



Compartment Review Presentation

Pigeon River Country Forest Management Unit

Compartment 53036

Entry Year 2017

Acreage: 1,897

County Otsego

Management Area: Pigeon River Country

Revision Date: 2015-06-03

Stand Examiner: Greg Rekowski

Legal Description:

T32N R01W Sections 16, 17, and 18

Identified Planning Goals:

Maintain the current species mix and apply appropriate management techniques to mature stands of timber that are in need of treatment.

Soil and topography:

Topography is flat to gently rolling. Short, steep slopes are present closer to the Pigeon River. Lowland soils are poorly-drained and are a combination of Deford, Tawas-Leafriver, Tawas-Lupton, and Ausable-Bowstring mucks. Upland soils in Section 18 are predominantly Blue Lakes loamy sand. Upland soils in Sections 16 and 17 are predominantly Leelanau loamy sands with smaller amounts of Blue Lake loamy sands, Lindquist sands, and Rubicon sands.

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

Solid State ownership within the Compartment. The Song of the Morning Ranch adjoins the Compartment along the south line of Section 18.

Unique Natural Features:

The Pigeon River is a designated Natural River. There has been a documented occurrence of both the Ram's head lady-slipper and wood turtle within this Compartment.

Archeological, Historical, and Cultural Features:

The Pigeon River Management Unit Headquarters is located in the northern portion of Section 16. The Witness Tree is located at the eastern quarter section of Section 16.

Special Management Designations or Considerations:

The Pigeon River is designated as a Natural River. A Big-Tree Management Special Conservation Area (SCA) was previously approved for most of the upland pine stands in Sections 16 and 17. This SCA extends south into Compartment 38. With the exception of a few minor alterations, this SCA will remain in place. Specific management guidelines are provided in the SCA comments field.

Watershed and Fisheries Considerations:

The Pigeon River is a high quality trout stream.

Wildlife Habitat Considerations:

A Wildlife Division representative will be available to participate at the Open House and in the formal Compartment Review.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of coarse-textured glacial till and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 800 feet. Beneath the glacial drift is the Devonian Antrim Shale that is quarried for cement products elsewhere in the State. An inactive gravel pit is located in Section 18 and potential is considered good. However, page 30 of the Concept of Management for the PRC says that extraction of surface minerals will rarely be allowed. This area was previously leased for Niagaran oil and gas development and one well, a dry hole, was drilled in Section 16. Niagaran reefs are not likely to be found in the Compartment. The Antrim Shale is present and has potential. The closest Antrim production is one mile to the southwest. However, the entire Compartment is in the Consent Order Area and, as provided on page 33 of the Concept of Management, no new leases will be issued in this Area.

Vehicle Access:

There is good access throughout this Compartment. Roads designated to be closed to wheeled motorized vehicles are still closed.

Survey Needs:

None

Recreational Facilities and Opportunities:

The Pigeon Bridge Campground is located just east of the Pigeon River and north of Sturgeon Valley Road. The trail heads for the Shingle Mill and High Country Pathways are located in the Pigeon Bridge Campground. Both pathways meander through the Compartment along both sides of the Pigeon River.

Fire Protection:

Fire risk in the upland pine stands of Sections 16 and 17 is moderate to high, although most of these stands are mature. The remaining west half of the compartment is at low risk for fire potential. Open and closed roads provide good access in case of suppression needs.

Additional Compartment Information:

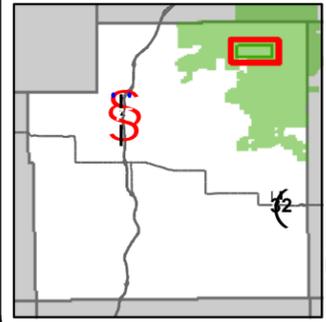
The following reports from the Inventory are attached:

- 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**

Cover Type & Treatments



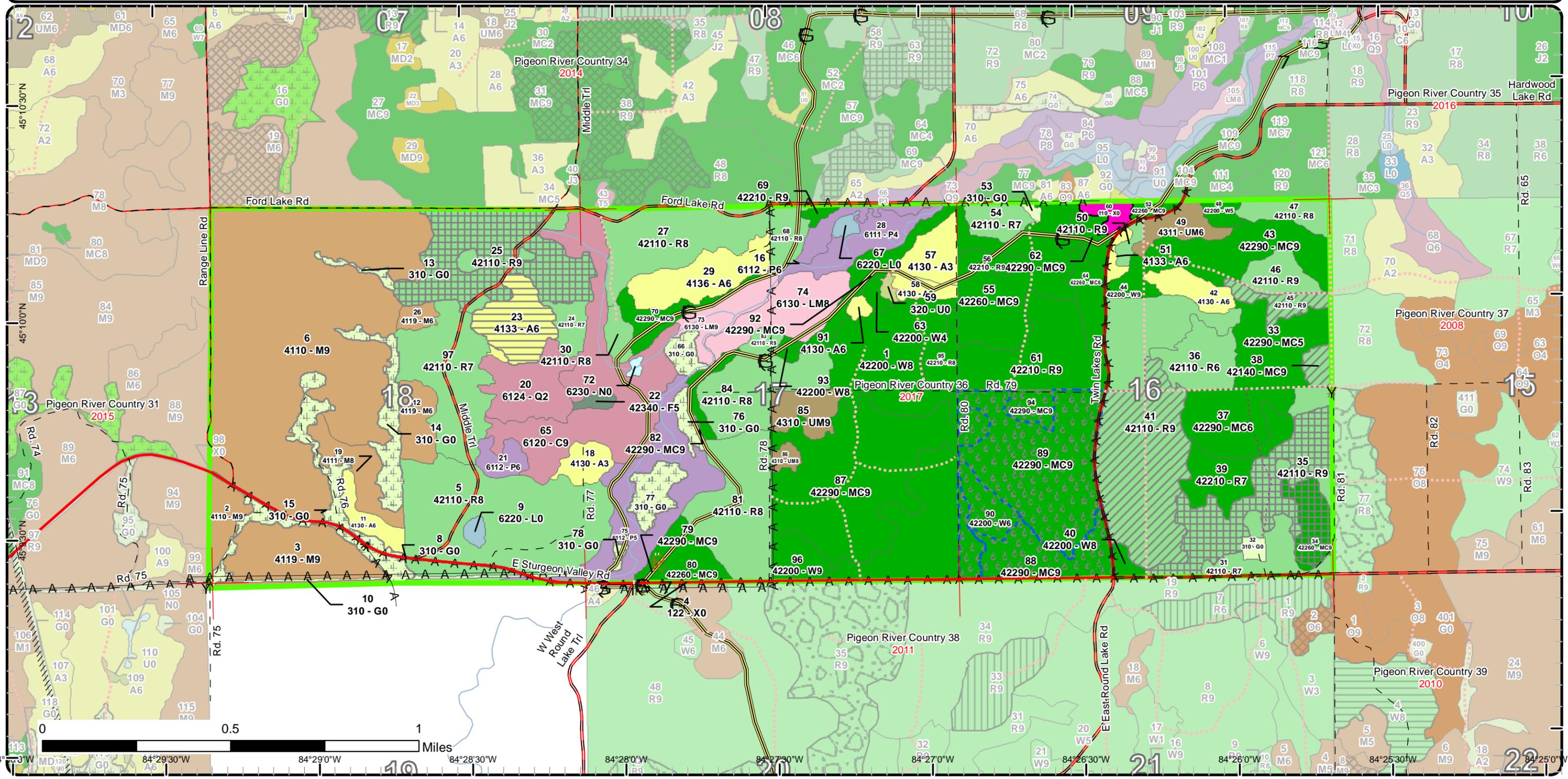
Compartment: 36
 T32N, R01W Sec. 16, 17, 18
 County: Otsego
 Unit: Pigeon River Country
 Mgmt Area: Pigeon River Country
 YOE: 2017
 Acres: 1897 GIS Calculated
 Examiner: Greg Rekowski
 Map Revised: 6/18/2015
 Map Phase: Pre-Review



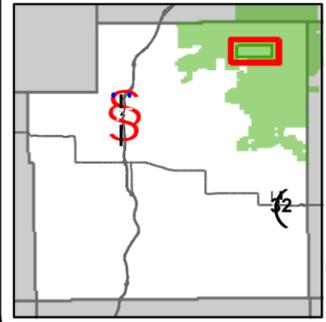
- Y Iron Post
- Y Witness Tree
- Miris Corners
- County Paved Roads
- County Gravel Roads
- - Poor Dirt Roads
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- Trail (Non-Recreation)
- Closed Roads
- o Campground
- i Parking Lot
- K Trailhead
- G Bike Trails
- F Hiking Trails
- (Ski Trails
- Rivers
- Pipeline
- A Powerline
- Treatments with Site Conditions
- **INCORRECT ATTRIBUTES**
- Treatments
- Clearcut (w/Reserves)

