

SAVAGE RIVER STATE FOREST

ANNUAL WORK PLAN

FISCAL YEAR 2016

Prepared:	<u>Wade R. Doney</u> (Forest Manager)	<u>4/18/2015</u> Date
Reviewed:	<u>[Signature]</u> (Regional Manager)	<u>4/23/15</u> Date
Reviewed:	<u>[Signature]</u> (Land Acquisition & Planning)	<u>4/28/15</u> Date
Approved:	<u>[Signature]</u> (Environmental Specialist)	<u>5/13/15</u> Date

State Forest Annual Work Plan

A. Forest Overview

Includes an overview of the forest; history, size, location, special features, etc.

B. AWP summary

Includes number of sales, total harvest acres, acres by harvest method, estimated harvest volume and other important features for the work to be performed during the next year.

C. Maintenance Projects

Includes boundary maintenance, road maintenance, building maintenance and other such projects.

D. Recreation Projects

Includes projects such as campsite improvements, hunting programs, special recreational activities, ATV and hiking trail maintenance, trail grants, signage, and other projects specific to benefiting recreational users of the forest.

E. Special Projects

Includes activities to gain or maintain third party forest certification, GIS databases, and other such activities.

F. Silvicultural Projects

Includes forest harvesting, prescribed fire programs, fertilization, reforestation, and other such projects. This section must include the following:

Final Silvicultural Activities:

1. Site Map
2. Silvicultural Prescription
3. Stand Data (in appendix)

Review Process:

1. Review Summary
2. Interdisciplinary Team Comments (collective)
3. Advisory Committee Comments
4. Public Comments

G. Watershed Improvement Projects

Includes special projects to enhance water quality, wetland restoration, and other such activities.

H. Ecosystem Restoration Projects

Includes projects to manage exotic invasive species, efforts to restore shale barrens or other natural habitats, and other such activities aimed at improving ecosystems.

I. Monitoring Projects

Includes CFI forest inventories, and other inventory projects being conducted on the forest, watershed monitoring, and other such projects.

J. Budget

Includes a proposed budget specific to the forest.

K. Stand Data

Includes a summary of current stand inventory.

Savage River State Forest Annual Work-plan for FY 2016

A. Forest Overview

Savage River State Forest is approximately 55,155 acres in size and is situated in the northeastern quadrant of Garrett County in Western Maryland. It is a second growth mixed hardwood forest dominated by oak species, sugar and red maple, black cherry, hickory and ash. Owing to high rainfall and certain topographic features, Savage River State Forest contains many excellent quality growing sites stocked with superior quality trees. The forest contains approximately 4000 acres of conifer plantations, established in the 1940's following state acquisition. Red pine is the dominant tree species within these plantations but other conifers include white pine, Norway spruce, larch, and Scotch pine. These plantations were established as nurse crops to rehabilitate abandoned and depleted farm fields, with the long-term goal of conversion back to native hardwoods as appropriate.

Savage River State Forest has been intensively managed for over 60 years. Forest harvest and grooming operations are undertaken to thin overstocked stands, to effectively deal with public safety concerns, to harvest mature or diseased/dying trees, to improve habitat for certain wildlife species, to assist and provide for certain research needs, to address aesthetic concerns, and to increase the proportion of age/height diversity of forested stands.

B. Annual Work Plan Summary

The FY-2016 Annual Work Plan for Savage River State Forest was formulated during 2014. It contains projects to be undertaken in the areas of Silviculture, Maintenance, Special Projects, and Recreation.

All projects and proposals within this Plan have been developed to meet one or more of the Land Management Guidelines and Objectives as seen in the Savage River State Forest Sustainable Forest Management Plan including:

Forest Economy: management activities with a purpose to maintain an economically sustainable forest and contribute to the local economy through providing forest-related employment and products.

Forest Conservation: management activities with a purpose to protect significant or unique natural communities and elements of biological diversity, including Ecologically Significant Areas, High Conservation Value Forests and old growth Forests. Old growth forest management serves to restore and/or enhance old growth forest structure and function.

Water Quality: management activities designed to protect or improve ecological functions in protecting or enhancing water quality.

Wildlife Habitat: management activities with a purpose to maintain and enhance the ecological needs of the diversity of wildlife species and habitat types.

Recreation and Cultural Heritage: management activities with a purpose to maintain and enhance areas that serve as visual, public camping, designated trails, and other high public use areas.

Savage River will harvest approximately 1 million board feet of sawtimber through implementation of the FY-16 Annual Work Plan. The plan involves 23 proposed silvicultural projects within the forest. There is one regeneration harvest, 2 pre-commercial thinnings, and 20 commercial thinnings.

Silvicultural treatment	Acres	Sawtimber Volume (Bd. Ft.)	Pulpwood Volume (cords)
Pre-commercial Thinning	48		
Hardwood Comm. Thinning	83	201,567	1082
Conifer Comm. Thinning	128	579,834	750
Conifer Regeneration	11	204,973	182

The goal with conifer plantations in Savage River State Forest is to retain them and to the extent possible to increase the acreage with conifer cover. Most of the conifer stands in Savage River State Forest were planted with exotic conifers and as we gradually regenerate these stands we intend to convert them to native species such as white pine and red spruce. When the choice is possible we will try to retain white pine and remove red pine and encourage white pine regeneration.

Most of the maintenance projects are of a routine nature. Most recreation work is of a routine nature; however it is expected that the revision of the recreation component of the Sustainable Management Plan will be finished this year. A special effort that began in FY 11 and will be ongoing for the next 2 years is stand level data collection as part of our certification and management efforts. Further, we will be monitoring all of our silvicultural activities five and 10 years post treatment.

A summary of silvicultural activity (planned and implemented) from 2002 to the present can be found on pages 85 and 86.

C. Maintenance Projects

Routine maintenance projects include: Building repair and maintenance, mowing at the campus, snow removal, repair and replacement of fire rings and tables at the camp sites, brush hogging trails, and repair of road surfaces.

There are 70 plus primitive camp sites that we maintain. Maintenance and upkeep is ongoing with major camp site maintenance focused at the end of the winter, prior to major holidays (such as Memorial Day, 4th of July, and Labor Day) and at the end of the camping season.

