# Compartment Review Presentation 

Gaylord Forest Management Unit<br>Compartment 52064<br>Entry Year 2017<br>Acreage: 3,804<br>County Antrim<br>Management Area: Grayling Outwash

Revision Date: 2015-05-12
Stand Examiner: Zach Crew
Legal Description:
T29N, R05W, Sections 23, 24, 25, 26, 35 \& 36

## Identified Planning Goals:

 To provide for the protection, integrated management and responsible use of a healthy, productive and undiminished forest resource base for the social, recreational, environmental and economic benefit of the State of Michigan.
## Soil and topography:

The main soil type is Rubicon Sand. This is located in the flat areas and outwash plains of the compartment. KalkaskaMontcalm sands are located in the south and central portion of the compartment where topography begins to develop.

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

Ownership within this compartment is contiguous and only part of the north side of the compartment abuts against private property. There is quite a bit of gas well activity in this compartment.

## Unique Natural Features:

The Manistee River flows along the east boundary of the compartment.

## Archeological, Historical, and Cultural Features:

None
Special Management Designations or Considerations:
None
Watershed and Fisheries Considerations:
None

## Wildlife Habitat Considerations:

Treatments in this compartment will maintain age class diversity in aspen while creating early successional habitat benefiting deer, grouse, wild turkey and woodcock.

## Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. The Coldwater does not have a current economic use. A gravel pit is located one mile to the east and there is good potential on the uplands. Oil and gas potential in the area is for the Antrim Shale gas play and Niagaran reef play. This area is leased and is currently being developed for oil and gas.
Vehicle Access:
Access to this compartment is along Mancelona Road. Both Deward Road and North Crooked Lake Road run along the east and west boundaries of this compartment. There are plenty of gaswell roads that run through the compartment as well.

Survey Needs:
None
Recreational Facilities and Opportunities:
An ORV trail runs throughout the majority of this compartment. A snowmobile trail runs through the NW part of this compartment.

## Fire Protection:

Fire protection is provided out the Gaylord and Bellaire Field Offices. The majority of the forest types in this area are not highly susceptible to large scale fire events.

## 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: 64
T29N,R05W, Sec. 23-26, 35, 36
County: Antrim
Unit: Gaylord
Mgmt Area: Grayling Outwash
YOE: 2017
Acres: 3804 GIS Calculated
Examiner: Zach Crew
Map Revised: 5/22/2015
Map Phase: Pre-Review


## Cover Type

 \& TreatmentsCompartment: 64
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+ Remonumented Section Corner
$\diamond$ Field Grade GPS Corners
- Miris Corners
—County Paved Roads
=County Gravel Roads
$==$ Gravel Roads
-     - Poor Dirt Roads
-C ounty Poor Dirt Roads
$\triangle$ Campground
Roro O Trails
むORV Routes
Bnowmobile Trails
$===$ ORV Route
- ATV Trail
-Snowmobile Trails
-Rivers
- Lakes
- Pipeline

Treatments
$\square$ Patch/Strip Cut (Femelschlag)
S $x$ ite Prep
$\boxed{\triangle X}$ Selection (Group, Single Tree)
ØClearcut (w/Reserves)
$7^{\text {Thinning (Crown, Low, }}$
Systematic)
Forest Covertype
411 - Northern Hardwood
413 - Aspen
421 - Planted Pines
422 - Natural Pines
430 - Upland Mixed Fores
Non-Forest Covertype
310 - Herbaceous Openland
320 - Upland Shrub
790 - Other Bare/S parsely Vegetated

## Cover Type

## \& Treatments

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- Miris Corners
-County Paved Roads
—Paved Roads
-C ounty Gravel Roads
- Poor Dirt Roads
-County P oor Dirt Roads Closed Roads
$\triangle$ Campground
RORV Trails
$===$ ORV Route
—ATV Trail
-Rivers
Lakes
Treatments
$\checkmark$ Patch/Strip Cut (Femelschlag)
Site Prep
$\sqsupseteq$ Clearcut (w/Reserves)
Thinning (Crown, Low,
Systematic)
Forest Covertype
411 - Northern Hardwood
413 - Aspen
421 - Planted Pines
422 - Natural P ines
430-Upland Mixed Fores
Non-F orest Covertype
310 - Herbaceous Openland
320 - Upland Shrub
622 - Lowland Shrub
790 - Other Bare/S parsely
Vegetated