- Other Treatment - See Comments
- Prescribed Burn
- Thinning (Crown, Low, Systematic)
- Seed Tree (w/Reserves)
- Forest Covertype
- 411 - Northern Hardwood
- 413 - Aspen
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers

- 430 - Upland Mixed Forests
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- Non-Forest Covertype
- 110 - Low Intensity Urban
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 623 - Emergent Wetland



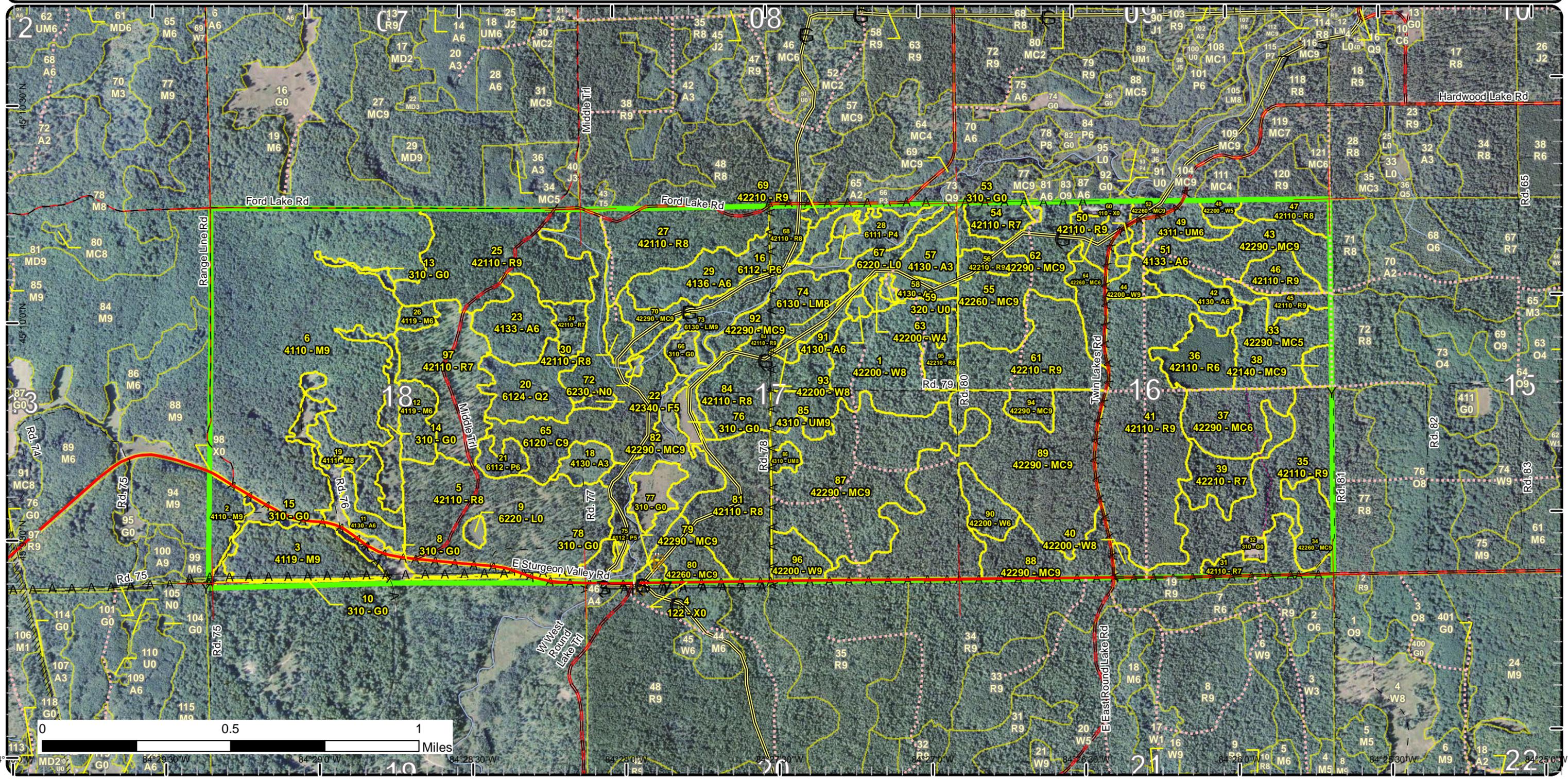
Stand Boundary Map



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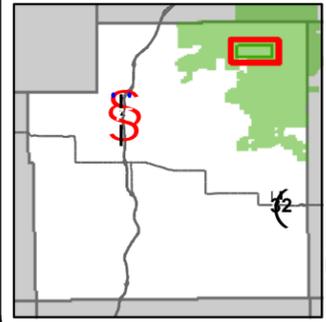
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Special Conservation Areas & Site Conditions Map

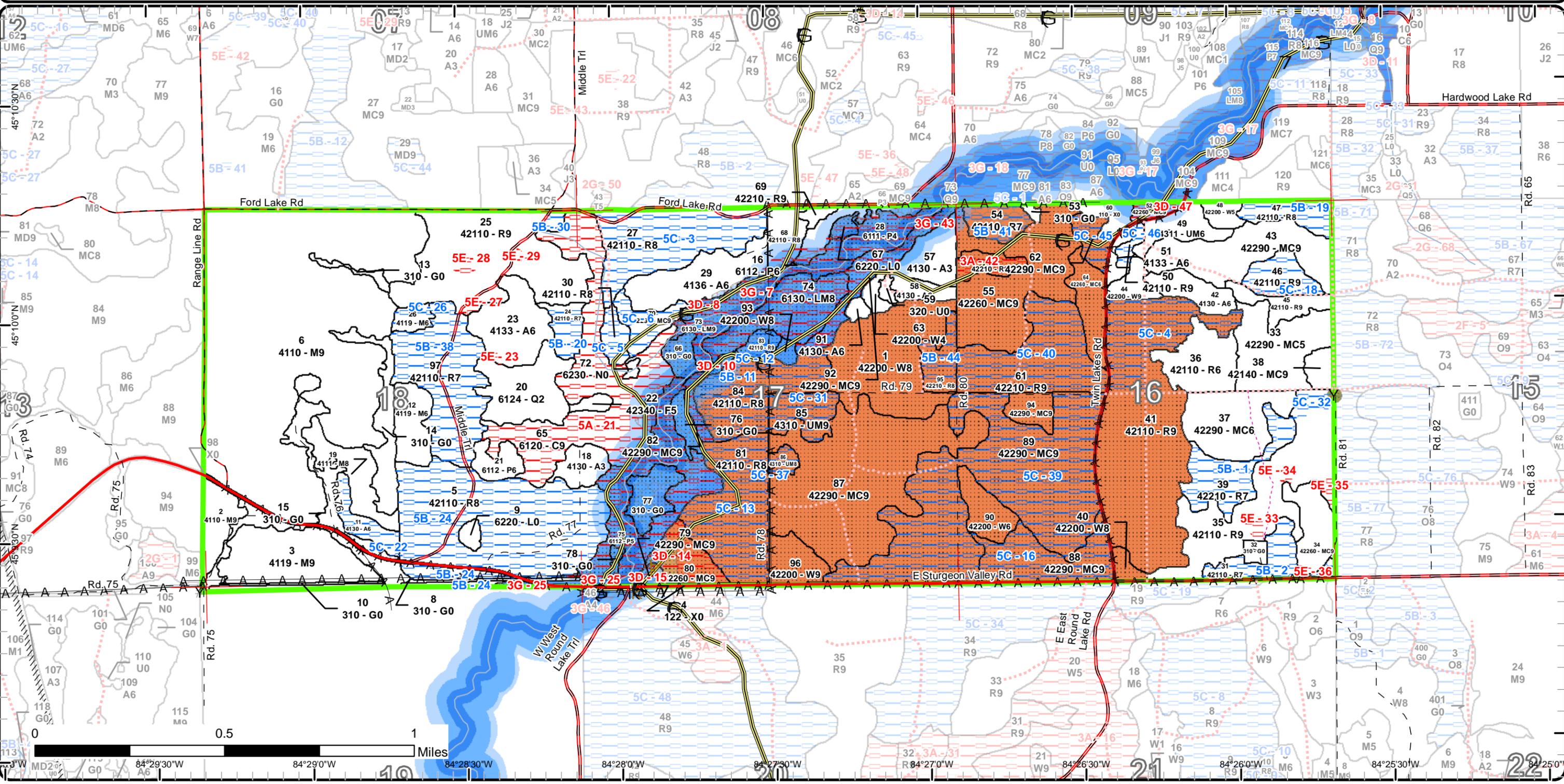
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- F Hiking Trails
- (Ski Trails
- Rivers
- |||| Pipeline
- A Powerline
- Stand Boundaries
- Reviewable SCAs (dq)
- Recommendation
- ▨ SCA
- ▨ SCA Removal

- Site Condition
- - Available w/ Constraints
- - - Unavailable
- Available Factors W/ Constraints
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable Factors
- 3A: Potential old growth / biodiversity

