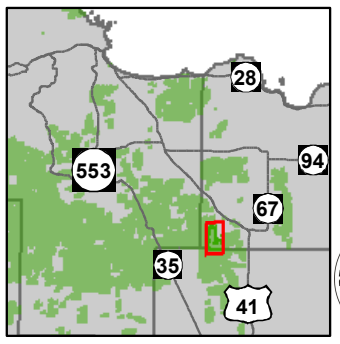

N

- Remonumented Section Corner
- Field Grade GPS Corners
- Miris Corners
- County Gravel Roads
- Poor Dirt Roads
- Closed Roads
- Gate
- Bridges
- Rivers
- Stand Boundaries

Site Condition

- Unavailable

Unavailable Factors

1C: Other dept or div proc/practices
2G: Too wet (sensitive soils, does not include access issues)
2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
3B: Threatened, endangered, and special concern species/communities

Special Conservation Areas

- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer

Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit **Compartment 92** **Year of Entry 2017**

Ben Travis : Examiner

Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	170	123	35	0	10	0	0	0	0	0	0	0	0	0	0	0	0	**338**
Bog	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Cedar	0	0	0	0	0	0	0	0	0	0	6	11	54	0	0	0	0	0	**71**
Herbaceous Openland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Lowland Aspen/Balsam Poplar	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**69**
Lowland Conifers	0	0	0	0	0	0	0	0	159	0	149	22	91	0	0	0	0	0	**421**
Lowland Deciduous	0	0	0	0	0	106	27	67	0	0	0	0	0	0	0	13	0	0	**213**
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	403	0	0	0	0	0	**403**
Lowland Shrub	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**94**
Lowland Spruce/Fir	0	0	0	0	0	0	0	1	0	8	0	0	0	0	0	0	0	0	**9**
Marsh	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Northern Hardwood	0	0	0	0	0	0	0	35	110	47	0	0	0	0	0	0	0	431	**623**
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	9	38	0	0	0	0	0	**47**
Upland Mixed Forest	0	0	0	0	0	0	0	8	0	54	0	0	0	0	0	0	0	0	**62**
Upland Spruce/Fir	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	**34**
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**105**	**170**	**192**	**35**	**0**	**116**	**61**	**111**	**269**	**109**	**155**	**42**	**586**	**0**	**0**	**13**	**0**	**431**	**2395**

Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2017

Acres of Harvest

Compartment 92

Total Compartment Acres: 2,393

Commercial Harvest - 259

Harvests with Site Condition - 0

Next Step Harvest - 0

Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Northern Hardwood	0	158	0	0	5	0	0	0	0	**163**
Upland Mixed Forest	62	0	0	0	0	0	0	0	0	**62**
Upland Spruce/Fir	34	0	0	0	0	0	0	0	0	**34**
Total	**96**	**158**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**259**

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	259	0	0	0	0	0	0	0	0	**259**
Next Step	0	0	0	0	0	0	367	0	0	**367**
Total	**259**	**0**	**0**	**0**	**0**	**0**	**367**	**0**	**0**	**626**

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
16	32092016-Cut	6.7	4112 - Maple, Beech, Cherry Association	Poletimber Well	80	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Selectively mark individual trees for harvest to promote an uneven aged stand structure. Residual basal area should be between 80 to 90 square feet. Emphasis will be on improving the timber quality and productivity of the stand by releasing future crop trees. Remove majority of defective, poor form, high risk, and/or poorly spaced competitors to achieve the target basal area. Quality timber trees may also be selected when suitable. Wildlife habitat, forest health, tree species diversity, and regeneration gaps are important factors to consider when marking the stand for sale. Release of advanced maple regeneration is desirable. Strive to maintain a diversity of diameter classes in the overstory. Retain any white pine, cedar, hemlock, oak, or white spruce present. Favor yellow birch, black cherry, and basswood retention.

Next Step Treatments:

Acceptable Regen: Maple, birch, black cherry, hemlock, and basswood.