There are about 101 miles of trail and hardened road surface on the forest and we are maintaining 1/3 of these each year. This maintenance includes brush hogging and repair of road

surfaces. We are also using herbicide in areas where it is too steep or narrow to brush hog. In FY 2016 we anticipate beginning a major effort at restoration and improvement of our trails and road system.

There is a public shooting range on the forest that we keep open year round. Maintenance is on-going which includes replacing backboards and general clean-up on a weekly basis. Major efforts are done prior to the holiday seasons and prior to the beginning of the various hunting seasons.

Eighty miles of boundary will be repainted and 5 miles of “lost” boundary will be recovered.

D. Recreation Projects

We will begin implementing the expanded recreation plan that was created in FY 2016.

Phase one of the Continental Divide Loop bike trail that goes through the forest will likely be finished in FY 2015. Phase two will likely be completed in FY 2016, these sections use part of the Meadow Mountain Trail.

The Wildlife and Heritage Service will be working on 2 acres of herbaceous openings, maintaining 25 bluebird boxes, and pruning some 75 fruit trees. They will also be controlling woody vegetation by mowing and prescribed burning on 40 acres of wildlife openings. The Margroff wildlife habitat unit will have another soft edge brushy area created along one of the gas well areas. The Margroff wildlife habitat unit operating plan will be completed during this fiscal year.

A new ORV trail is currently in the review process; it will be installed in fiscal year 15 or early in fiscal year 16. The use of this new trail along with East Shale Road ORV trail will be regulated with the Compass system, a web-based permitting system. Both trails will be designed to be sustainable and, as part of that, their use will be limited to ensure the stability of the surface and surrounding natural resources. They will also be closed to ORV use to accommodate the hunting public.

E. Special Projects

1. 106 acre “Rounds Property”

The acquisition of the Rounds property has provided a somewhat unique opportunity on Savage River State Forest. Open agricultural land is the most limited habitat type on the state forest. When the Sines property at Keyzers Ridge was given to the county for development as a business park, the largest area of open field and agricultural land on SRSF was lost. The acquisition of the Rounds property and other property along Fairview Road has provided some new opportunity to manage open agricultural land again. Grassland and early succession habitat is limited and occurs on state forest primarily as powerline rights of way, reclaimed mine sites, and small plots that have been maintained by the Wildlife and Heritage Service as herbaceous openings that serve as brood habitat and forage areas for wildlife.

The large open area on this property is unique. Because of the extent of open grassland habitat, there may be potential for grassland nesting birds to occur here. A survey of nesting bird species should be conducted early in the next nesting season i.e. June 2015. It should be determined whether there are any grassland birds of concern that occur here. If they do occur, any habitat modifications should be done with consideration for these bird's habitat requirements. If they do not occur, but it is determined that there is potential for them to use this habitat, this should be a top priority for the area.

Absent the presence of grassland birds or potential to attract them, there are many opportunities to manage this area for wildlife. A focus area of early succession wildlife habitat is in place on Fairview Road near this property. This property should become incorporated into that management area. As with that area, a plan should be developed to provide habitat for farmland wildlife species such as Eastern cottontail. This would include planting shrubs in hedgerows or other areas, as well as dense conifer cover such as red spruce along drainage areas or in stands that will serve as winter and thermal cover. Additionally planting some herbaceous cover in pollinator habitat such as clovers, or native wildflowers would provide additional habitat for invertebrates and serve as brood habitat and forage. Some areas would be rotationally mowed to keep open and provide singing and roosting areas for American woodcock. Planting or allowing some areas to grow up in trees and shrubs of various sizes and heights would potentially provide habitat for golden winged warblers that could be a featured species in this area as well.

The house site would serve well as a parking area for public access to the property and other parts of the state forest.

2. 113.6 acre "Owings Property"

This property is primarily an old abandoned field or pasture area. There currently are 3 old trailers on the property that will be removed. Inventory work has not been done on the property as yet, but based on brief recons there is a fair amount of black locust and quite a bit of invasive understory plants.

The goals for acquiring this property were to provide more protection for the Savage River which is down slope from the property and to provide additional protection for the Bear Pen wildland from exotic/invasive plants and unauthorized OHV(Off-highway Vehicle) traffic.

Inventory work will be completed either later this fall or early next spring and management recommendations will be developed then.

3. 272 acre "TNC - Miller/Newman Property"

This property is a forested area that contains part of Wolf Swamp. It will likely have an ESA through the center to protect Wolf Swamp. Inventory work has not been done on the property.

There is a fair amount of illegal OHV traffic impacting the swamp and surrounding woods. The inventory work will be completed either later this fall or early next spring and in conjunction with the MD Wildlife and Heritage Service, management recommendations will be completed.

F. Silvicultural Projects

Compartment 7 – Stand 6 Conifer Thinning (7.9 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is a conifer plantation type that is dominated by Norway spruce, black cherry, white pine, red pine and red maple. The stand is over-stocked with acceptable growing stock (relative density of 103 percent). (Stand summary data is in Appendix one.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There is a stream on the outside of the sale boundary that will be buffered.