- 3D: Recreational / Scenic values
- 3G: Other Influence zones - See comments
- 5A: Not able to obtain desirable regeneration
- 5E: Long-Term Retention
- Special Conservation Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Cold Water Streams
- High Priority Trout Stream Buffer
- Riparian Area
- State Forest Campground
- Other Habitat Area
- Customary Use Area



Report 1 – Total Acres by Cover Type and Age Class



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	8	12	10	34	22	8	0	0	0	0	0	0	0	0	0	0	0	94
Cedar	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	70
Herbaceous Openland	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
Lowland Aspen/Balsam Poplar	0	0	0	0	32	0	42	0	0	0	0	0	0	0	0	0	0	0	74
Lowland Conifers	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Lowland Mixed Forest	0	0	0	0	0	0	0	25	0	0	14	0	0	0	0	0	0	0	39
Lowland Shrub	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Marsh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Natural Mixed Pines	0	0	0	0	0	0	68	11	60	170	57	0	0	0	0	0	0	88	454
Northern Hardwood	0	0	0	0	0	0	0	46	249	0	0	0	0	0	0	0	0	0	295
Planted Mixed Pines	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
Red Pine	0	0	0	19	0	0	0	9	2	531	47	29	0	0	0	0	0	0	637
Upland Mixed Forest	0	0	0	0	10	0	0	0	0	15	0	0	0	0	0	0	0	0	25
Upland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Spruce/Fir	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Urban	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
White Pine	0	0	0	0	0	7	0	0	52	6	10	0	0	0	0	0	0	11	86
Total	92	8	12	53	76	31	118	45	160	976	198	29	0	0	0	0	0	99	1897



Report 2 – Treatment Summary

Acres of Harvest

Commercial Harvest - 0
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 189

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	21	0	0	0	0	0	0	0	0	21
Natural Mixed Pines	0	0	0	13	0	0	0	0	0	13
Planted Mixed Pines	0	0	0	0	0	5	0	0	0	5
Red Pine	0	0	0	100	0	74	0	0	0	174
Total	21	0	0	113	0	79	0	0	0	213

Proposed and Next Step Treatments by Harvest Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	213	0	0	0	121	0	0	5	62	402
Next Step	0	113	57	0	0	0	255	0	0	425
Total	213	113	57	0	121	0	255	5	62	826



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
8	53036008-NF	10.9	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal

Habitat Cut: Yes

Site Condition:

Prescription Mow, plant, brush, burn, or herbicide to maintain opening. Planting of hard or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

13	53036013-NF	2.4	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Mow, plant, brush, burn, or herbicide to maintain opening. Planting of hard or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

14	53036014-NF	14.6	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Mow, plant, brush, burn, or herbicide to maintain opening. Planting of hard or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

15	53036015-NF	13.3	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Mow, plant, brush, burn, or herbicide to maintain opening. Planting of hard or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
23 53036023-Cut	21.0	4133 - Aspen, Mixed Pine	Poletimber Well	46	81-110	Harvest	Clearcut with Retention	4133 - Aspen, Mixed Pine	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Clearcut all species except paper birch or oak. Do not cut any pine over 18" DBH. Mark to leave some of the larger aspen (1-3/acre) as many already have good snag potential.

Next Step
Treatments:

Acceptable At least a medium stocked stand dominated by aspen with any combination of additional species acceptable.
Regen:

Other -Retention has already been excluded from the treatment boundary and is the located along the SW edge of the stand. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

25 53036025-Cut	56.7	42110 - Planted Red Pine	Sawtimber Well	84	81-110	Harvest	Seed Tree with Retention	42260 - Natural Pine, Mixed Deciduous	Two-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription -Leave 10-20 ba/acre in red pine. Leave all white pine over 18" DBH. Do not cut oak.
Specs: -Require whole-tree harvesting, low stumps, and 2" spec to ensure all competing regeneration is knocked down.

Next Step SitePrep, Scarification; Planting, Initial Plant; Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable At least a medium-stocked stand with a 50% representation of red and white pine. Any additional mix of species will be acceptable.
Regen:

Other -Retention has already been excluded from the treatment boundary (see Site Conditions Layer).
Comment: -After harvest, use DNR resources to mechanically scarify the site. Old next step comments:

Proposed Start Date: 10/1 /2016

34 53036034-Cut	13.2	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	85	111-140	Harvest	Seed Tree with Retention	42260 - Natural Pine, Mixed Deciduous	Two-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription -Mark to leave 30-40 ba/acre of the largest red pine, white pine, and oak. Focus on leaving the large natural pine. Do not leave any trees less than 18" DBH. Protect paper birch and any hemlock if present.
Specs: -Require whole-tree harvesting, low stumps, and 2" spec to knock down all WP and RM regen. This will facilitate post-harvest scarification activities.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable At least a medium-stocked stand with a 50% representation of red pine, white pine, and oak. Any additional mix of species will be acceptable in the remaining regeneration.
Regen:

Other -Recommend a fall/winter harvest to avoid conflicts with recreational users.
Comment: -Retention has already been excluded from the far southern edge of the stand (see Site Conditions layer). Old next step comments:

Proposed Start Date: 10/1 /2016



Standard

Standard	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
35	53036035-Cut	42.9	42110 - Planted Red Pine	Sawtimber Well	86	111-140	Harvest	Seed Tree with Retention	42260 - Natural Pine, Mixed Deciduous	Two-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription -Mark to leave 30-40 ba/acre of the largest red pine, white pine, and oak. Focus on leaving the large natural pine. Do not leave any trees less than 18" DBH. Protect paper birch and any hemlock if present.
Specs: -Require whole-tree harvesting, low stumps, and 2" spec to knock down all WP regen. This will facilitate post-harvest scarification activities.

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

Acceptable Regen: At least a medium-stocked stand with a 50% representation of red pine, white pine, and oak. Any mix of species will be acceptable in the remaining regeneration.

Other -Retention areas have already been excluded from the treatment boundary. Stick to these areas.

Comment: -There may be a few pockets of heavy white pine poletimber and saplings. Protect these if possible when harvesting.
-Fall/winter harvest to avoid conflicts with recreational users.
-Confine landings to the old well pad and 1 site along Road 81. Old next step comments:

Proposed Start Date: 10/1 /2016

38	53036038-Cut	4.9	42140 - Planted Mixed Pine	Sawtimber Well	84	141-170	Harvest	Crown Thinning	42140 - Planted Mixed Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Thin to 100-110 sq ft per acre. Leave all large natural pine, >18" DBH. Do not cut oak or birch.
Specs:

Next Step
Treatments:

Acceptable Regen:

Other Witness Tree is just south of the four way road intersection near the SE corner of the stand. Do not haul south on Road 81 because of the signage and parking area. Will have to haul east, west, or north on one of the closed roads. Old next step comments:

Proposed Start Date: 10/1 /2016

41	53036041-Cut	65.5	42110 - Planted Red Pine	Sawtimber Well	84	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription -Thin down to an average ba/acre of 90-110 sq ft dependent on stocking levels. Focus on removing pine from the smaller size classes and retain all of the largest pine. Mark most of the red maple as you go but retain a few to maintain species diversity. Retain all oak. Go around the scattered pockets of lower stocking that are filling in with white pine saplings and poletimber.
Specs:

Next Step
Treatments:

Acceptable Regen: No regen survey necessary as this is a thinning.

Other Fall-winter harvest only to avoid conflicts with equestrian users. Protect any trail markers along the closed roads as these are frequently used by horseback riders. No new landings, deck all products alongside the closed roads. Old next step comments:

Proposed Start Date: 10/1 /2016

45	53036045-Cut	8.4	42110 - Planted Red Pine	Sawtimber Well	84	141-170	Harvest	Crown Thinning	42110 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Thin to 110-120 sq ft per acre. Do not cut oak or birch. Leave most of the jack pine. Leave all large natural pine >18" DBH.
Specs:

Next Step
Treatments:

Acceptable Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
60	53036060-Other	5.2	110 - Low Intensity Urban	Nonstocked		Unspecified	Other	Other	122 - Road/Parking Lot		Proposal

Habitat Cut: Yes

Site Condition:

Prescription Possibly remove lean-to and build barn. Grade driveway, facility upgrades.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

66	53036066-NF	5.3	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Mow, plant, brush, burn, or herbicide to maintain opening. Planting of hard or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

76	53036076-NF	4.6	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Mow, plant, brush, burn, or herbicide to maintain opening. Planting of hard or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

77	53036077-NF	10.1	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Mow, plant, brush, burn, or herbicide to maintain opening. Planting of hard or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
78	53036078-NF	1.3	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Proposal

Habitat Cut: Yes

Site Condition:

Prescription Mow, plant, brush, burn, or herbicide to maintain opening. Planting of hard or soft mast.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

87	53036087-Burn	3.8	42290 - Natural Mixed Pine	Sawtimber Well	91	81-110	Burn	Understory	42260 - Natural Pine, Mixed Deciduous	Uneven-Aged	Proposal
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Habitat Cut: Yes

Site Condition:

Prescription Attempt to replicate a natural fire by performing an understory burn. The goal is to promote future pine regeneration by reducing red maple

Specs: competition and preparing a seed bed. The intent is not to eliminate all hardwoods from the stand.