## Stand Boundary Map

Compartment: 64
T29N,R05W, Sec. 23-26, 35, 36 County: Antrim
Unit: Gaylord
Mgmt Area: Grayling Outwash YOE: 2017
Acres: 3804 GIS Calculated Examiner: Zach Crew
Map Revised: 5/22/2015
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## Stand Boundary Map

Compartment: 64
T29N,R05W, Sec. 23-26, 35, 36
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+ Remonumented Section Corner
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Age Class

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aspen | 0 | 71 | 180 | 298 | 0 | 263 | 23 | 60 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 902 |
| Bare/Sparsely Vegetated | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| Herbaceous Openland | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Jack Pine | 0 | 0 | 167 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 167 |
| Lowland Shrub | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 589 | 253 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 1219 |
| Planted Mixed Pines | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| Red Pine | 0 | 0 | 0 | 0 | 0 | 0 | 756 | 188 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 944 |
| Upland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| Upland Shrub | 396 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 396 |
| White Pine | 0 | 0 | 57 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| Total | 458 | 71 | 433 | 298 | 0 | 263 | 807 | 523 | 596 | 253 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 3804 |

## Report 2 - Treatment Summary

Commercial Harvest - 850
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut-37

## Cover Type by Harvest Method



Proposed and Next Step Treatments by Harvest Method



Prescription Clearcut southwest corner of stand in order to connect final harvests in stands 9 and 2 and expand Aspen as well as begin to start breaking up Specs: checkerboard pattern in the area

Next Step
Treatments:
Acceptable Any mix of deciduous species resulting in a medium stocked aspen dominated stand.
Regen:
Other Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| 1 52064001-Cut | 35.0 | 42110 - Planted Red Pine | Sawtimber Well |  | $\begin{aligned} & 111- \\ & 140 \end{aligned}$ | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Proposal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Habitat Cut: No |  | Site Condition | None |  |  |  |  |  |  |  |
| Prescription Follow standard retention guidelines, focus retention along the edges of the stand. Specs: |  |  |  |  |  |  |  |  |  |  |
| Next Step 1 -SitePrep, Trenching; 2 - Planting, Initial Plant; 3-Pesticide, Aerial Treatments: |  |  |  |  |  |  |  |  |  |  |
| Acceptable A fully stocked red pine plantation Regen: |  |  |  |  |  |  |  |  |  |  |
| Other$\underline{\text { Comment: }}$ Old next step comments: |  |  |  |  |  |  |  |  |  |  |
| Proposed Start Date: $\quad 10 / 1 / 2016$ |  |  |  |  |  |  |  |  |  |  |
| 2 52064002-Cut |  | 4130 - Aspen | Poletimber Medium |  | $51-80$ | Harvest | Clearcut with Retention | 413 - Aspen | Even-Aged | Proposal |
| Habitat Cut: No |  | Site Condition | None |  |  |  |  |  |  |  |
| Prescription Final harvest stand. Specs: |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Next Step Treatments: |  |  |  |  |  |  |  |  |  |  |
| Acceptable Any mix of deciduous species that results in an aspen dominated stand. Regen: |  |  |  |  |  |  |  |  |  |  |
| OtherComment:Incorporate pine as much as possible into retention pockets. Do not cut white pine. Old next step comments: |  |  |  |  |  |  |  |  |  |  |
| Proposed Start Date: | 10/1 | 2016 |  |  |  |  |  |  |  |  |
| 6 52064006-Cut | 20.1 | 42110 - Planted Red Pine | Sawtimber Well | 59 | $\begin{aligned} & 171- \\ & 200 \end{aligned}$ | Harvest | Crown Thinning | 4211 - Planted Red Pine | Even-Aged | Proposal |

## Habitat Cut: No Site Condition: None

Prescription Thin red pine to 120 BA, do not cut any Red Pine species unless they interfere with equipment operations. Specs:

Next Step
Treatments:
Acceptable
Regen:
Other Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016