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
18	32092018-Cut	16.3	4110 - Sugar Maple Association	Poletimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Selectively mark individual trees for harvest to promote an uneven aged stand structure. Residual basal area should be between 80 to 90 square feet. Emphasis will be on improving the timber quality and productivity of the stand by releasing future crop trees. Remove majority of defective, poor form, high risk, and/or poorly spaced competitors to achieve the target basal area. Quality timber trees may also be selected when suitable. Wildlife habitat, forest health, tree species diversity, and regeneration gaps are important factors to consider when marking the stand for sale. Release of dense advanced maple regeneration is desirable. Strive to maintain a diversity of diameter classes in the overstory. Retain any white pine, cedar, hemlock, oak, or white spruce present. Favor yellow birch, black cherry, and basswood retention.

Next Step Treatments:

Acceptable Regen: Maple, birch, basswood, black cherry, and hemlock.

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
40	32092040-Cut	34.1	42340 - Upland Spruce/Fir	Sawtimber Well	52	Unspecified	Harvest	Clearcut with Retention	42340 - Upland Spruce/Fir	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Retain any white pine, yellow birch, cedar, or hemlock. Retain all black cherry. Use patch retention to achieve proper reserves. There are wetlands to exclude which will contribute to the overall area retention. Series of low ridges and swales.

Next Step Treatments:

Acceptable Regen: Fir, spruce, maple, birch, aspen, balsam poplar, cedar, hemlock, white pine, and black cherry.

Other Comment: Winter harvest only - deer wintering complex area. Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
54	32092054-Cut	54.2	4319 - Mixed Upland Forest	Sawtimber Well	85	81-110	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Retain any white pine, yellow birch, cedar, or hemlock. Use patch retention (including older, larger aspen) to achieve proper reserves. There are wetlands to exclude which will contribute to the overall area retention. Series of low ridges and swales. Leave some white birch along road.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory); Monitoring, Natural Regen (Re-Inventory); Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Fir, spruce, maple, birch, white pine, balsam poplar, aspen, cedar, and hemlock.

Other Comment: Winter harvest only - deer wintering complex area. Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
57	32092057-Cut	23.9	4110 - Sugar Maple Association	Sawtimber Well	85	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Selectively mark individual trees for harvest to promote an uneven aged stand structure. Residual basal area should be between 80 to 90 square feet. Emphasis will be on improving the timber quality and productivity of the stand by releasing future crop trees. Remove majority of defective, poor form, high risk, and/or poorly spaced competitors to achieve the target basal area. Quality timber trees may also be selected when suitable. Wildlife habitat, forest health, tree species diversity, and regeneration gaps are important factors to consider when marking the stand for sale. Release of dense advanced maple regeneration is desirable. Strive to maintain a diversity of diameter classes in the overstory. Retain any white pine, cedar, hemlock, oak, or white spruce present. Favor yellow birch, black cherry, and basswood retention.

Next Step Treatments:

Acceptable Regen: Maple, birch, basswood, and black cherry.

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
60	32092060-Cut	4.8	4113 - R.Maple, Conifer	Sawtimber Well	80	111-140	Harvest	Shelterwood	4113 - R.Maple, Conifer	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Residual basal area should be between 40 to 50 square feet. Remove majority of defective, poor form, high risk, and/or poorly spaced trees to achieve the target basal area. Quality timber trees may also be selected when suitable. Wildlife habitat, forest health, and tree species diversity are important factors to consider when marking the stand for sale. Retain any white pine, yellow birch, hemlock, cedar, or oak present.

Next Step Treatments:

Acceptable Regen: Maple, birch, basswood, aspen, white pine, fir, hemlock, spruce, and cedar

Other Comment: Retention patches should include older, larger aspen within. Winter harvest only - deer wintering complex area. Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
64	32092064-Cut	12.1	4110 - Sugar Maple Association	Poletimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Selectively mark individual trees for harvest to promote an uneven aged stand structure. Residual basal area should be between 80 to 90 square feet. Emphasis will be on improving the timber quality and productivity of the stand by releasing future crop trees. Remove majority of defective, poor form, high risk, and/or poorly spaced competitors to achieve the target basal area. Quality timber trees may also be selected when suitable. Wildlife habitat, forest health, tree species diversity, and regeneration gaps are important factors to consider when marking the stand for sale. Strive to maintain a diversity of diameter classes in the overstory. Retain any white pine, cedar, hemlock, oak, or white spruce present. Favor yellow birch, black cherry, and basswood retention.