Next Step

Treatments:

Acceptable

Regen:

Other Leave FTP open for future burns. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

88	53036088-Burn	24.6	42290 - Natural Mixed Pine	Sawtimber Well	81	111-140	Burn	Understory	42260 - Natural Pine, Mixed Deciduous	Uneven-Aged	Proposal
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Habitat Cut: Yes

Site Condition: Age-Class or Site Quality

Prescription The primary goal of this understory burn is to replicate a natural fire with a secondary goal of promoting future pine regeneration by reducing red

Specs: maple competition and preparing a seed bed. The intent is not to eliminate all hardwoods from the stand. Scattered mortality to the residual stand will be acceptable.

Next Step

Treatments:

Acceptable

Regen:

Other This stand has not been treated for a while and has a higher concentration of understory white pine.

Comment:

Leave FTP open for future burns. Old next step comments:

Proposed Start Date: 10/1 /2016



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Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
89	53036089-Burn	75.8	42290 - Natural Mixed Pine	Sawtimber Well	88	111-140	Burn	Understory	42260 - Natural Pine, Mixed Deciduous	Uneven-Aged	Proposal

Habitat Cut: Yes **Site Condition: Age-Class or Site Quality**

Prescription The primary goal of this understory burn is to replicate a natural fire with a secondary goal of promoting future pine regeneration by reducing red maple competition and preparing a seed bed. The intent is not to eliminate all hardwoods from the stand. Scattered mortality to the residual stand will be acceptable.

Next Step
Treatments:

Acceptable
Regen:

Other This stand was recently thinned (Hazel Pine) and has a relatively open understory. Most new regeneration is under 5' tall.

Comment: Leave FTP open for future burns. Old next step comments:

Proposed Start Date: 10/1 /2016

90	53036090-Burn	10.6	42200 - Natural White Pine	Poletimber Well	64	81-110	Burn	Understory	42260 - Natural Pine, Mixed Deciduous	Uneven-Aged	Proposal
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Habitat Cut: Yes **Site Condition:**

Prescription The primary goal of this understory burn is to replicate a natural fire with a secondary goal of promoting future pine regeneration by reducing red maple competition and preparing a seed bed. The intent is not to eliminate all hardwoods from the stand. Scattered mortality to the residual stand will be acceptable.

Next Step
Treatments:

Acceptable
Regen:

Other This stand has not been treated for a while and has a higher concentration of understory white pine than the surrounding stands.

Comment: Leave FTP open for future burns. Old next step comments:

Proposed Start Date: 10/1 /2016

94	53036094-Burn	6.7	42290 - Natural Mixed Pine	Sawtimber Well	91	81-110	Burn	Understory	42260 - Natural Pine, Mixed Deciduous	Uneven-Aged	Proposal
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Habitat Cut: Yes **Site Condition:**

Prescription The primary goal of this understory burn is to replicate a natural fire with a secondary goal of promoting future pine regeneration by reducing red maple competition and preparing a seed bed. The intent is not to eliminate all hardwoods from the stand. Scattered mortality to the residual stand will be acceptable..

Next Step
Treatments:

Acceptable
Regen:

Other This stand has not been treated for a while and has a denser white pine understory than the surrounding stands.

Comment: Leave FTP open for future burns. Old next step comments:

Proposed Start Date: 10/1 /2016

Total Treatment
Acres Proposed: 401.5

Dominant Site Conditions

	3D	3G	5A	5B	5C	5E
Aspen		0			8	1
Cedar			70			
Herbaceous Openland						
Lowland Aspen/Balsam Poplar		62				
Lowland Conifers				0		
Lowland Mixed Forest		39				
Lowland Shrub		2				
Marsh						
Natural Mixed Pines	25	15			157	0
Northern Hardwood					4	
Planted Mixed Pines						
Red Pine		2		237	181	9
Upland Mixed Forest					15	
Upland Shrub						
Upland Spruce/Fir						
Urban						
White Pine						
Total Forested Acres	25	119	70	237	365	10
Relative Percent						

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5B: Maintain for regeneration purposes	20	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Available	5B: Maintain for regeneration purposes	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 36

Greg Rekowski : Examiner

Year of Entry: 2017

3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	3G: Other Influence zones - See comments	62	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Majority of stand falls within the Natural Rivers buffer. Also the Shingle Mill Pathway follows the northern border of the stand.							
8	Unavailable	3D: Recreational / Scenic values	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Shingle Mill Pathway meanders in and out of this part of the stand. There are also some relatively steep slopes in this part of the stand.							

Report 5 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 36

Greg Rekowski : Examiner

Year of Entry: 2017

10	Unavailable	3D: Recreational / Scenic values	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Available	5B: Maintain for regeneration purposes	32	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	42	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
14	Unavailable	3D: Recreational / Scenic values	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Unavailable	3D: Recreational / Scenic values	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
Pigeon River Campground							

Report 5 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 36

Greg Rekowski : Examiner

Year of Entry: 2017

16	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
19	Available	5B: Maintain for regeneration purposes	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
20	Available	5B: Maintain for regeneration purposes	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
21	Unavailable	5A: Not able to obtain desirable regeneration	70	3J: Water quality / BMPs (stream, river, or lake)	3D: Recreational / Scenic values	Unspecified	Unspecified
Comments: -Management opportunities very limited due to the presence of streams, proximity to Pigeon River, Shingle Mill Pathway, and inability to regenerate cedar. Part of this stand was cut at one point (stand 20). No evidence of cedar regeneration. Some areas are too wet.							
22	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 36
Year of Entry: 2017

23	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
24	Available	5B: Maintain for regeneration purposes	90	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
25	Unavailable	3G: Other Influence zones - See comments	42	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Pigeon River flows through the stand and the Natural Rivers buffer encompasses most of the stand.							
26	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
27	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
28	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
29	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Pigeon River Country Mgt. Unit
Greg Rekowski : Examiner

Compartment: 36
Year of Entry: 2017

30	Available	5B: Maintain for regeneration purposes	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: This area of the stand is dominated by very large white pine with quite a bit of aspen filling in the open areas along the swamp edge.							
31	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
32	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Due to its proximity to the Witness Tree, convert this part of the stand to selective management.							
33	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
34	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
35	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
36	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 36

Greg Rekowski : Examiner

Year of Entry: 2017

37	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
38	Available	5B: Maintain for regeneration purposes	43	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
39	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	116	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
40	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
41	Available	5B: Maintain for regeneration purposes	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
42	Unavailable	3A: Potential old growth / biodiversity	6	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
Comments:							
As agreed upon at a previous Compartment Review, this stand will be left unmanaged and has been nominated for inclusion in the surrounding Special Conservation Area. The Shingle Mill Pathway also traverses through a large portion of the stand.							

Report 5 – Site Conditions

Pigeon River Country Mgt. Unit

Compartment: 36

Greg Rekowski : Examiner

Year of Entry: 2017

43	Unavailable	3G: Other Influence zones - See comments	15	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
Comments: North half of stand lies within 200 foot Natural Rivers buffer. Shingle Mill Pathway travels through the majority of the south half.							
44	Available	5B: Maintain for regeneration purposes	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
45	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
46	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
47	Unavailable	3D: Recreational / Scenic values	3	3G: Other Influence zones - See comments	Unspecified	Unspecified	Unspecified
Comments: Staff house, Shingle Mill Pathway, proximity to Pigeon River.							



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	Habitat Areas or Corridors	Other Habitat Area	SCA Removal	9
Lovejoy's Pines Comments	Habitat Areas or Corridors	Other Habitat Area	Proposed SCA	627
Pigeon Bridge Campground Comments	Concentrated Recreation Area	State Forest Campground	Proposed SCA	2
Pigeon River Corridor Comments	Spring-Seeps, Riparian Areas	Riparian Area	Proposed SCA	149
Unspecified Comments	Other SCA		SCA Removal	112
Whitness Tree Comments	Cultural or Customary Use Area	Customary Use Area	Proposed SCA	1

2005 THIS STAND IS NEXT TO THE PIGEON RIVER WHICH IS A NATURAL RIVER. THIS STAND IS CODED 8 BECAUSE A HIGH PROPORTION OF IT FALLS IN THE 200 FT BUFFER OF THE PIGEON RIVER A NATURAL RIVER.