Acceptable A mix of deciduous species resulting in a well stocked aspen stand.
Regen:
Other Make sure to protect wildlife shrubs during sale. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016


## Habitat Cut: No Site Condition: None

Prescription Thin stand to 120 BA, focus removal on porcupine damaged or crotched trees.
Specs:
Next Step
Treatments:
Acceptable Treatment is a thinning, regen is not a management objective at this time.
Regen:
Other Be sure to protect the ORV Trail during harvest operations. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| 25 | 52064025-Cut | 15.9 | 4130 - Aspen | Poletimber <br> Medium | 46 | $51-80$ | Harvest | Clearcut with <br> Retention | 413 - Aspen | Even-Aged |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Habitat Cut: No
Site Condition: None
Prescription Final harvest stand along with stand 65 in the adjacent compartment. Specs:

Next Step
Treatments:
Acceptable Any mix of deciduous species that results in a fully stocked aspen stand.
Regen:
Other Standard retention. Be sure to protect the ORV trail during harvest operations using retention and BMPs. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016


## Habitat Cut: No <br> Site Condition: None

Prescription Final harvest stand in conjunction with stand 28 , focus retention pockets around regenerating aspen and hardwood from previous harvests. Specs:

Next Step
Treatments:
Acceptable Any mix of species that results in a medium stocked stand.
Regen:
Other Be sure to protect the ORV trail during harvesting operations using retention and BMPs. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016


## Habitat Cut: No Site Condition: None

Prescription Thin Red Pine to 120 BA , do not cut any non Red Pine species unless they interfere with equipment operations.
Specs:
Next Step
Treatments:
Acceptable
Regen:
Other Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016


Prescription Thin red pine to 120 BA , only remove non Red Pine species if they interfere with equipment access.
Specs:
Next Step
Treatments:
Acceptable Regen is not an objective of this treatment
Regen:
Other Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| 62 | 52064062-Cut | 24.2 | $42110-$ Planted <br> Red Pine | Sawtimber <br> Well | 59 | $201+$ | Harvest | Crown Thinning | $4211-$ Planted <br> Red Pine | Even-Aged Proposal |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Habitat Cut: No Site Condition: None

Prescription Thin Red Pine to 120 BA, do not cut any non Red Pine species unless they interfere with equipment access.
Specs:
Next Step
Treatments:
Acceptable
Regen:
Other Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

67 52064067-Cut \begin{tabular}{llllllllll}

16.6 \& 4130 -Aspen \& \begin{tabular}{c}
Poletimber <br>
Medium

 \& 45 \& $51-80$ \& Harvest \& 

Clearcut with <br>
Retention
\end{tabular} \& 413 - Aspen \& Even-Aged Proposal

\end{tabular}

Habitat Cut: No
Site Condition: None
Prescription Final harvest stand, expand into the surrounding upland brush as much as possible.
Specs:
Next Step
Treatments:
Acceptable Any mix of deciduous species that results in a fully stocked aspen stand.
Regen:
Other Standard Retention Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| 75 | 52064075-Cut | 22.2 | 4130 - Aspen | Poletimber <br> Well | 48 | $51-80$ | Harvest | Clearcut with <br> Retention | 413 - Aspen | Even-Aged |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Habitat Cut: No
Site Condition: None
Prescription Final harvest stand, try and expand into the surrounding u type as much as possible.
Specs:
Next Step
Treatments:
Acceptable Any mix of deciduous species that results in a fully stocked aspen stand.
Regen:
Other Standard retention. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016


Prescription Stand should be marked to 120 BA in order to release red pine crowns
Specs:
Next Step
Treatments:
Acceptable 2nd entry thinning, no regen objectives
Regen:
Other Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| 81 52064081-Cut | 6.8 | 4130 - Aspen | Sawtimber Well | 69 | 81-110 | Harvest | Clearcut with Retention | 413 - Aspen | Even-Aged | Proposal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Habitat Cut: No |  | Site Conditio | None |  |  |  |  |  |  |  |
| Prescription Final Harvest Stand. |  |  |  |  |  |  |  |  |  |  |
| Specs: |  |  |  |  |  |  |  |  |  |  |
| Next Step Treatments: |  |  |  |  |  |  |  |  |  |  |