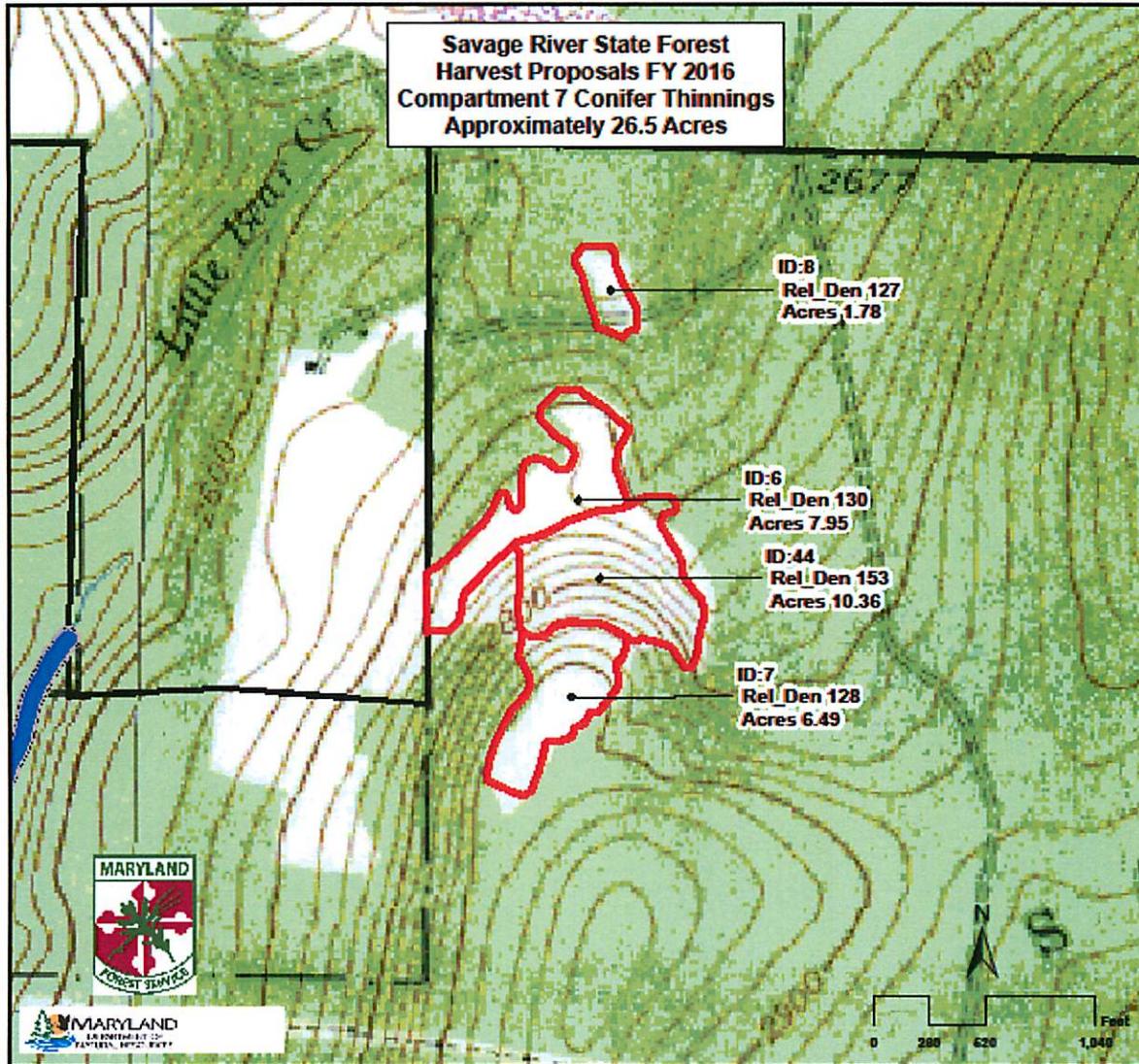
Soil Resources: The soils found in this stand are predominately the Meckesville silt loam, 0 – 8 percent slope. The Meckesville series consists of deep, well-drained soils that have a weak to moderate fragipan in the lower part of the subsoil. They are fairly productive soils with an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1940's. The stand does not appear to have been thinned which has resulted in the overstocked condition. There is lots of blow down and broken tops in this stand. In places the original planting rows are still distinguishable but in other sections not so. No evidence of recent fire was observed in the stand during the recon.

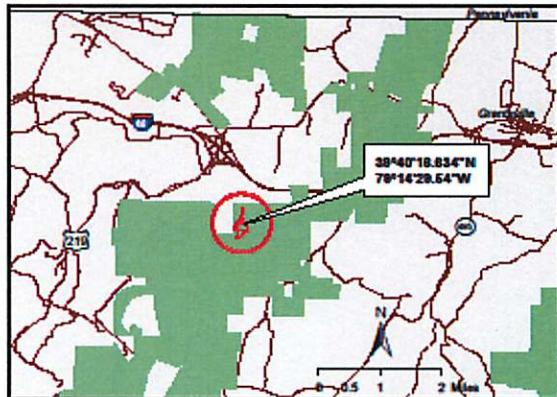
Recreation Resources: No developed recreation resources in the stand, but during the harvest operations Negro Mountain Snowmobile trail will be used as a haul road and depending upon conditions may be closed.

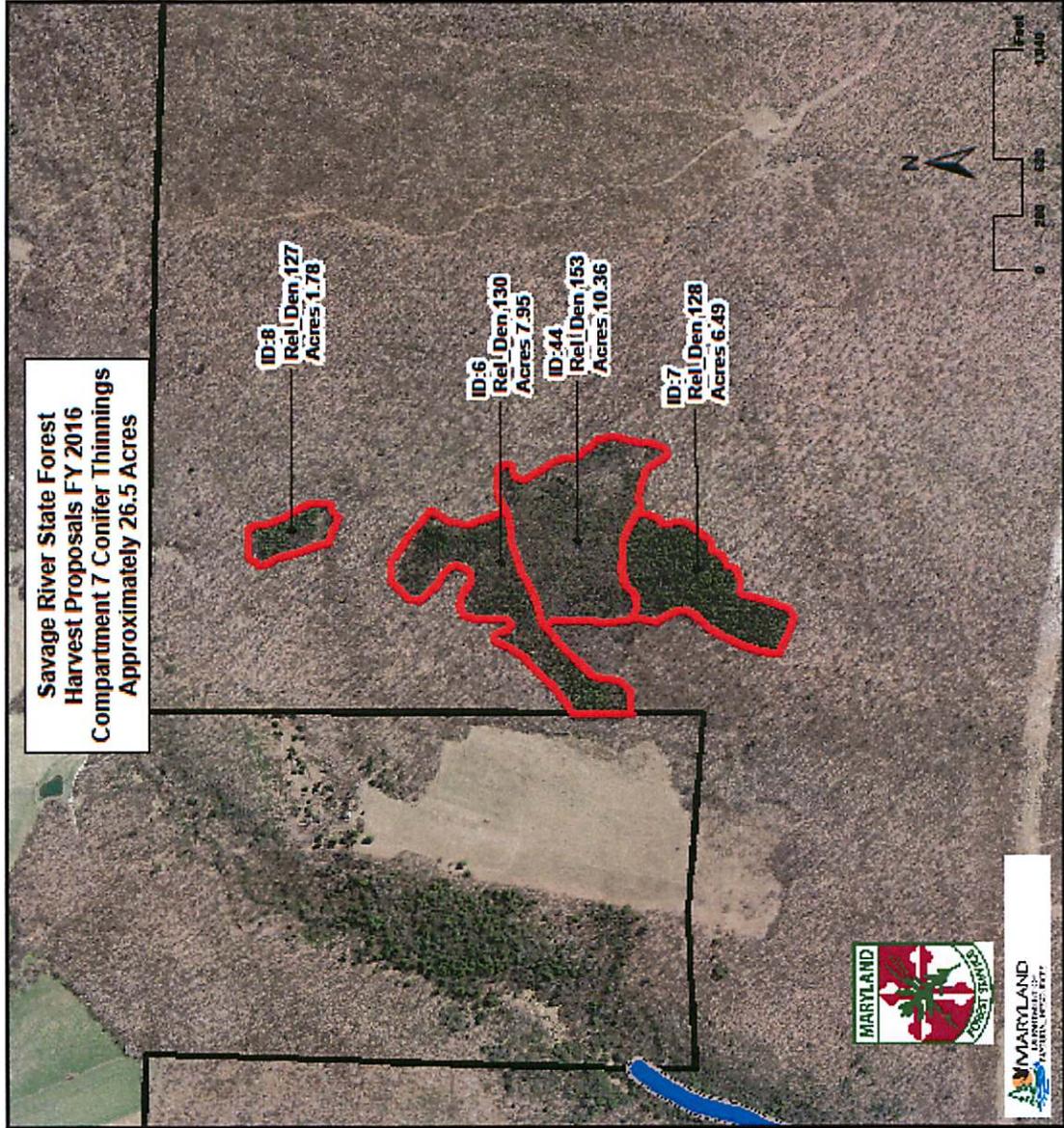
Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 145 square feet. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients. There was mile-a-minute found in this stand, if practical prior to the thinning operation, this invasive plant should be controlled.