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 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.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42200 - Natural White Pine	Sawtimber Medium	47.1	71	51-80	<p>-Highly variable stand both in diameter and stocking. All aspen, maple, jack pine, and other hardwoods were removed from the stand in 1979. This species removal created large canopy gaps throughout the stand which have filled in with primarily white pine, which is now recruiting into the overstory. The residual supercanopy white pine are a variety of sizes and tend to be grouped in clumps, with some very large trees here and there. Trace of red oak, fir, spruce, and paper birch in the overstory. Average ba/acre = 77 sq ft. with roughly 30 sq ft of that total being poletimber ingrowth.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
2	4110 - Sugar Maple Association	Sawtimber Well	10.8	76	81-110	<p>Decent quality hardwoods with some undulating terrain. There is a seep and seasonally wet drainage in the south part of the stand.</p>
3	4119 - Mixed Northern Hardwoods	Sawtimber Well	35.0	78	81-110	<p>-Moderate quality hardwoods that appear to have been thinned quite a while ago. Variable stocking levels throughout, past harvest must have been a species removal. Areas that were opened up have filled in with primarily ash, ironwood, and beech. There were a few pockets of SM regen, mostly in the SW corner of the stand where there was an aspen overstory. In need of a TSI cut when the BA reaches 120.</p> <p>-Undulating terrain with some steep slopes. A few of the valleys may be seasonally wet, couldn't tell with the snow on the ground.</p> <p>-BAM, paper birch, and ironwood poletimber most prevalent along the perimeter of the stand. Trace of red oak saps in the understory; yellow birch and red pine in the overstory.</p>
5	42110 - Planted Red Pine	Sawtimber Medium	90.4	84	51-80	<p>-Stand cut in Middle Trail Pine Mix timber sale, #53-019-07-01, bought by Biewer. All species cut except for red pine, white pine, oak, elm, cherry, and green marked trees. Whole-tree skidding did take place, minimal damage to the residual. Trace of RO, WP, WA, SM, and RM in the overstory. Residual ba/acre = 51 sq ft and is somewhat variable in distribution due to the species removal.</p> <p>-Rolling terrain. Small wetland inclusion NE of the interior lowland shrub stand.</p> <p>-Varying site quality. West of Middle Trail is higher site quality and is where the majority of the hardwood understory is located. East of Middle Trail becomes lower site quality and is dominated by aspen in the understory. Jack pine regen is present in the heavily scarified areas but is overtopped by aspen in most places.</p>