Acceptable A mix of Aspen and deciduous species resulting in a fully stocked stand.
Regen:
Other Utilize the pocket of upland spruce/fir in the SE corner for retention. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| 82 | 52064082-Cut | 75.7 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 77 | $\begin{aligned} & 111- \\ & 140 \end{aligned}$ | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Proposal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Habitat Cut: No Site Condition: None

Prescription Clearcut stand, make sure to leave retention along the edges of the stand so as not to interfere with planting efforts.
Specs:
Next Step 1-SitePrep, Trenching; 2-Planting, Initial Plant; 3-Monitoring, Artificial Regen(1yr); 4-Pesticide, Aerial; 5 - Monitoring, Artificial
Treatments: Regen(3yr)
Acceptable A fully stocked planted red pine stand with intermixed wildlife openings.
Regen:
Other We may decide to implement some managed wildlife openings within the planted red pine stand. Be sure to protect the ORV trail during Comment: harvesting operations. Also when the site is to be planted be sure not to trench or plant through the trail. Old next step comments:
Proposed Start Date: $\quad 10 / 1 / 2016$

| 83 | 52064083-Cut | 12.2 | 42110 - Planted <br> Red Pine | Poletimber <br> Well | 54 | $111-$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 140 |  |  |  |  |$\quad$ Harvest $\quad$ Clearcut | 4211 - Planted |
| :---: |
| Red Pine |$\quad$| Even-Aged |
| :---: |

## Habitat Cut: No Site Condition: None

Prescription Clearcut stand, no retention due to stand size.
Specs:
Next Step 1-SitePrep, Trenching; 2-Planting, Initial Plant; 3-Monitoring, Artificial Regen(1yr); 4-Pesticide, Aerial; 5-Monitoring, Artificial
Treatments: Regen(3yr)
Acceptable A fully stocked planted red pine stand with some intermixed managed wildlife openings.
Regen:
Other After the harvest, we may decide to implement some intermixed wildlife openings in the red pine stand. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| S |  | Gaylord Mgt. Unit |  |  | Report 4 -- Treatments |  |  |  | Compartment: 64 <br> Year of Entry: 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & n \\ & d \end{aligned}$ | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
| 86 | 52064086-Cut | 77.0 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 69 | $\begin{gathered} 111- \\ 140 \end{gathered}$ | Harvest | $\begin{gathered} \text { Strip/Patch/Gap } \\ \text { Cut } \\ \text { (Femelschlag) } \end{gathered}$ | 411 - Northern Hardwood | UnevenAged | Proposal |

Acceptable A mix of deciduous species that mimic the composition of the overstory.
Regen:
Other Be sure to protect the ORV trail during harvest operations. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016


Acceptable Any mix of deciduous species that results in a medium stocked stand.
Regen:
Other If the retention acreage ends up being greater than $10 \%$ of the stand acres that is acceptable. Old next step comments:
Comment:
Proposed Start Date: $\quad 10 / 1 / 2016$

| 92 | 52064092-Cut | 36.2 | 42110-Planted | Sawtimber | 54 | $111-$ | Harvest | Clearcut with | 4211-Planted |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Red Pine | Well |  | 140 |  | Ren-Aged | Proposal |  |
|  |  |  |  |  |  |  |  |  |  |

## Habitat Cut: No Site Condition: None

Prescription Clearcut stand, make sure to leave retention around the edge of the stand so as not to interfere with planting efforts.
Specs:
Next Step 1-SitePrep, Trenching; 2-Planting, Initial Plant; 3-Monitoring, Artificial Regen(1yr); 4-Pesticide, Aerial; 5 - Monitoring, Artificial Treatments: Regen(3yr)

Acceptable A fully stocked red pine stand with intermixed wildlife openings.
Regen:
Other Wildlife openings may be intermixed throughout the red pine stand. Old next step comments:
Comment:
Proposed Start Date: $\quad 10 / 1 / 2016$

| $\begin{aligned} & \mathrm{a} \\ & \mathrm{n} \\ & \mathrm{~d} \end{aligned}$ | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 97 | 52064097-Cut | 38.3 | 4112 - Maple, Beech, Cherry Association | Sawtimber Well | 71 | 81-110 | Harvest | Single Tree Selection | 4116 - Mixed N. Hardwood Aspen | UnevenAged | Proposal |