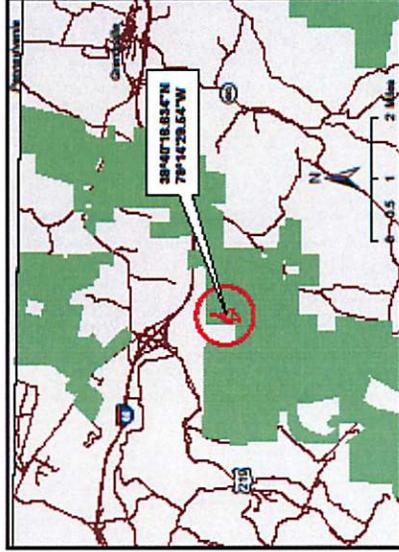


- Wildlands
- Environmentally Sensitive Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland of State Concern
- Streams and 50' Buffer
- SRSF Boundary





- Wildlands
- Environmentally Sensitive Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland of State Concern
- Streams and 50' Buffer
- SRSF Boundary



Compartment 7 – Stand 7 Conifer Thinning (6.5 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is a conifer plantation type that is dominated by Norway spruce, northern red oak, sweet birch, white pine and red pine. The stand is over-stocked with acceptable growing stock (relative density of 112 percent). (Stand summary data is in Appendix two.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There are no streams or ponds within or near the sale boundary.

Soil Resources: The soils found in this stand are predominately the Gilpin channery silt loam, 20 - 35 percent slope. The Gilpin series consists of moderately deep, well-drained soils formed on uplands in material weathered from gray to brown, acid shale and siltstone that commonly includes some thin beds of sandstone. They are fairly productive soils with an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1940's. The stand does not appear to have been thinned which has resulted in the overstocked condition. There is a fair amount of up-rooted trees and broken tops in this stand. In places the original planting rows are still distinguishable but in other sections not so. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations Negro Mountain Snowmobile trail will be used as a haul road and depending upon conditions may be closed.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 141 square feet. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients. There was mile-a-minute found in this stand, if practical, prior to the thinning operation this invasive plant should be controlled.

Compartment 7 – Stand 8 Conifer Thinning (1.8 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is a conifer plantation type that is dominated by red pine and white pine. The stand is over-stocked with acceptable growing stock (relative density of 138 percent).

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There is an intermittent stream east of the stand and outside of the sale boundary.

Soil Resources: The soils found in this stand are predominately the Albrights very stony silt loam, 0 – 15 percent slope and Meckesville very stony silt loam, 0 - 8 percent slopes. The Albrights series consists of deep, somewhat poorly drained to moderately drained soils that have a fragipan in the lower part of the subsoil. The Meckesville series consists of deep, well-drained soils that have a weak to moderate fragipan in the lower part of the subsoil. These soils are fairly productive with an estimated site index of about 70 - 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1940's. The stand does not appear to have been thinned which has resulted in the overstocked condition. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations Negro Mountain Snowmobile trail will be used as a haul road and depending upon conditions may be closed.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This stand only had one inventory plot taken in it - so prior to implementing the recommendation the stand should be re-examined to verify that the prescription is still valid. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 141 square feet. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Compartment 7 – Stand 44 Conifer Thinning (10.3 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by red maple, black cherry, red pine, Norway spruce, white ash and white pine. The stand is over-stocked with acceptable growing stock (relative density of 71 percent). (Stand summary data is in Appendix three.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There are no streams or ponds within or near the sale boundary.

Soil Resources: The soils found in this stand are predominately the Gilpin channery silt loam, 20 - 35 percent slope and Calvin & Lehew channery loams, 35 – 50 percent slopes. The Gilpin series consists of moderately deep, well-drained soils formed on uplands in material weathered from gray to brown, acid shale and siltstone that commonly includes some thin beds of sandstone. The Calvin and Lehew series are moderately deep, well drained soils that formed in material weathered in place. These soils are fairly productive with an estimated site index of about 70 - 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1940's. The stand does not appear to have been thinned which has resulted in the overstocked condition. In places the original planting rows are still distinguishable but in other sections not so. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations Negro Mountain Snowmobile trail will be used as a haul road and depending upon conditions may be closed.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 131 square feet. The focus will include removing the poor quality stems to the extent possible. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Compartment 11 – Stand 10 Conifer Thinning (8.4 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by Norway spruce, red maple, black cherry, red oak and black oak. The stand is overstocked with acceptable growing stock (relative density of 113 percent). (Stand summary data is in Appendix four.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There is an intermittent stream on the north side and east side of the stand about 700 feet beyond the sale boundary.