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
6	4110 - Sugar Maple Association	Sawtimber Well	217.8	88	81-110	<p>-Stand thinned recently in Three Elk Hardwoods, #53-008-07-01. The west half of the stand is high quality hardwoods. The BA's tend to be a little higher in this part and understory regen is limited, with the exception of white ash seedlings. Quality and size decrease in the east half of the stand. This portion of the stand also seemed to have been thinned heavier and as a result beech and ironwood is more common in the understory. Trace of yellow birch, paper birch, black cherry, red oak, white spruce, red pine, and white pine.</p> <p>-Most of the ash appears dead from EAB. Noticed BBD on scattered beech.</p> <p>-Heavy deer and elk use. Trails everywhere during time of inventory.</p> <p>-Rolling terrain with a few steep slopes on the east side.</p> <p>-A tornado went through the north 1/2 of the stand in 1993 (running NE, visible on 98 DOQ). A subsequent salvage harvest was done on the portion affected, Twister's Path Hardwood #53-14-93-01. As a result, some areas have lower stocking and these were excluded from the most recent thinning.</p>
11	4130 - Aspen	Poletimber Well	8.1	59	81-110	<p>-Stand sits atop a ridge with steep slopes along the western and southern edges. Looks like there are two age classes of aspen in the stand as there are scattered XL size trees throughout. Trace of elm, red maple, basswood, and dead white ash. Average ba/acre = 82 sq ft.</p> <p>-Leave unmanaged for now due to it's aesthetic value.</p>
12	4119 - Mixed Northern Hardwoods	Poletimber Well	12.5	83	Unspecified	<p>-South 1/2 of stand was thinned in Middle Trail Pine Mix, #53-019-07-01, north 1/2 of stand wasn't included for some reason. A lot of small, poor-quality stems in this stand. BBD observed on a lot of the beech. Undulating terrain with some steep slopes. Trace of jack pine, white pine, and balsam fir. Average ba/acre = 98 sq ft.</p>
16	6112 - Lowland Aspen	Poletimber Well	8.3	37	111-140	<p>-Nice poletimber stand with a well-developed lowland shrub layer. Spruce is mostly located in the far SW and NE corners. These areas also have a component of larger aspen. From the imagery it looks like a small stream originates from the southern 1/3 of the stand, flowing into the Pigeon River. Didn't notice this during time of inventory, however there was quite a bit of snow on the ground. Average ba/acre = 117 sq ft.</p> <p>-When management is deemed desirable, consideration must be made for the Natural Rivers buffer which extends into the southwest and northeast portions of the stand.</p>
18	4130 - Aspen	Sapling Well	8.1	6	Immature	<p>-Stand cut in Middle Trail Pine Mix timber sale, bought by Biewer. Some lowland around the edges. No browsing impacts.</p>
19	4111 - S.Maple, Hard Mast Association	Sawtimber Medium	14.7	88	81-110	<p>-Low quality hardwoods with several open areas throughout that have filled in with primarily pole/sap sized ironwood. BBD on a few of the beech. Trace of elm, white spruce, paper birch, red maple, and dead white ash. Average ba/acre = 87 sq ft.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	6124 - Lowland Spruce- Fir	Sapling Medium	23.7	25	Immature	-Stand cut in Jack Pine Hump timber sale, #53-037-88-01, bought by James Burkhart. 176 cords of cedar cut in sale. Resulting stand is quite variable in composition. North 1/2 tends to be less stocked and has more aspen, BAM, birch, and alder. South 1/2 is more bog-like and is mostly spruce and fir. Possible nutrient or water issues in this part as much of the balsam fir has yellowing foliage. In the SE part there is a roughly 1 acre upland island that must have been used as the landing and is now filling in with fir. Only evidence of cedar regeneration was 1 sapling that made it past the browsing level and three seedlings (each about 1' tall) that were badly browsed.
21	6112 - Lowland Aspen	Poletimber Well	6.8	35	81-110	Stand was a past wildlife cutting. A few pockets of real wet ground but most seemed operable. Spruce and cedar start to increase in the NE/E side of the stand. Black ash poletimber is present but most appears dead. Trace of elm, white spruce, paper birch. Average ba/acre = 88 sq ft.
22	42340 - Upland Spruce/Fir	Poletimber Medium	2.4	47	Unspecified	Upland island in a swamp. Previously this stand was coded as jack pine but most of that has died. Fir is filling in thick.
23	4133 - Aspen, Mixed Pine	Poletimber Well	21.8	46	81-110	-Appears to be two ages of aspen in this stand, with scattered log-size trees mixed in with the more frequent poletimber. In some areas, the aspen is still quite small with average diameters only around 5-6". White pine is poor quality. Trace of jack pine. Average ba/acre = 87 sq ft.
24	42110 - Planted Red Pine	Sawtimber Poor	7.2	84	1-50	-Stand cut in Middle Trail Mix timber sale, #53-014-97-01, all species cut except for red and white pine. Aspen has regenerated well here and is free to grow in many places. Manage for the understory and leave the overstory as supercanopy trees. Average ba/acre = 30 sq ft.
25	42110 - Planted Red Pine	Sawtimber Well	62.8	84	81-110	-Stand cut as part of Middle Trail Mix timber sale, #53-014-97-01, bought by Georgia Pacific. All species removed except for red pine, white pine, and oak. A small amount of pine was marked to cut as well. Current average ba/acre = 101 sq ft. -Varying site quality and the understory regeneration reflects that. In general, west of Middle Trail is where the hardwood understory increases. As you get closer to the adjacent hardwood stand the ironwood becomes quite dense. Red maple is dense in scattered pockets but browse is keeping a lot of this below 4 feet in height. East of Middle Trail is lower site quality and is where most of the fir and quaking aspen is located. White pine is regen is present throughout the entire stand. Red pine regen is only present in the few areas that were heavily scarified, i.e. landings and skid trails. -Aggressive actions should be taken to promote more desirable regeneration. A component of undesirable hardwoods like ironwood and beech will be inevitable but mechanical scarification and/or burning should be implemented to give pine a better shot at regenerating. Whole-tree skidding alone won't do the job as this was used in adjacent stand 97 to the south and the regen survey results showed no red pine regeneration.
26	4119 - Mixed Northern Hardwoods	Poletimber Well	4.0	83	111-140	-Stand has most of red pine removed in Middle Trail Pine Mix, #53-019-07-01. Residual hardwoods are small and low quality. Trace of paper birch. Average ba/acre = 115 sq ft.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	42110 - Planted Red Pine	Sawtimber Medium	41.2	88	51-80	-All jack pine, aspen, and hardwoods were removed in Pigeon River Heights timber sale, #53-022-89-01. Stand thinned in Racketeer Red Pine sale, #53-012-07-01. The species removal in 1989 was a whole-tree harvest which resulted in quite a bit of scarification on skid trails. As a result there are scattered pockets of advanced regeneration, particularly in the west half of the stand. Red pine seedlings and saplings are very clumpy in nature and not uniform throughout, with only a few of the clumps free to grow, most are suppressed. Average ba/acre = 77 sq ft. -Regen survey was completed in summer of 2014. Acceptable regen was a mix and the stand passed. Results - 643 RP TPA, 457 WP TPA, 314 RM TPA, 157 BTA TPA, 129 BF TPA, 14 JP TPA, 14 WA TPA, 14 RO TPA. -Let the overstory grow and consider a regen treatment next entry. Mossy ground cover will allow for good scarification
28	6111 - Lowland Balsam Poplar	Poletimber Poor	16.9	38	1-50	-The Pigeon River flows through the length of this stand. BAM is present in patches throughout and is starting to seed in some areas. Average ba/acre = 45 sq ft. Did not visit the portion of the stand south of the river.
29	4136 - Aspen, Mixed Conifer	Poletimber Well	23.8	36	51-80	-Stand cut in 1979 by Champion. The bigtooth aspen is showing good growth however the quaking is not looking too great. Some scattered pockets of pure white pine. Trace of red oak and red pine in the overstory. Rolling terrain. Average ba/acre = 68 sq ft. -Stand should be ready to treat in ten years.
30	42110 - Planted Red Pine	Sawtimber Medium	5.6	88	1-50	-Stand cut as part of Middle Trail Mix timber sale, #53-014-97-01, everything cut except red pine and white pine, as a result the overstory stocking is variable. Most jack and red pine regen is located on old skid trails. Spruce becomes more common in the south end. Many aspen saplings have been browsed to death. Average ba/acre = 47 sq ft.
31	42110 - Planted Red Pine	Sawtimber Poor	14.5	85	1-50	-Backyard Blocks, #53-016-97-01, seed tree harvest bought by Georgia Pacific. Jack pine understory more prevalent in the west half. Overstory ba increases in the east-northeast part of stand and the white pine understory becomes more dominant here. Red pine seedlings are present in places but are mostly overtopped. Average ba/acre = 47 sq ft.
33	42290 - Natural Mixed Pine	Poletimber Medium	28.8	50	1-50	-Witness Tree Removal Block, cut in mid 1990's, advanced pine regeneration was protected while a mix of all three pine species were removed from the overstory. The white pine is decent quality but not close to being fully stocked. Jack pine and white pine have filled in some of the open areas though. Trace of red oak sawtimber and red maple poletimber. Gently rolling terrain. Average ba/acre = 46 sq ft.
34	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	13.6	85	111-140	-Portions of this stand were cut as part of Twin Lakes Road East timber sale, all jack pine and mixed hardwoods were removed as well as some marked red and white pine, 1989 Bill Peyton. There are two age classes of overstory pine; smaller log/pole red pine that were planted in 1930 and a XL+ size-class of red pine. Average ba/acre = 112 sq ft.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	42110 - Planted Red Pine	Sawtimber Well	52.1	86	111-140	-Stand cut as part of Twin Lakes Road East timber sale, all jack pine and mixed hardwood were removed as well as some marked red and white pine, 1989 Bill Peyton. As a result of the species removal the stocking is quite variable. Stand ranges from MC8 to MC9 with a few scattered pockets of dense MC9. Oak is most prevalent along Road 81 as well as the far SW corner of the stand. Average ba/acre = 114 sq ft. -No planting records were found for the stand but it looks like the log/pole size red pine were likely planted. However, there is a separate population of XL-sized pine that are natural.
36	42110 - Planted Red Pine	Poletimber Well	18.5	24	111-140	Developing very nicely, excellent growth. Avg. ba/acre = 130 sq ft.
37	42290 - Natural Mixed Pine	Poletimber Well	26.1	50	81-110	-Wide variety of pine sizes throughout however white pine poletimber is the most prevalent. With the mix of differing size classes and ages this stand almost appears uneven-aged. Avg ba/acre = 98 sq ft.
38	42140 - Planted Mixed Pine	Sawtimber Well	4.9	84	141-170	-Witness Tree is next to the SE corner of the stand. Some larger natural pine are present in the stand but rare. Average ba/acre = 157 sq ft.
39	42210 - Natural Red Pine	Sawtimber Poor	19.8	100	1-50	-Stand cut as part of Twin Lakes Road East, 1989 by Bill Peyton, all jack pine and mixed hardwood removed as well as some marked red and white pine. Stand was opened up quite a bit during that harvest and those openings have filled in primarily with white pine and red maple. Many of these white pine pockets are now in the poletimber size class. A difficult stand to classify by size due to the multiple sizes of white pine. At the next inventory this will probably be coded as a white pine poletimber stand. Average ba/acre of the supercanopy red and white pine = 40 sq ft. Average ba/acre of the understory poletimber = roughly 35 sq ft. Trace of paper birch.
40	42200 - Natural White Pine	Sawtimber Medium	3.3	72	81-110	-Wide mix of sizes and ages in the pine. Pine and maple poletimber have filled in the areas where log-sized pine are not present. Avg. ba/acre = 107 sq ft. Leave unmanaged until the poletimber matures. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	42110 - Planted Red Pine	Sawtimber Well	95.4	84	111-140	<p>-High quality pine stand. Planting records only exist for the NE part of the stand, however most of the red pine, particularly in the south half, appear to be aligned somewhat in rows. Much of the white pine appears natural and there are some natural RP interspersed throughout. Average ba/acre from 16 plots = 141 sq ft.</p> <p>-Stand was repeatedly thinned throughout the 1970's and again in 1989 as part of Twin Lakes Road East timber sale, in which all jack pine and mixed hardwood was removed. There are several pockets that were thinned heavily, mostly in the northern 1/3 of the stand (N of the E-W running closed road) and as a result residual stocking is quite variable. These canopy gaps are visible from imagery and have filled in with mostly white pine and a little red maple. A few small pockets of pure red oak, otherwise it is rare throughout the remainder of the stand.</p> <p>-Rolling terrain with a few steeper slopes adjacent to Twin Lakes Road in the NW part of the stand.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
42	4130 - Aspen	Poletimber Well	10.0	26	Immature	<p>-This stand is just reaching merchantable size. Most of the stand lies on the top of a ridge with some relatively steep slopes along the north edge.</p> <p>-Stand cut in 1988 by AJD, Headquarters South Ridge.</p>
43	42290 - Natural Mixed Pine	Sawtimber Well	33.5	74	81-110	<p>-Variable quality and stocking density throughout the stand. In general, the west half has lower stocking and a greater amount of white pine poletimber. The east half has better quality and is densely stocked in some areas, with a greater proportion of red oak. Some very large XL sized red and white pine are scattered throughout. Trace of paper birch. Average ba/acre = 96 sq ft.</p> <p>-Overall the stand is not ready to be thinned yet, maybe in 10 years.</p>
44	42200 - Natural White Pine	Sawtimber Well	5.9	82	81-110	<p>-Variable stocking. West end has a pretty steep slope and is there is mostly poletimber in that part of the stand. Scattered, advanced oak regeneration, some of which is free to grow. Trace of paper birch and balsam fir. Average ba/acre = 88 sq ft.</p>
45	42110 - Planted Red Pine	Sawtimber Well	8.4	84	141-170	<p>-For some reason, this stand wasn't included with either of the adjacent harvests that took place at different times to the north and south. Doesn't appear that it has been thinned for some time. Trace of red oak and red maple in the overstory. Average ba/acre = 170 sq ft.</p> <p>-Slight slope runs E-W in the eastern half of the stand.</p>
46	42110 - Planted Red Pine	Sawtimber Well	10.6	88	81-110	<p>-Stand cut as part of Forget-me-not Pine, #53-007-09-01, all jack pine, aspen, and red maple removed as well as some orange-marked red and white pine. Stocking density is variable. Residual ba/acre = 95 sq ft.</p>
47	42110 - Planted Red Pine	Sawtimber Medium	9.9	88	51-80	<p>-Stand cut as part of Forget-me-not Pine, #53-007-09-01, all jack pine, aspen, and red maple removed as well as some orange-marked red and white pine. Quite a bit of advanced white pine regeneration was protected from damage. Average ba/acre = 60 sq ft.</p> <p>-Not great soils here but there is a 9" DBH serviceberry in the west part of the stand.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	42200 - Natural White Pine	Poletimber Medium	4.2	48	51-80	-Poor quality, open grown trees. Trace of red maple and bigtooth aspen in the overstory. Nice diversity of shrubs.
49	4311 - Pine, Aspen Mix	Poletimber Well	10.2	35	81-110	Larger aspen is more prevalent near Twin Lakes Road, while the remainder is barely merchantable. White pine dominant in the east half of the stand. Some very large white pine (>25" DBH) scattered throughout. Average ba/acre = 86 sq ft.
50	42110 - Planted Red Pine	Sawtimber Well	2.9	89	111-140	-North half has most of the aspen. South half is more densely stocked. Average ba/acre = 89 sq ft.
51	4133 - Aspen, Mixed Pine	Poletimber Well	2.8	35	81-110	-White pine poletimber more prevalent in the south half. Trace of red oak. Average ba/acre = 92 sq ft.
52	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	3.2	85	81-110	-Variety of sizes within the stand, particularly the white pine. Small opening at east end. Average ba/acre = 95 sq ft. -A driveway as well as a portion of the staff house fall within the stand boundary. -Shingle Mill Pathway travels through the stand.