Acceptable A mix of deciduous species that result in a well stocked stand similar to the parent stand
Regen:
Other If aspen regen gaps are big enough, perhaps planting some larger oak stock would be a viable option. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| 97 | $\begin{gathered} 52064097- \\ \text { Cutx } \end{gathered}$ | 25.2 | 4112 - Maple, Beech, Cherry Association | Sawtimber Well | 71 | $81-110$ | Harvest | Clearcut with Retention | 413 - Aspen | Even-Aged | Proposal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | t Cut: No |  | Site Condition: None |  |  |  |  |  |  |  |  |
| Prescription Clear cut area. Focus retention around pockets of beech in order to provide some hard mast production. Expand the borders of the harvest Specs: where feasible into the adjacent stand 92 in order to promote aspen. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

Acceptable Any mix of deciduous species that results in a well stocked aspen dominated stand.
Regen:
Other Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| $\begin{gathered} \hline 9292064099 \\ \text { Prep } \end{gathered}$ | 32.4 | 3209 - Upland Shrub (OI) | Nonstocked |  | Unspec ified | SitePrep | Roller Chopping | 4211 - Planted Red Pine | Even-Aged | Proposal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Habitat Cut: Yes |  | Site Conditio | None |  |  |  |  |  |  |  |
| Prescription Roller chop to prep site for trenching and planting Specs: |  |  |  |  |  |  |  |  |  |  |
| Next Step 1-SitePrep, Trenching; 2-Planting, Initial Plant Treatments: |  |  |  |  |  |  |  |  |  |  |
| Acceptable A fully stocked red pine plantation Regen: |  |  |  |  |  |  |  |  |  |  |
| OtherComment: Old next step comments: |  |  |  |  |  |  |  |  |  |  |
| Proposed Start Date: 10/1/2014 |  |  |  |  |  |  |  |  |  |  |
| 111 52064111-Cut | 22.3 | 4111 - S.Maple, Hard Mast Association | Poletimber Well | 75 | 81-110 | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Proposal |
| Habitat Cut: No |  | Site Conditio | None |  |  |  |  |  |  |  |

Prescription Clearcut stand, make sure to place retention along the edge of the stand so as not to interfere with post harvest site prep.
Specs:
Next Step 1-SitePrep, Roller Chopping; 2-SitePrep, Trenching; 3-Planting, Initial Plant; 4-Monitoring, Artificial Regen(1yr); 5-Pesticide, Aerial Treatments:

Acceptable A fully stocked planted red pine stand with intermixed wildlife openings.
Regen:
Other Some wildlife openings should be intermixed within the planted red pine stand. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| $\begin{aligned} & \mathrm{n} \\ & \mathrm{~d} \end{aligned}$ | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 130 | 52064130-Cut | 8.1 | 4130 - Aspen | Sawtimber Well | 69 | 81-110 | Harvest | Clearcut | 413 - Aspen | Even-Aged | Proposal |
| Hab | itat Cut: No |  | Site Conditio | None |  |  |  |  |  |  |  |

Prescription Final harvest stand.

## Specs:

Next Step
Treatments:
Acceptable Mix of aspen and deciduous species that results in a fully stocked stand.
Regen:
Other No retention due to small stand size. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

| 135 52064135-Cut | 7.2 | 4111 - S.Maple, Hard Mast | Poletimber Well | 71 | $\begin{gathered} 111- \\ 140 \end{gathered}$ | Harvest | Crown Thinning | 411 - Northern Hardwood | UnevenAged | Proposal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Habitat Cut: No Site Condition: None

Prescription Mark out poor quality trees with a target residual BA of 80 BA. Cut all beech except those marked to leave for hard mast production. Specs:

Next Step
Treatments:
Acceptable
Regen:
Other Will probably have to set up as multiple small fuelwood sales. Old next step comments:
Comment:
Proposed Start Date: $\quad$ 10/1/2016