Next Step Treatments:

Acceptable Regen: Maple, birch, black cherry, and basswood

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
68	32092068-Cut	0.0	4110 - Sugar Maple Association	Sawtimber Well	75	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Selectively mark individual trees for harvest to promote an uneven aged stand structure. Residual basal area should be between 80 to 90 square feet. Emphasis will be on improving the timber quality and productivity of the stand by releasing future crop trees. Remove majority of defective, poor form, high risk, and/or poorly spaced competitors to achieve the target basal area. Quality timber trees may also be selected when suitable. Wildlife habitat, forest health, tree species diversity, and regeneration gaps are important factors to consider when marking the stand for sale. Release of dense advanced maple regeneration is desirable. Strive to maintain a diversity of diameter classes in the overstory. Retain any white pine, cedar, hemlock, oak, or white spruce present. Favor yellow birch, black cherry, and basswood retention.

Next Step Treatments:

Acceptable Regen: sugar maple, basswood

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
68	32092068-Cutx	25.9	4110 - Sugar Maple Association	Sawtimber Well	75	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Selectively mark individual trees for harvest to promote an uneven aged stand structure. Residual basal area should be between 80 to 90 square feet. Emphasis will be on improving the timber quality and productivity of the stand by releasing future crop trees. Remove majority of defective, poor form, high risk, and/or poorly spaced competitors to achieve the target basal area. Quality timber trees may also be selected when suitable. Wildlife habitat, forest health, tree species diversity, and regeneration gaps are important factors to consider when marking the stand for sale. Release of dense advanced maple regeneration is desirable. Strive to maintain a diversity of diameter classes in the overstory. Retain any white pine, cedar, hemlock, oak, or white spruce present. Favor yellow birch, black cherry, and basswood retention.

Next Step Treatments:

Acceptable Regen: sugar maple, basswood

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
69	32092069-Cut	73.3	4110 - Sugar Maple Association	Sawtimber Well	90	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Selectively mark individual trees for harvest to promote an uneven aged stand structure. Residual basal area should be between 80 to 90 square feet. Emphasis will be on improving the timber quality and productivity of the stand by releasing future crop trees. Remove majority of defective, poor form, high risk, and/or poorly spaced competitors to achieve the target basal area. Quality timber trees may also be selected when suitable. Wildlife habitat, forest health, tree species diversity, and regeneration gaps are important factors to consider when marking the stand for sale. Release of dense advanced maple regeneration is desirable. Strive to maintain a diversity of diameter classes in the overstory. Retain any white pine, cedar, hemlock, oak, or white spruce present. Favor yellow birch, black cherry, and basswood retention.

Next Step Treatments:

Acceptable Regen: Maple, birch, basswood, black cherry, spruce, and hemlock.

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
82	32092082-Cut	7.7	4319 - Mixed Upland Forest	Poletimber Well	60	81-110	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Retain any white pine, yellow birch, cedar, or hemlock. Use patch retention (including older, larger aspen) to achieve proper reserves. Leave some scattered white birch along road.

Next Step Treatments:

Acceptable Regen: Maple, aspen, fir, and spruce.

Other Comment: Stand extends into Delta county and should be harvested there as well to salvage fir. Winter harvest only - deer wintering complex area. Old next step comments:

Proposed Start Date: 10/1 /2016

Total Treatment Acreage Proposed: 259.0

Report 5 – Site Conditions

Gwinn Mgt. Unit

Ben Travis : Examiner

Compartment: 92

Year of Entry: 2017

Dominant Site Conditions

	1C	2G	2H	3B
Aspen				1
Bog				
Cedar				
Herbaceous Openland				
Lowland Aspen/Balsam Poplar				
Lowland Conifers	5	262		
Lowland Deciduous		13		
Lowland Mixed Forest				1
Lowland Shrub				
Lowland Spruce/Fir		8		
Marsh				
Northern Hardwood	0	9	31	
Upland Conifers				
Upland Mixed Forest				
Upland Spruce/Fir				
Water				
Total Forested Acres	5	291	31	2
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**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	7	2B: Unknown if access through adjacent landowner(s) is possible	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
	Comments:						
2	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	22	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

3	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	8	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments:						
4	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	50	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	13	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments:						
7	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	88	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments:						
8	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	94	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 5 – Site Conditions