54	42110 - Planted Red Pine	Sawtimber Poor	9.2	89	1-50	-Stand harvested as part of Backyard Blocks timber sale, 353-016-97-01, bought by Georgia Pacific. Jack pine has regenerated quite well but has poor form. Trace of white pine in the overstory. Noticed a few stems of red oak, fir, white spruce, and aspen in the understory. Residual overstory ba/acre = 40 sq ft. and is higher along the southern edge. -Manage for the understory, leave the overstory indefinitely as supercanopy trees. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration. Remove the SCA designation for this stand because the past management does not reflect the guidelines of the SCA.
55	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	48.3	93	81-110	-Basal area varies quite significantly in this stand. There are some patches of dense MC9 while others have a lower BA with more red maple and white pine poletimber mixed in. No sale records were found but it looks like a species removal harvest was implemented here maybe 30-40 years ago. Trace of fir and spruce in the far NW corner of stand. Aspen most prevalent along the N and NE edges of the stand. 15 plots taken with an average ba/acre of 108 sq ft. -The Shingle Mill Pathway travels through most of the northern half. -Consider treating in ten years when the red maple component has added some size. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
56	42210 - Natural Red Pine	Sawtimber Well	6.0	98	201+	-High quality pine stand that has never been thinned. Average ba/acre = 207 sq ft. -The Shingle Mill Pathway travels through a large portion of this stand. -As agreed upon at a previous Compartment Review, this stand will be left unmanaged and has been nominated for inclusion in the surrounding Special Conservation Area.
57	4130 - Aspen	Sapling Well	12.3	17	Immature	-Stand cut in 1997, Pigeon River Block, by Alan Lamberson. Regeneration looks good, and along with the black cherry, becomes very dense in spots. White pine most prevalent along the eastern edges of the stand. Terrain slopes down to the north-northwest, with a few wet spots along the far NW edge which is where the alder is located. Trace of red pine, fir, and spruce.
58	4130 - Aspen	Poletimber Well	5.7	35	51-80	-Looks pretty good. Average ba/acre = 75 sq ft. Trace of red pine. Some bigger trees along the western edge. Will be ready for treatment in ten years. -Shingle Mill Pathway travels through most of the stand.
61	42210 - Natural Red Pine	Sawtimber Well	40.8	91	81-110	-Stand had an understory burn in the early 2000's and then was thinned in 2007 in the Big Rock Pine timber sale, bought by Hydrolake. Average ba/acre = 100 sq ft. Most regeneration at this point is under 3 feet tall and consists mostly of red maple stump sprouts and white pine. The RM sprouts are being browsed pretty heavily. Not many large canopy gaps were created so I wouldn't expect to see any red pine regen. -Scorch height on the red pine ranges from 5-15 feet but doesn't appear to have caused any mortality. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.
62	42290 - Natural Mixed Pine	Sawtimber Well	6.9	89	111-140	-It looks like the red pine in the stand was planted but it is variable in stocking and not consistent throughout the stand. Jack pine used to be a larger component but much of it has died. Poletimber is abundant in scattered pockets. Average ba/acre = 118 sq ft. -The Shingle Mill Pathway travels through the middle of the stand. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.
63	42200 - Natural White Pine	Poletimber Poor	3.1	40	1-50	Scrubby open-grown white pine with a well-developed upland shrub component. Average ba/acre = 30 sq ft. Not many good white pine candidates to take an age so it was estimated.
64	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	12.7	53	51-80	-Sawlog-sized trees become more numerous near the south end. The remainder of the stand is dominated by poletimber. Jack pine used to be more numerous but much of it has died. Moderate slopes. Average ba/acre = 76 sq ft. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
65	6120 - Lowland Cedar	Sawtimber Well	70.0	95	Unspecified	Species composition varies throughout the stand but overall is dominated by cedar. In general, the south 1/2 is dominated by pockets of very high quality cedar. The middle of the stand has more spruce and tamarack. The north end is dominated by lower quality cedar. A small stream runs north-south through the northern half of the stand and then splits somewhere in the middle, with one heading east and the other south. Trace of white pine, hemlock, black cherry, elm, and black ash. Average ba/acre = 185 sq ft. -Management opportunities limited due to the presence of streams, proximity to Pigeon River, Shingle Mill Pathway, and inability to regenerate cedar.
68	42110 - Planted Red Pine	Sawtimber Medium	9.1	67	51-80	-Looks like all aspen, maple, and jack pine were removed at some point. Aspen and red maple saplings become much more abundant along the eastern edge. A small portion of the NW corner of the stand was thinned with stand 27 to the west. Average ba/acre = 68 sq ft.
69	42210 - Natural Red Pine	Sawtimber Well	2.2	73	81-110	-Wide mix of sizes in this stand. Some XL red pine that appear natural. Looks like everything but pine was removed at some point. Shingle Mill Pathway runs through. Leave unmanaged for now. Average ba/acre = 110 sq ft.
70	42290 - Natural Mixed Pine	Sawtimber Well	11.4	68	171-200	-The main part of the stand is a mix of planted red pine and natural white pine with a large component of aspen, which is overtopping the pine in some places. The NE running finger of the stand has large, natural pine and lies on some moderately steep slopes. Average ba/acre = 190 sq ft. -The Shingle Mill Pathway cuts through the SW part of the stand and then closely follows the south line for the remainder. -Thin the main part of this stand next entry when/if the aspen and red pine stands to the north are cut. Leave the thin strip of the stand unmanaged.
73	6130 - Fir, Aspen, Maple	Sawtimber Well	13.5	92	81-110	-Spruce and aspen is generally closer to the upland transition zone. There are some pockets of nice spruce although some mortality was noticed in the larger trees. The cedar is primarily next to the river. BAM is mostly in the south "finger" of the stand. Trace of paper birch, elm, red maple, red pine and black spruce. Good amount of coarse woody debris in the stand. Average ba/acre = 98 sq ft.
74	6130 - Fir, Aspen, Maple	Sawtimber Medium	25.1	64	51-80	-Natural succession is currently ongoing as much of the aspen is getting close to death and spruce and fir are starting to take over. In some areas, the spruce and fir understory is very dense. -This stand is sort of a toss-up between upland and lowland. It is within the floodplain of the Pigeon River but much of the ground appeared high and dry. -Average ba/acre = 80 sq ft. -No management recommended as a big portion of this stand lies within the 200 foot Natural River buffer for the Pigeon River.
75	6112 - Lowland Aspen	Poletimber Medium	42.4	54	51-80	A diverse stand of varying composition and stocking. Average ba/acre = 78 sq ft. In general, conifers are more abundant west of the river. Some short, steep slopes are present along the far western edge as the stand transitions to upland. A well-developed and diverse shrub layer is present in many places. The Pigeon River flows through the middle of the stand. The Shingle Mill Pathway also travels through the western half.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
79	42290 - Natural Mixed Pine	Sawtimber Well	2.2	95	81-110	The Pigeon River Campground is in this stand.
80	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	12.7	75	111-140	-Diverse stand. Trace of red oak and white spruce. Shingle Mill Pathway travels through the western side of the stand. Average ba/acre = 132 sq ft. -No management due to recreational trail and proximity to the campground. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. If management is ever deemed desirable in this stand, then it will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.
81	42110 - Planted Red Pine	Sawtimber Medium	42.2	88	81-110	-Stand cut as part of Forget-me-not Pine, #53-007-09-01, all jack pine, aspen, red maple, and birch was removed. As a result, residual stocking is variable. Quality and diameter both seem to increase in the south 1/2 of the stand. There is a small percentage of large, natural pine in this stand. Good amount of coarse woody debris from dead jack pine. Average ba/acre = 81 sq ft. -This Shingle Mill Pathway follows the western edge of the stand. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.
82	42290 - Natural Mixed Pine	Sawtimber Well	5.1	87	111-140	-Stand lies on a short, steep ridge. The Shingle Mill Pathway runs through most of the stand. Aspen and spruce more common in the north half, jack pine and red maple more common in the south half. Average ba/acre = 124 sq ft. No treatment.
83	42110 - Planted Red Pine	Sawtimber Well	4.0	88	141-170	-The Shingle Mill Pathway runs through this stand. Most of the white pine appears natural and there are some larger natural RP on the east side of the road. Average ba/acre = 150 sq ft. Leave unmanaged for now.
84	42110 - Planted Red Pine	Sawtimber Medium	31.9	88	51-80	-Stand cut as part of 4 Corner Mix, #53-001-98-01, bought by Georgia Pacific. All species except red and white pine were cut. As a result the residual stocking is quite variable and clumpy in nature. Some areas resemble a seed tree or shelterwood while others have a much higher stocking. Average ba/acre = 76 sq ft. Gently rolling terrain. -As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
85	4310 - Pine, Oak Mix	Sawtimber Well	11.9	86	81-110	<p>-All jack pine, aspen, and mixed hardwoods were removed from this stand in 1977 by Glawe. As a result the stocking is somewhat variable. Some pretty large trees in this stand. All pine appears natural. Oak quality is quite good. Site quality seems to increase as you move east in the stand. Undulating terrain. Average ba/acre = 87 sq ft.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
86	4310 - Pine, Oak Mix	Sawtimber Medium	3.0	86	51-80	<p>-All jack pine, aspen, and mixed hardwoods were removed in 1977 by Glawe. Average ba/acre = 80 sq ft.</p> <p>-Some moderate slopes as you move east in the stand.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
87	42290 - Natural Mixed Pine	Sawtimber Well	87.7	91	81-110	<p>-There is a high degree of variability throughout this stand in both basal area and diameter which makes it appear uneven-aged. The only documented harvest is from 1977 which removed all jack pine, aspen, and hardwoods as well as some marked red and white pine. As a result of the harvest, several large canopy gaps were created which have filled in primarily with white pine and red maple that are now beginning to reach poletimber size. The remainder of the stand is variable in overstory basal area with some scattered pockets of dense MC9 that don't appear to have ever been thinned. There are two sinkhole-like depressions in the stand (see Topo map for locations). Trace of quaking aspen and red oak. 12 plots taken with an average ba/acre of 110 sq ft.</p> <p>-Hold until the smaller timber matures and then thin with a goal of maintaining an uneven-aged structure.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
88	42290 - Natural Mixed Pine	Sawtimber Well	24.6	81	111-140	<p>-Old sale records show this stand was thinned at least once in the 1970's. In general, the west half of the stand is densely stocked and dominated by red pine. The east half of the stand has a lower stocking and is more of a mixture of red and white pine of varying sizes and is where most of the red maple and jack pine is located. Average ba/acre = 136 sq ft.</p> <p>-Leave this stand unmanaged at this time to maintain structural diversity. Leave the option open to thin when the adjacent stand 89 is treated. Do not treat on its own due to the unnecessary need to build a new road and landing within the stand.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
89	42290 - Natural Mixed Pine	Sawtimber Well	115.7	88	111-140	<p>-Very high quality natural pine stand. Thinned recently, Hazel Pine, #53-014-07-01, bought by Hydrolake. Bit more damage on the residual than you'd expect to see from a thinning but probably due to the amount of utility poles removed. Trace of paper birch and red oak in the overstory. Heavy browsing on the red maple stump sprouts. Average ba/acre from 20 plots = 114 sq. ft.</p> <p>-Some scattered dieback throughout, mostly on the red pine, and looks to be caused by bark beetles. The dieback appears old and likely occurred right after the harvest was completed. Didn't notice any flagging to indicate that mortality is still occurring.</p> <p>-Rolling terrain. There is a small bog-like depression on the west side of Road 80.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
90	42200 - Natural White Pine	Poletimber Well	10.6	64	81-110	<p>-Large variety of white pine sizes in this stand with poletimber being the most dominant. Some very large XL sized white pine mixed in throughout. Average ba/acre = 104 sq ft.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
91	4130 - Aspen	Poletimber Well	2.0	35	111-140	<p>-Average ba/acre = 120 sq ft. Trace of red pine, jack pine, and fir in the overstory.</p>
92	42290 - Natural Mixed Pine	Sawtimber Well	14.2	78	81-110	<p>-Most of this stand lies on a gradual ridgeline with the north half bordering the Pigeon River. Basal area, diameter, and composition all vary somewhat considerably throughout the stand. Some areas are dominated by red maple and white pine poletimber whereas others are dominated by large diameter pine. The north 1/4 of the stand transitions into lowland and is where most of the aspen and spruce is located. Trace of balsam fir, bigtooth aspen, and red oak. Average ba/acre = 87 sq ft.</p> <p>-The Shingle Mill Pathway travels through the southern half of the stand.</p> <p>-No management due to the pathway and proximity to the river.</p>
93	42200 - Natural White Pine	Sawtimber Medium	2.1	77	51-80	<p>Wide mix of sizes. Average ba/acre = 57 sq ft. Shingle Mill Pathway bisects the stand.</p>
94	42290 - Natural Mixed Pine	Sawtimber Well	6.7	91	81-110	<p>-Highly variable stocking and diameters throughout. There are a few pockets of pure white pine poletimber and saplings while the remainder of the stand is mostly log-sized trees, with some very large XL-sized pine mixed in. Average ba/acre = 107 sq ft.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
95	42210 - Natural Red Pine	Sawtimber Medium	9.3	102	81-110	<p>-Highly variable stand both in diameter and stocking. All aspen, maple, jack pine, and other hardwoods were removed from the stand in 1979. This species removal created large canopy gaps throughout the stand which have filled in with primarily white pine, which is now recruiting into the overstory. The residual supercanopy trees are both lightly scattered throughout and also in densely stocked clumps with basal areas 150 and greater. Trace of red oak, fir, and paper birch in the overstory. Average ba/acre = 102 sq ft. with roughly 20 sq ft of that total being poletimber ingrowth.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
96	42200 - Natural White Pine	Sawtimber Well	10.3	97	141-170	<p>-High quality white pine. Trace of paper birch in the overstory. Average ba/acre = 145 sq ft.</p> <p>-There is a popular dispersed camping site in the northwestern part of the stand.</p> <p>-As agreed to at a previous Compartment Review, this stand is part of a nominated Special Conservation Area. This stand will be managed on an extended rotation with Big Tree Management as a goal and regeneration holes will be the means for natural regeneration.</p>
97	42110 - Planted Red Pine	Sawtimber Poor	43.0	84	1-50	<p>-Stand cut as part of Middle Trail Pine Mix, #53-019-07-01. All species cut except red pine, oak, cherry, and green marked trees. Some red pine were marked to cut as well. A higher amount of trees were left around Middle Trail. Whole-tree skidding did take place. Trace of paper birch, jack pine, sugar maple, and white pine in the overstory. Average ba/acre = 38 sq ft.</p> <p>-Regen survey completed in 2013 and stand passed based on Rx comments which stated that anything is acceptable. Results with average height in parentheses: RM 500 TPA (1'), JP 130 TPA (2'), IW 720 TPA (3'), BC 760 TPA (2.5'), Be 160 TPA (3'), QA 200 TPA (4.5'), WA 160 TPA (1.5'). Jack pine and beech regen seemed more numerous in most recent walkthrough than what was found during the regen survey. Jack pine regen is patchy and concentrated mostly around skid trails, free to grow in some spots, overtopped in others.</p> <p>-Site quality decreases east of Middle Trail and is where most of the aspen and fir regen is located. West of Middle Trail becomes higher site quality and is where the majority of the hardwood regen is located.</p>