## Report 5 - Site Conditions

Gaylord Mgt. Unit

Dominant Site Conditions

| 5C | 5 E |  |
| :---: | :---: | :---: |
| Aspen | 5 | 5 |
| Bare/Sparsely Vegetated |  |  |
| Herbaceous Openland |  |  |
| Jack Pine |  |  |
| Lowland Shrub |  |  |
| Northern Hardwood | 371 |  |
| Planted Mixed Pines |  |  |
| Red Pine |  |  |
| Upland Mixed Forest |  |  |
| Upland Shrub |  |  |
| White Pine |  |  |
| Total Forested Acres | 375 | 5 |
| 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 <br> No. Cond Availability | Dominant Site Condition | Acres | Other Site Condition | Other Site Condition | Other Site Condition | Other Site Condition |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Unavailable | 3J: Water quality / BMPs <br> (stream, river, or lake) | 8 | Unspecified | Unspecified | Unspecified |  |
| Comments: |  |  |  |  |  |  |  |
| 2 | Available | 5C: Delay treatment for <br> age/size class diversity or <br> exceptional site quality | 5 | Unspecified | Unspecified | Unspecified |  |

## Comments:

Gaylord Mgt. Unit
Zach Crew : Examiner

Compartment: 64
Year of Entry: 2017

| 3 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 173 | Unspecified | Unspecified | Unspecified | Unspecified |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Comments: |  |  |  |  |  |  |  |
| 4 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 198 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: |  |  |  |  |  |  |  |
| 5 | Unavailable | 5E: Long-Term Retention | 5 | 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.


## 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.

| Conservation Area | n Type |  ERA $=$ Ecological Reference Area <br> Description HCVA $=$ High Conservation Value Area <br>  SCA $=$ Special Conservation Area |
| :---: | :---: | :---: |
| SCA C | 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. |
| HCVA | Dedicated Management Areas | Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR. |
| 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:IDocumentationlGDSE data folder. |







| S | Gaylord | Mgt. Unit |  | Report 8 - Forested Stands |  |  | Compartment: 64 <br> Year of Entry: 2017 <br> General Comments: | $5$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{n} \\ & \mathrm{~d} \end{aligned}$ | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range |  |  |  |
| 103 | 4130 - Aspen | Sapling Well | 16.4 | 5 | Immature | OPIC - FMD: Mature aspen and limby open grown hardwood on rolling terrain. Final harvest prescribed to promote regeneration of mature stand. HARVESTED IN 2010. |  |  |
| 104 | 4130 - Aspen | Sapling Well | 14.0 | 15 | Immature | Final ha | in 2000. Young aspen dwood stump sprouting | neration |
| 106 | 42110 - Planted Red Pine | Poletimber Well | 19.8 | 54 | 111-140 | OPIC - FM time thinni marking s not | lantation that would bene 5\% either by cutting ever lusion in southwest corn ed (R5). HARVESTED | om a first urth row or stand will 2010. |
| 110 | 4111 - S.Maple, Hard Mast Association | Poletimber Well | 98.4 | 77 | 51-80 | $\begin{array}{r} \text { OPIC - FM } \\ 12-16 " \mathrm{c} \\ \text { Select } \end{array}$ | ardwood polestand with b terrain with access from mpleted in Dec.2011. AV | wood logs north. $A=73$ |
| 111 | 4111 - S.Maple, Hard Mast Association | Poletimber Well | 106.1 | 75 | 81-110 | Northern terrai compone | n grown, limby quality on needed currently. Bass cial value. Noticed 2 oak ventory of stand. | ing to hilly d log s during |
| 112 | 4130 - Aspen | Sapling Well | 41.1 | 24 | Immature | Fully | d, merged old OI stand | nd 112 |
| 113 | 4130 - Aspen | Sapling Well | 4.2 | 7 | Immature | OPIC harves | tooth aspen stand pres with the thinning on adjac st completed in May, 2008 | for final tand 20. |
| 125 | 4130 - Aspen | Sapling Well | 22.4 | 24 | Immature |  | tocked aspen stand |  |
| 130 | 4130 - Aspen | Sawtimber Well | 8.1 | 69 | 81-110 | Aspen | tand 81, separated by s stand 78. | 416 and |
| 132 | 42200 - Natural White Pine | Poletimber Well | 7.7 | 56 | 51-80 | Natural | older trees are open gro ling development | but dense |
| 133 | 42121 - Planted Jack Pine, Mixed Deciduous | Sapling Well | 18.1 | 15 | Immature |  | pine planted in 2000 |  |
| 135 | 4111 - S.Maple, Hard Mast Association | Poletimber Well | 180.2 | 71 | 111-140 | Hilly t density. | letimber. Hold \& let grow and 70 to the east. Some places. | present stems in |