Soil Resources: The soils found in this stand are predominately the Gilpin channery silt loam, 0 - 10 percent slope. The Gilpin series consists of moderately deep, well-drained soils formed on uplands in material weathered from gray to brown, acid shale and siltstone that commonly includes some thin beds of sandstone. These soils are fairly productive with an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

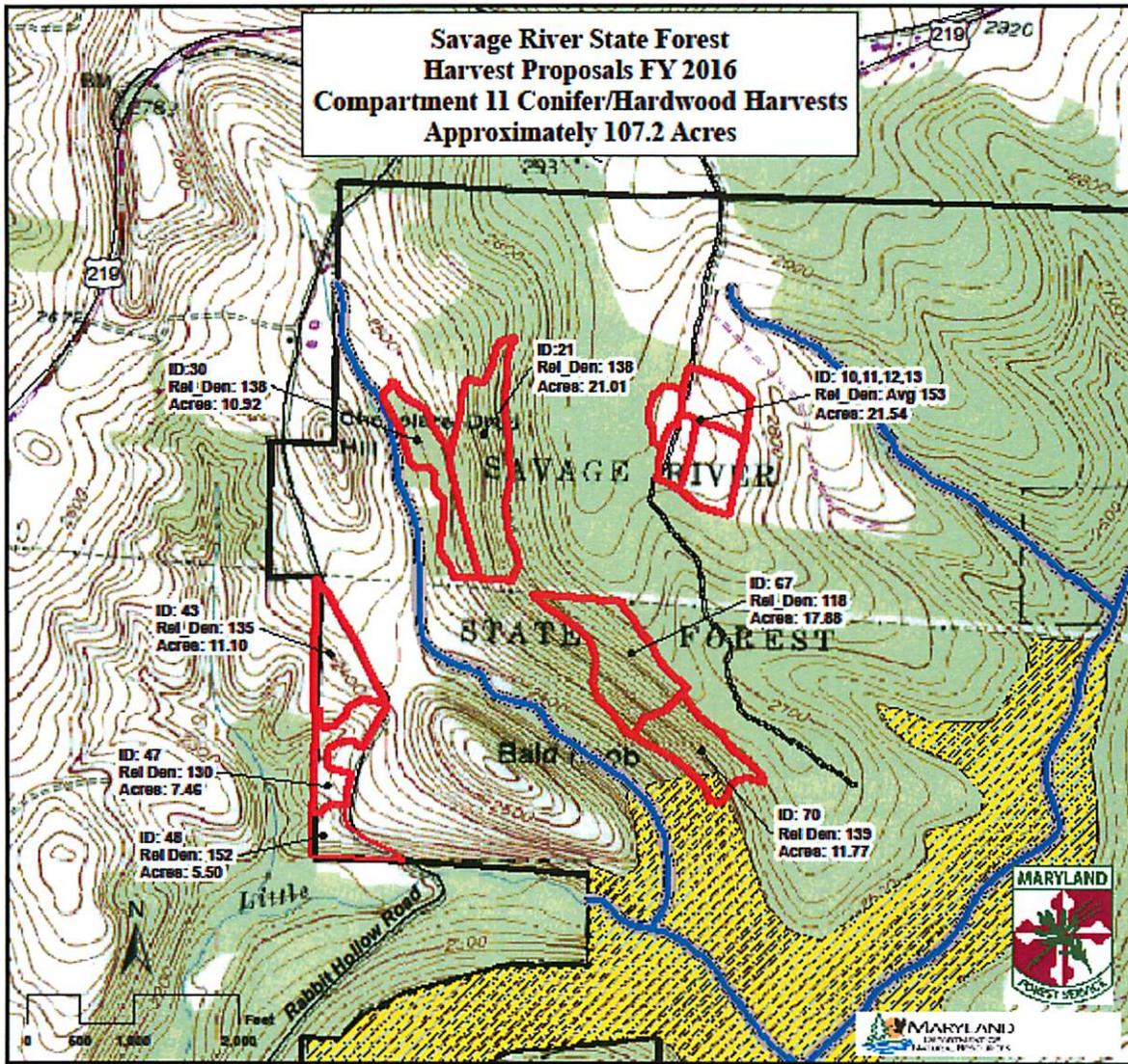
Historic Conditions: This site was an abandoned field that was planted to conifers during the 1940's. The stand does not appear to have been thinned which has resulted in the overstocked condition. It is hard to find original planting rows. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations the forest service road will be used as a haul road and depending upon conditions may be closed this will temporary restrict hunting opportunities.