Gwinn Mgt. Unit

Ben Travis : Examiner

Compartment: 92

Year of Entry: 2017

9	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
17	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
18	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
31	**Unavailable**	**1C: Other dept or div proc/practices**	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
51	**Unavailable**	**3B: Threatened, endangered, and special concern species/communities**	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 6 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres

Comments

Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	411 - Northern Hardwood	Poletimber Well	31.3	75	81-110	Fairly good timber quality stand. Stand select cut in December and January of 1999 and 2000.
2	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	88.6	116	Unspecified	Many vernal ponds.
3	4110 - Sugar Maple Association	Sawtimber Well	67.9	85	51-80	Harvested in 2001 under permit #32-029-97-01.
4	4110 - Sugar Maple Association	Poletimber Well	12.2	80	51-80	Raspberry present. Herbaceous groundcover is spring beauties and trout lilies. Patches of heavy ironwood regeneration. Yellow birch, cedar, and white spruce are infrequent overstory associates. White pine saplings found. Was cut in in 2002 under permit #32-029-97-01.
5	4112 - Maple, Beech, Cherry Association	Poletimber Well	7.0	80	111-140	This stand is inaccessible due to the adjacent swamps, private property, and Werner Creek.
6	6120 - Lowland Cedar	Poletimber Well	43.2	116	Unspecified	Very wet substrate.
7	4130 - Aspen	Sapling Well	63.1	4	Immature	Harvested in winter of 2010/2011 under contract # 026-07-01. White birch saplings found.
8	6122 - Black Spruce	Poletimber Well	1.3	65	51-80	Retention patch from surrounding overstory removal.
9	42390 - Mixed Non-Pine Upland Conifers	Sawtimber Well	15.1	116	81-110	Werner Creek corridor. White spruce and hemlock are overstory members.
10	413 - Aspen	Sapling Well	1.9	15	Immature	
12	413 - Aspen	Sapling Well	15.7	5	Immature	Prior overstory was mix of aspen and fir. Stand harvested under contract # 027-07-01.
14	4130 - Aspen	Sapling Well	91.0	4	Immature	Fully stocked. Harvested under contract #026-07-01.
15	4110 - Sugar Maple Association	Sawtimber Well	89.7	90	51-80	Some sedge. Not seeing a lot of sugar maple regeneration. Will need to check again in another year. Patches of raspberry. Basswood uncommon overstory associate. White spruce saplings found. Transitions to more of a poletimber-sized stand to south. Was cut in 1991 under permit #32-025-88-2. Harvested again in 2008 under permit #32-028-07-01.
16	4112 - Maple, Beech, Cherry Association	Poletimber Well	6.7	80	141-170	Trout lily and clubmoss present. Patches of F3 understory. White pine saplings found. White spruce and cedar are uncommon overstory associates.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4110 - Sugar Maple Association	Poletimber Well	16.3	80	111-140	Patches of M3 greater than 10 feet tall. Clubmoss predominant groundcover. White spruce and black cherry are infrequent overstory components. White spruce saplings present. Harvested in 1998 under contract # 034-97-01.
19	411 - Northern Hardwood	Poletimber Well	21.6	75	81-110	
20	4110 - Sugar Maple Association	Sawtimber Well	37.4	82	81-110	Harvested in winter of 2010/2011 under contract #026-07-01. Some cherry in overstory.
21	4112 - Maple, Beech, Cherry Association	Poletimber Well	27.7	75	81-110	
22	411 - Northern Hardwood	Poletimber Well	2.7	75	51-80	
23	411 - Northern Hardwood	Poletimber Well	7.0	75	81-110	Stand primarily comprised of sugar maple with lesser component of red maple. No real access. Stand is surrounded by swamp, private land, and located between Deer Creek and Werner Creek.
24	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	150.2	75	Unspecified	
25	6118 - Lowland Deciduous with Cedar	Poletimber Well	12.6	145	Unspecified	Elm, white pine, white spruce, black ash, and black spruce are uncommon overstory associates. White spruce saplings found.