| Stand | Cover Type | Acres | Managed Site | General Comments: |
| :---: | :---: | :---: | :---: | :---: |
| 5 | 3209 - Upland Shrub (OI) | 36.2 | No | OPIC - FMD: Upland brush with scattered non-merchantable cherry. Minor component of small aspen clone saplings developing. Proposed planting of white and red pine seedlings in this stand to restore native pine. Also, within 5 yrs. after pine planting, plant acorns |
| 8 | 3209 - Upland Shrub (OI) | 6.1 | No | OPIC - FMD: Upland brush with scattered cherry of non-merchantable open grown form. A4, A1. |
| 11 | 3209 - Upland Shrub (OI) | 35.2 | No | OPIC - FMD: Upland brush with small inclusions of low quality 1 stick aspen clones. |
| 14 | 3209 - Upland Shrub (OI) | 32.8 | No | OPIC - FMD: Upland brush. White pine stump land with some scrub black cherry \& A2 developing. Experimented with a prescribed burn that promoted sedge growth, so no further white pine seeding was done. |
| 16 | 3209 - Upland Shrub (OI) | 3.0 | No | OPIC - FMD: Upland brush with cherry \& young aspen developing. White pine stump remnants. |
| 24 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No | Gaswell |
| 26 | 3209 - Upland Shrub (OI) | 12.1 | No | OPIC - FMD: Upland brush with scattered cherry of non-merchantable open grown form. |
| 33 | 3209 - Upland Shrub (OI) | 33.6 | No | OPIC - FMD: Upland brush with scattered cherry and aspen developing. <br> Experimented with a prescribe burn that promoted sedge growth making it difficult to proceed with any pine seeding. |
| 36 | 3209 - Upland Shrub (OI) | 35.1 | No | OPIC - FMD: Upland brush with scattered non-commercial black cherry \& white pine. Small clones of aspen developing also. White pine dense in northeast corner. |
| 42 | 3209 - Upland Shrub (OI) | 10.3 | No | OPIC - FMD: Upland brush with scattered cherry, jack pine, red maple, \& aspen clones. |
| 45 | 3209 - Upland Shrub (OI) | 33.2 | No | OPIC - FMD: Upland brush with scattered non-merchantable black cherry trees and some A1. |
| 49 | 790 - Other Bare/Sparsely Vegetate | 3.8 | No | OPIC - FMD: GAS AND OIL FACILITY |
| 50 | 31029 - Grass (OI) | 3.4 | No | OPIC - FMD: Open rolling terrain with a depression or bowl. Could have been glacier carved. White pine stump country. Keep open due to frost pocket. |
| 52 | 3209 - Upland Shrub (OI) | 18.2 | No | OPIC - FMD: Upland brush with scattered small, young clones of quaking aspen, some J1, A1. |
| 58 | 790 - Other Bare/Sparsely Vegetate | 1.3 | No | Gas Well Site |