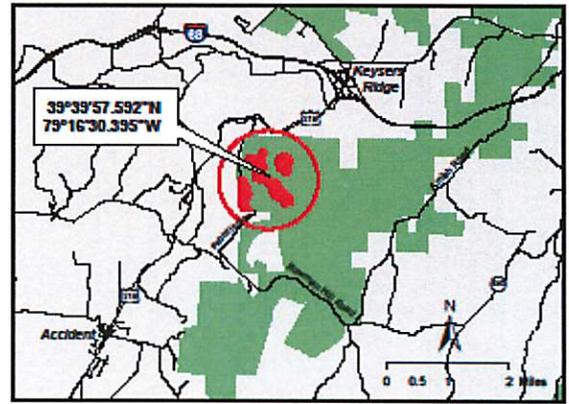
Silvicultural Prescription

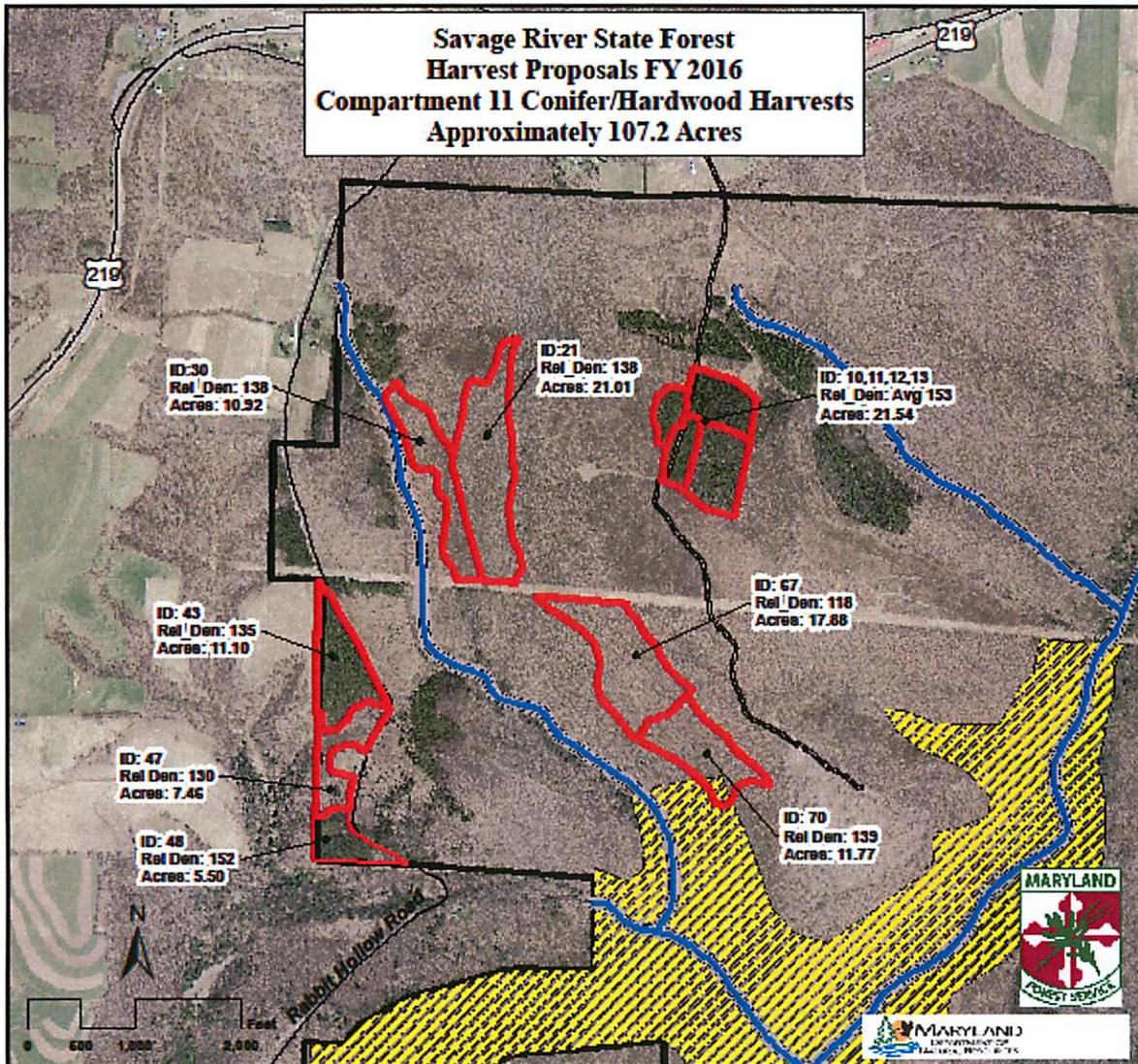
The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 136 square feet. The focus will include removing the poor quality stems to the extent possible. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Stands 10 through 13 will be marked independently but will be sold together. When possible and there are black cherry, red maples and sugar maple trees in and adjacent to these conifer stands they should be favored for Goshawk nest sites.

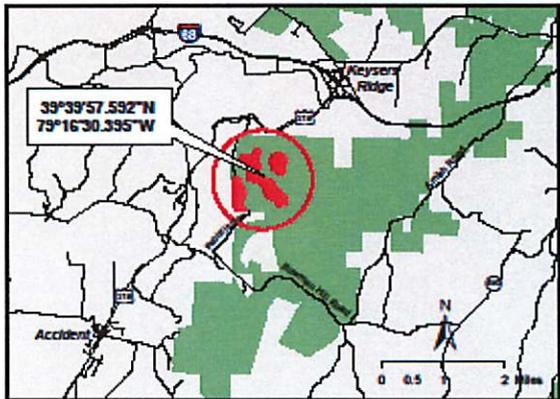


- Wildlands
- Environmentally Sensitive Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland of State Concern
- Streams and 50' Buffer
- SRSF Boundary





- Wildlands
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- Old Growth
- Old Growth Ecosystem Area
- Wetland of State Concern
- Streams and 50' Buffer
- SRSF Boundary



Compartment 11 – Stand 11 Conifer Thinning (3.7 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by red pine, black cherry, Norway spruce, red oak, red maple and white ash. The stand is over-stocked with acceptable growing stock (relative density of 135 percent). (Stand summary data is in Appendix five.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There are no streams or ponds within or near the sale boundary.

Soil Resources: The soils found in this stand are predominately the Gilpin channery silt loam, 0 - 10 percent slope. The Gilpin series consists of moderately deep, well-drained soils formed on uplands in material weathered from gray to brown, acid shale and siltstone that commonly includes some thin beds of sandstone. These soils are fairly productive with an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1940's. The stand has been thinned by removing every third row. The residual planting rows are still distinguishable. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations the forest service road will be used as a haul road and depending upon conditions may be closed and will temporary restrict hunting opportunities.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 169 square feet. This will be accomplished by selectively thinning between rows. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Stands 10 - 13 will be marked independently but will be sold together.

Compartment 11 – Stand 12 Conifer Thinning (6.7 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by Norway spruce, black cherry, red maple, black locust and sweet birch. The stand is over-stocked with acceptable growing stock (relative density of 120 percent). (Stand summary data is in Appendix six.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There is an intermittent stream on the north side of the stand and it will be buffered.

Soil Resources: The soils found in this stand are predominately the Gilpin channery silt loam, 0 - 10 percent slope and Ernest silt loams, 3 – 8 percent slopes. The Gilpin series consists of moderately deep, well-drained soils formed on uplands in material weathered from gray to brown, acid shale and siltstone that commonly includes some thin beds of sandstone. The Ernest series consists of deep, moderately well drained soils that have a firm, brittle fragipan in the lower part of the subsoil. These soils are fairly productive with an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1940's. The stand does not appear to have been thinned which has resulted in the overstocked condition. It is hard to find original planting rows. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations the forest service road will be used as a haul road and depending upon conditions may be closed and will temporary restrict hunting opportunities.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 190 square feet. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Stands 10 - 13 will be marked independently but will be sold together.