27	4110 - Sugar Maple Association	Sawtimber Well	18.5	85	111-140	An upland "island" of good quality hardwoods surrounded by a very wet cedar swamp. Sugar maple, red maple, yellow birch, and black cherry comprise overstory composition.
28	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	2.3	116	Unspecified	Site very wet.
29	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	208.9	116	81-110	Deer creek passes through stand. Stand extremely wet. Black spruce, hemlock, yellow birch, and elm uncommon overstory associates. Black ash saplings found.
30	4130 - Aspen	Poletimber Well	34.5	27	Immature	1 to 3 stick aspen.
31	4113 - R.Maple, Conifer	Poletimber Well	2.1	80	51-80	
32	4130 - Aspen	Sapling Well	21.2	17	Immature	Fully stocked, vigorous stand. Sporadic red maple, sugar maple, and white spruce poletimber-sized trees present. White spruce saplings found. Stand harvested in 1998, contract #32-034-97-01.
33	4130 - Aspen	Sapling Well	18.1	14	Immature	Cut in 2001 under permit #32-029-97-01.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	66.6	65	Unspecified	
36	4130 - Aspen	Sapling Well	10.7	14	Immature	Fully stocked.
37	4110 - Sugar Maple Association	Sawtimber Well	9.1	85	81-110	Hemlock and cedar are infrequent overstory associates.
38	4110 - Sugar Maple Association	Sawtimber Well	6.9	75	81-110	Stand harvested under permit # 030-97-01 in 2000.
39	4110 - Sugar Maple Association	Sawtimber Well	2.3	75	81-110	
40	42340 - Upland Spruce/Fir	Sawtimber Well	34.1	52	Unspecified	Fir snags and windthrow common.
41	4110 - Sugar Maple Association	Poletimber Well	1.0	75	51-80	Retention patch from surrounding aspen clearcut.
42	6112 - Lowland Aspen	Sapling Well	69.4	15	Immature	Fully stocked. east-west aligned drainage in stand. Residual hemlock, sugar maple, red maple, and cedar from past overstory. White pine, tamarack, red pine, and black ash saplings present. Was cut in 2000 under permit #30-97-01.
43	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	194.3	116	Unspecified	Black ash saplings found. White birch and tamarack are overstory associates. Stream running through stand (15 feet wide in certain stretches).
46	4130 - Aspen	Sapling Well	29.1	13	Immature	A3 with small patches of residual cedar from last overstory. White spruce,, yellow birch, fir, tamarack, and white birch poletimber also present. Fir, white birch, yellow birch, and black cherry saplings found.
47	6118 - Lowland Deciduous with Cedar	Poletimber Well	106.4	40	Unspecified	1/2 to 2/3 of black ash or sub-merchantable size. Ash pockets stagnant - may never reach even one-stick size. Lot of standing water. Cedar patches.
48	6115 - Lowland Ash	Poletimber Well	26.6	50	Unspecified	Deep muck and organic soils. Flooded. Too wet to freeze in.
49	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	93.5	98	Unspecified	
52	4130 - Aspen	Sapling Well	9.3	17	Immature	Heavy stocking. Yellow birch, white pine, and white spruce saplings found.
53	4130 - Aspen	Poletimber Well	9.7	42	Unspecified	3 to 4 stick aspen. Red maple and white birch saplings present. White birch and white poletimber present.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	4319 - Mixed Upland Forest	Sawtimber Well	54.2	85	81-110	Fir and spruce snags. Low timber quality soft maple. Hemlock and black ash saplings present. Cedar, white birch, and black ash are overstory members.
55	4113 - R.Maple, Conifer	Poletimber Medium	16.7	60	51-80	More spruce and fir in overstory next to stand 51.
56	411 - Northern Hardwood	Poletimber Well	5.5	75	111-140	Poor quality timber. Heavy balsam fir understory. Access difficult due to surrounding cedar type. Would treat with adjacent, similar stand in the Escanaba unit which is also limited by surrounding cedar swamp.
57	4110 - Sugar Maple Association	Sawtimber Well	23.9	85	111-140	No canopy gaps.
58	4110 - Sugar Maple Association	Poletimber Well	7.6	83	81-110	Raspberry present. Many gaps in canopy. Spring beauties and clubmoss are predominant groundcover. Stand harvested in December 2011 under contract #021-08-01.