| Stand | Cover Type | Acres | Managed Site | General Comments: |
| :---: | :---: | :---: | :---: | :---: |
| 59 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No | Gaswell |
| 60 | 790 - Other Bare/Sparsely Vegetate | 1.2 | No | Gas Well Site |
| 63 | 3209 - Upland Shrub (OI) | 37.6 | No | OPIC - FMD: Upland brush with non-commercial cherry \& some quaking aspen clones. Proposed to plant white pine \& red pine seedlings to restore native species. Also, within 5 yrs. after the pine planting, plant acorns throughout. |
| 66 | 3209 - Upland Shrub (OI) | 21.7 | No | OPIC - FMD: Upland brush with scattered non-merchantable cherry \& some young aspen clones developing. |
| 74 | 3209 - Upland Shrub (OI) | 16.4 | No | OPIC - FMD: Upland brush with scattered non-merchantable cherry. |
| 79 | 6299 - Lowland Shrub (OI) | 8.4 | No | OPIC - FMD: Tag alder, wild raisin, viburnum. |
| 80 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No |  |
| 89 | 790 - Other Bare/Sparsely Vegetate | 1.8 | No | Gaswell site. |
| 91 | 320 - Upland Shrub | 12.7 | No | Grassy opening, some orv trails throughout |
| 94 | 790 - Other Bare/Sparsely Vegetate | 2.2 | No | Gas well site |
| 99 | 3209 - Upland Shrub (OI) | 32.4 | No | OPIC - FMD: Upland brush with open, grassy areas and small clones of A3, A5. Minor scattered species include jack pine, white pine, cherry. |
| 102 | 3209 - Upland Shrub (OI) | 1.1 | No | OPIC - FMD: Upland brush in low depression with scattered aspen, cherry trees. |
| 105 | 790 - Other Bare/Sparsely Vegetate | 1.9 | No | Gas Well Site looks abandoned |
| 107 | 3209 - Upland Shrub (OI) | 9.7 | No | OPIC - FMD: Upland brush with scattered black cherry, aspen clones. Potential landing site. |
| 108 | 3209 - Upland Shrub (OI) | 3.7 | No | OPIC - FMD: Upland brush with scattered cherry developing \& minor component of jack pine, knap weed ground cover. |
| 109 | 790 - Other Bare/Sparsely Vegetate | 0.7 | No |  |
| 115 | 790 - Other Bare/Sparsely Vegetate | 1.5 | No | Gas Well |


| Stand | Cover Type | Acres | Managed Site | General Comments: |
| :---: | :---: | :---: | :---: | :---: |
| 116 | 790 - Other Bare/Sparsely Vegetate | 1.2 | No |  |
| 117 | 790 - Other Bare/Sparsely Vegetate | 1.2 | No | Gas Well Site |
| 118 | 790 - Other Bare/Sparsely Vegetate | 0.9 | No | Gas Well Site |
| 119 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No | Gas Well |
| 120 | 790 - Other Bare/Sparsely Vegetate | 3.1 | No | Gas well site |
| 121 | 320 - Upland Shrub | 4.9 | No |  |
| 122 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No | Gas Well Site |
| 124 | 310 - Herbaceous Openland | 3.0 | No | OPIC - FMD: Northern hardwood polestand on steep hillside with variable density and more difficult access. Hold \& re-evaluate next time. |
| 126 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No | Gas Well |
| 127 | 790 - Other Bare/Sparsely Vegetate | 1.3 | No | Gas well site. |
| 128 | 790 - Other Bare/Sparsely Vegetate | 0.8 | No | Gas Well Site |
| 129 | 790 - Other Bare/Sparsely Vegetate | 0.8 | No | Gas Well Site |
| 131 | 310 - Herbaceous Openland | 1.5 | No |  |
| 402 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No | Gas well site. |
| 403 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No | Gas well site. |
| 405 | 790 - Other Bare/Sparsely Vegetate | 2.1 | No | Gas well site. |
| 407 | 790 - Other Bare/Sparsely Vegetate | 1.2 | No | Gas well site. |
| 409 | 790 - Other Bare/Sparsely Vegetate | 1.5 | No | Gas well site. |


| Stand | Cover Type | Acres | Managed Site | General Comments: |
| :---: | :---: | :---: | :---: | :---: |
| 410 | 790 - Other Bare/Sparsely Vegetate | 1.0 | No | Gas well site. |
| 415 | 790 - Other Bare/Sparsely Vegetate | 2.0 | No | Gas well site. |
| 416 | 790 - Other Bare/Sparsely Vegetate | 2.1 | No | Gas well site |
| 417 | 790 - Other Bare/Sparsely Vegetate | 0.7 | No | Gas well Site |
| 419 | 790 - Other Bare/Sparsely Vegetate | 0.7 | No | Gas well site. |
| 450 | 31029 - Grass (OI) | 2.7 | No | Low, glacial formed frost pocket with scattered cherry. Possible future landing site when adjacent hardwood is thinned. |