Compartment 11 – Stand 13 Conifer Thinning (2.8 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by red pine, black cherry, and Scot's pine. The stand is over-stocked with acceptable growing trees (relative density of 100 percent). (Stand summary data is in Appendix seven.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There is an intermittent stream on the north side of the stand and it will be buffered.

Soil Resources: The soils found in this stand are predominately the Gilpin channery silt loam, 0 - 10 percent slope. The Gilpin series consists of moderately deep, well-drained soils formed on uplands in material weathered from gray to brown, acid shale and siltstone that commonly includes some thin beds of sandstone. These soils are fairly productive with an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1940's. The stand has been thinned by removing every third row. The residual planting rows are still distinguishable. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations the forest service road will be used as a haul road and depending upon conditions may be closed and will temporary restrict hunting opportunities.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 120 square feet. This will be accomplished by selectively thinning between rows. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Stands 10 - 13 will be marked independently but will be sold together.

Compartment 11 – Stand 21 – Commercial Thinning on 21 acres

Description/Resource Impact Assessment

Forest Community Type: This stand is a mixed oak type that is dominated by chestnut oak, red maple and red oak. Other species present include: black cherry, black gum, American beech, sweet birch, white oak and cucumber tree. The stand is overstocked and has a relative density of 120 percent and a basal area of 153 sq. ft. (Stand summary data is included in Appendix eight).

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: An intermittent stream that feeds into Little Bear Creek is approximately 400 feet down slope from the this stand.

Soil Resources: The soils found in this stand are predominately the stony land, steep type. The soil material between the stones in places resembles soils of several series, but generally it lacks distinct horizonation. These soils are fairly productive with an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails as outlined by our BMP and rutting guidelines.

Historic Conditions: This site, like most of SRSF, was likely cutover and burned around the turn of the last century. There is no evidence of past fire within the stand.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations the forest service road will be used as a haul road and depending upon conditions may be closed and will temporary restrict hunting opportunities.

Silvicultural Prescription

This stand is approaching maturity and there is very little advanced regeneration in the stand. These two characteristics drive the recommendation to prepare the stand for regeneration. The first step is to control the striped maple and witch hazel in the shrub layer and the abundant ferns. If a broadcast application is practical then the entire shrub and fern layers can be controlled. This will increase the light level on the forest floor and stimulate the young oak seedlings present and stimulate the germination of any new acorns. The next step is to conduct the first cut of a shelterwood sequence, namely by removing most of the pulpwood, the unacceptable sawtimber and adjusting the spacing. The target residual basal area is 100 sq. ft. Half of the standing dead trees should be removed during this thinning.

The stand should be examined again in ten years to determine if it is ready for a regeneration cut or a second Shelterwood cut.

Compartment 11 – Stand 30 – Pre-commercial Thinning on 10.9 acres

Description/Resource Impact Assessment

Forest Community Type: This stand is a mixed hardwood type that is dominated by American beech, cucumber tree and sweet birch. Other species present include: black cherry, black cherry, red oak, yellow birch, sugar maple and yellow poplar. The stand is overstocked and has a relative density of 138 percent and a basal area of 153 sq. ft. (Stand summary data is included in Appendix nine).

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: An intermittent stream that feeds into Little Bear Creek is between 50 and 100 feet down slope from the this stand.

Soil Resources: The soils found in this stand are predominately the Dekalb channery loam, 20 to 35 percent slopes, moderately eroded. The Dekalb series consists of moderately deep, well drained soils. These soils are fairly productive with an estimated site index of about 80 for mixed oak. Severe erosion potential so the productivity of the site will be protected by minimizing the haul roads and skid trails as outlined by our BMP and rutting guidelines.

Historic Conditions: This site, like most of SRSF, was likely cutover and burned around the turn of the last century. The stand was harvested again in 1984. There is no evidence of past fire within the stand.

Recreation Resources: No developed recreation resources in the stand.

Silvicultural Prescription

This stand has been growing for thirty years since it was harvested and is currently overstocked with pole sized trees. The recommendation for this stand is to remove the unacceptable growing stock and to improve the spacing for the residual stand. There is not enough volume to sell this stand by itself.

Prior to marking this stand it should have a more intense inventory conducted, to help decide whether a pre-commercial thinning combined with stand 21 or an independent crop tree release should be done.

Compartment 11 – Stand 43 Conifer Regeneration Harvest (11.1 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by white pine and black cherry. Other species present include sugar maple, black locust, sweet birch, Scot's pine and red maple. The stand is overstocked with acceptable growing stock having a relative density of 112 percent. (Stand summary data is in Appendix ten.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There is an intermittent stream on the south side of the stand and on the west side of the stand, these areas will be buffered.

Soil Resources: The soils found in this stand are predominately the Gilpin channery silt loam, 0 - 10 percent slope. The Gilpin series consists of moderately deep, well-drained soils formed on uplands in material weathered from gray to brown, acid shale and siltstone that commonly includes some thin beds of sandstone. These soils are fairly productive with an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1960's. Appears to have been previously thinned but the residual planting rows are not distinguishable. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to develop a mixed hardwood conifer type by regenerating the stand. The first activity to be completed in this stand is to control the exotic invasive plants such as Japanese barberry, striped maple and honeysuckle with herbicides. The second activity to be completed in this stand will be accomplished by cutting and removing all the overstory trees. The final activity in this stand is to spot herbicide and artificially plant 50 white pine seedlings to the acre and let the native hardwood fill in the gaps.

Compartment 11 – Stand 47 – Pulpwood Thinning on 8.0 acres

Description/Resource Impact Assessment

Forest Community Type: This stand is a mixed pine-hardwood type that is dominated by sugar maple, white pine and red maple. Other species present include: black cherry, black locust, Scot's pine, cucumber tree, white ash, white oak and sweet birch. The stand is overstocked and has a relative density of 130 percent and a basal area of 150 sq. ft. (Stand summary data is included in Appendix eleven).

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: An intermittent stream feeds into Little Bear Creek on the north side of this stand.