Stand	Cover Type	Acres	Managed Site	General Comments:
4	122 - Road/Parking Lot	10.4	No	Sturgeon Valley Road
8	310 - Herbaceous Openland	10.9	No	Encroaching ironwood and white ash mostly in the west half of the stand. East of the access road to the Yoga Camp is where the scotch pine and balsam poplar is located. In this part of the stand there is also an area that appears to have been used for gravel extraction at some point. There is still some barren ground within it.
9	6220 - Alder/willow	2.3	No	
10	310 - Herbaceous Openland	3.5	No	Powerline ROW
13	310 - Herbaceous Openland	2.4	No	Eastern end has a clump of red pine saplings along with a few white pine.
14	310 - Herbaceous Openland	14.6	No	Filling in with trees
15	310 - Herbaceous Openland	13.3	No	
32	310 - Herbaceous Openland	2.4	No	Site is a designated dispersed camping site for equestrian users.
53	310 - Herbaceous Openland	1.0	No	Storage yard for picnic tables, firewood, boulders, outhouses, etc.
59	320 - Upland Shrub	1.6	No	
60	110 - Low Intensity Urban	5.2	No	Site of Pigeon River Office Headquarters
66	310 - Herbaceous Openland	5.3	No	Quite a bit of snow on the ground during inventory but this appears to be upland. Old burnt stumps are common throughout.
67	6220 - Alder/willow	2.2	No	
72	6230 - Cattail	1.0	No	A small stream runs through this stand. Standing dead trees throughout although tamarack is starting to fill in.
76	310 - Herbaceous Openland	4.6	Yes	
77	310 - Herbaceous Openland	10.1	No	Several herbaceous and shrub species in this stand that I wasn't able to identify.
78	310 - Herbaceous Openland	1.3	No	