59	4110 - Sugar Maple Association	Poletimber Well	3.3	83	81-110	Sparse white spruce found in canopy. Many canopy gaps. Clubmoss and spring beauties are predominant groundcover. Harvested in winter of 2011/2012 under contract #021-08-01.
60	4113 - R.Maple, Conifer	Sawtimber Well	4.8	80	111-140	Small hills.
61	411 - Northern Hardwood	Sawtimber Well	9.5	75	81-110	Hardwood island surrounded by wet cedar swamp. Sugar maple, red maple, and yellow birch are overstory components.
62	4113 - R.Maple, Conifer	Poletimber Well	4.1	80	51-80	Remote "island" within large wetlands.
63	4113 - R.Maple, Conifer	Poletimber Well	5.3	75	81-110	
64	4110 - Sugar Maple Association	Poletimber Well	12.1	80	111-140	Hemlock, white spruce, white birch, and yellow birch are infrequent overstory associates. White spruce saplings found. Herbaceous cover is predominantly spring beauties.
65	4113 - R.Maple, Conifer	Poletimber Well	6.4	80	81-110	Access to stand blocked by private and wetlands.
66	4130 - Aspen	Sapling Well	32.3	17	Immature	Residual large hemlock and cedar retained from cutting in 1998 under contract #32-034-97-01.
67	4113 - R.Maple, Conifer	Poletimber Well	4.8	75	81-110	
68	4110 - Sugar Maple Association	Sawtimber Well	25.9	75	111-140	Stand harvested in 1991, and again in 2008 under permit #32-028-07-01. Many maple seedlings browsed. Pockets of M3 10 to 20 feet tall. Patches of sparse raspberry. White spruce saplings found. White spruce and hemlock are infrequent overstory associates.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
69	4110 - Sugar Maple Association	Sawtimber Well	73.3	90	81-110	Select cut in 1997 under permit #32-031-97-01.
70	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	7.3	75	81-110	
71	4112 - Maple, Beech, Cherry Association	Sawtimber Well	5.4	75	81-110	Werner Creek corridor. Mostly poor timber quality soft maple. Patches and scattered overstory hemlock.
72	61203 - Cedar (OI)	Poletimber Well	11.4	100	Unspecified	Northern tip of very large cedar stand to south.
73	6120 - Lowland Cedar	Sawtimber Well	10.9	116	Unspecified	Very wet. Adjacent to Werner creek. White birch uncommon in overstory. White spruce and white birch saplings present.
75	4113 - R.Maple, Conifer	Poletimber Well	17.7	60	51-80	Areas are flooded. Drainages.
76	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	9.0	100	51-80	White birch and white pine are uncommon overstory members. White pine saplings found.
77	4113 - R.Maple, Conifer	Poletimber Well	9.2	75	81-110	
78	42390 - Mixed Non-Pine Upland Conifers	Sawtimber Well	22.8	116	81-110	Werner Creek corridor. White spruce and hemlock are overstory members.
79	4115 - Y.Birch, Hemlock NH	Poletimber Medium	14.7	72	51-80	White pine supercanopy trees.
80	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	1.2	70	81-110	
81	6120 - Lowland Cedar	Poletimber Well	5.7	95	Unspecified	Area has been thinned through in past. Yellow birch inoverstory. Yellow birch and black spruce saplings found. Clumpy distribution to cedar overstory.
82	4319 - Mixed Upland Forest	Poletimber Well	7.7	60	81-110	
83	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	55.2	96	Unspecified	Cedar, fir, balsam poplar, and red maple form overstory. Very wet.
84	6122 - Black Spruce	Poletimber Well	7.8	81	81-110	
85	612 - Lowland Coniferous Forest	Poletimber Well	21.9	100	Unspecified	Very saturated soils.
86	411 - Northern Hardwood	Poletimber Well	2.0	75	51-80	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
87	4113 - R.Maple, Conifer	Poletimber Well	3.3	75	51-80	

Report 9 – Nonforested Stands

Stand	Cover Type	Acres	Managed Site	General Comments:
11	6220 - Alder/willow	7.8	No	
13	6230 - Cattail	2.7	No	
17	6220 - Alder/willow	53.0	No	
26	6220 - Alder/willow	23.3	No	Stream floodplain.
44	6220 - Alder/willow	10.1	No	Stream corridor.
45	6225 - Bog	1.1	No	
50	500 - Water	6.3	No	Werner creek corridor.
51	3102 - Grass	1.2	No	Old homestead site. Apple tree. Nice dispersed campsite right on Werner creek. Encroaching white spruce trees. Nice site.