Soil Resources: The soils found in this stand are predominately the Calvin-Gilpin-Ungers channery loam type. These soils are moderately deep to deep over bedrock and are well drained. These soils are fairly productive with an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails as outlined by our BMP and rutting guidelines.

Historic Conditions: This site was part of an abandoned homestead area. The historical significance is probably not high, but until a formal evaluation is completed this area will be buffered along with the intermittent stream that flows nearby. There is no evidence of past fire within the stand.

Recreation Resources: No developed recreation resources in the stand.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. The first activity to be completed in this stand is to control the exotic invasive plants such as multiflora rose and garlic mustard with herbicides. The second activity to be completed in this stand will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 100 square feet. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients. This stand is a pole timber sized stand.

This sale should be done in conjunction with stand 43.

Compartment 11 – Stand 48 Conifer Thinning Harvest (5,5 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by white pine, red pine and sugar maple. Other species present include black cherry, Scot's pine and Norway spruce. The stand is over-stocked with acceptable growing stock (relative density of 142 percent). (Stand summary data is in Appendix twenty-two.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: Cove Run is approximately 300 feet from the western boundary of the stand and Little Bear Creek is approximately 400 feet from the southern boundary of the stand. There is no need to buffer these streams as they are quite a distance from the stand.

Soil Resources: The soils found in this stand are predominately the Calvin-Gilpin-Lehew channery loams, 20 - 35 percent slope. These soils consist of moderately deep, medium textured, well-drained soils formed on uplands. These soils are fairly productive with an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1960's. Appears to have been previously thinned but the residual planting rows are not distinguishable. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: No developed recreation resources in the stand.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. The first activity to be completed in this stand is to control the exotic invasive plants such as multiflora rose, Japanese barberry and Japanese knotweed with herbicides. The second activity to be completed in this stand will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 150 square feet. This will be done by removing all the poor quality red and Scot's pine; then thinning among the Norway spruce and white pine. If there is sufficient space where the red and Scot's pine are removed, then that area should be planted with red spruce.

Compartment 11 – Stand 67 – Pulpwood Thinning on 17.9 acres

Description/Resource Impact Assessment

Forest Community Type: This stand is a mixed oak type that is dominated by chestnut oak, red maple and red oak. Other species present include: sweet birch, black cherry, black walnut, white oak, black gum and service berry. The stand is overstocked and has a relative density of 118 percent and a basal area of 156 sq. ft. (Stand summary data is included in Appendix twelve).

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: An intermittent stream that feeds into Little Bear Creek is approximately 500 feet down slope from the stand.

Soil Resources: The soils found in this stand are predominately the stony land, steep type. The soil material between the stones in places resembles soils of several series, but generally it lacks distinct horizonation. These soils are fairly productive with an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails as outlined by our BMP and rutting guidelines.

Historic Conditions: This site, like most of SRSF, was likely cutover and burned around the turn of the last century. There is no evidence of past fire within the stand.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations the forest service road will be used as a haul road and depending upon conditions may be closed this will temporary restrict hunting opportunities.

Silvicultural Prescription

This stand is approaching maturity and there is very little advanced regeneration in the stand. These two characteristics drive the recommendation to prepare the stand for regeneration. The first step is to control the striped maple, witch hazel and green briar in the shrub layer and the fairly abundant ferns. If a broadcast application is practical then the entire shrub and fern layers can be controlled. This will increase the light level on the forest floor and stimulate the young oak seedlings present and stimulate the germination of any new acorns. The next step is to conduct the first cut of a shelterwood sequence, namely by removing most of the pulpwood and the unacceptable sawtimber. The target residual basal area is 100 sq. ft. The final step in anticipation of the regeneration cut would be to install a fence on approximately ½ of the stand.

The stand should be examined again in ten years to determine if it is ready for a regeneration cut or a second Shelterwood cut.

Compartment 11 – Stand 70 – Commercial Thinning on 21 acres

Description/Resource Impact Assessment

Forest Community Type: This stand is a mixed oak type that is dominated by chestnut oak, red maple and red oak. Other species present include: black gum, sweet birch, scarlet oak, American beech, white oak and eastern hemlock. The stand is overstocked and has a relative density of 139 percent and a basal area of 165 sq. ft. (Stand summary data is included in Appendix thirteen).

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription. Southwestern corner intersects an ESA and is also very steep (>50 %).

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: An intermittent stream that feeds into Little Bear Creek is approximately 500 feet down slope from the this stand.

Soil Resources: The soils found in this stand are predominately the stony land, steep type. The soil material between the stones in places resembles soils of several series, but generally it lacks distinct horizonation. These soils are fairly productive with an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails as outlined by our BMP and rutting guidelines.

Historic Conditions: This site, like most of SRSF, was likely cutover and burned around the turn of the last century. There is no evidence of past fire within the stand.

Recreation Resources: No developed recreation resources in the stand, but during the harvest operations the forest service road will be used as a haul road and depending upon conditions may be closed this will temporary restrict hunting opportunities.

Silvicultural Prescription

This stand is approaching maturity and there is very little advanced regeneration in the stand. Before beginning the work in this stand we will need to coordinate with Wildlife and Heritage Service the exact boundary of the ESA and permitted management activities in this area. Above the ESA, there are two characteristics that drive the recommendation to prepare the stand for regeneration. The first step is to reduce the mountain laurel and witch hazel in the shrub layer and the bracken ferns. If a broadcast application is practical, then the entire shrub and fern layers can be controlled. This will increase the light level on the forest floor and stimulate the young oak seedlings present and stimulate the germination of any new acorns. The next step is to conduct the first cut of a shelterwood sequence, namely by removing most of the pulpwood and the unacceptable sawtimber. The target residual basal area is 110 sq. ft. The final step in anticipation of the regeneration cut would be to install a fence on approximately ½ the stand.

The stand should be examined again in ten years to determine if it is ready for a regeneration cut or a second Shelterwood cut.

Compartment 14 – Stand 2 Conifer Thinning (2.0 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by white pine, black cherry, red maple and Norway spruce. The stand is over-stocked with acceptable growing stock (relative density of 147 percent). (Stand summary data is in Appendix fourteen.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There is an intermittent stream on the southwest side of the stand approximately 700 down slope.

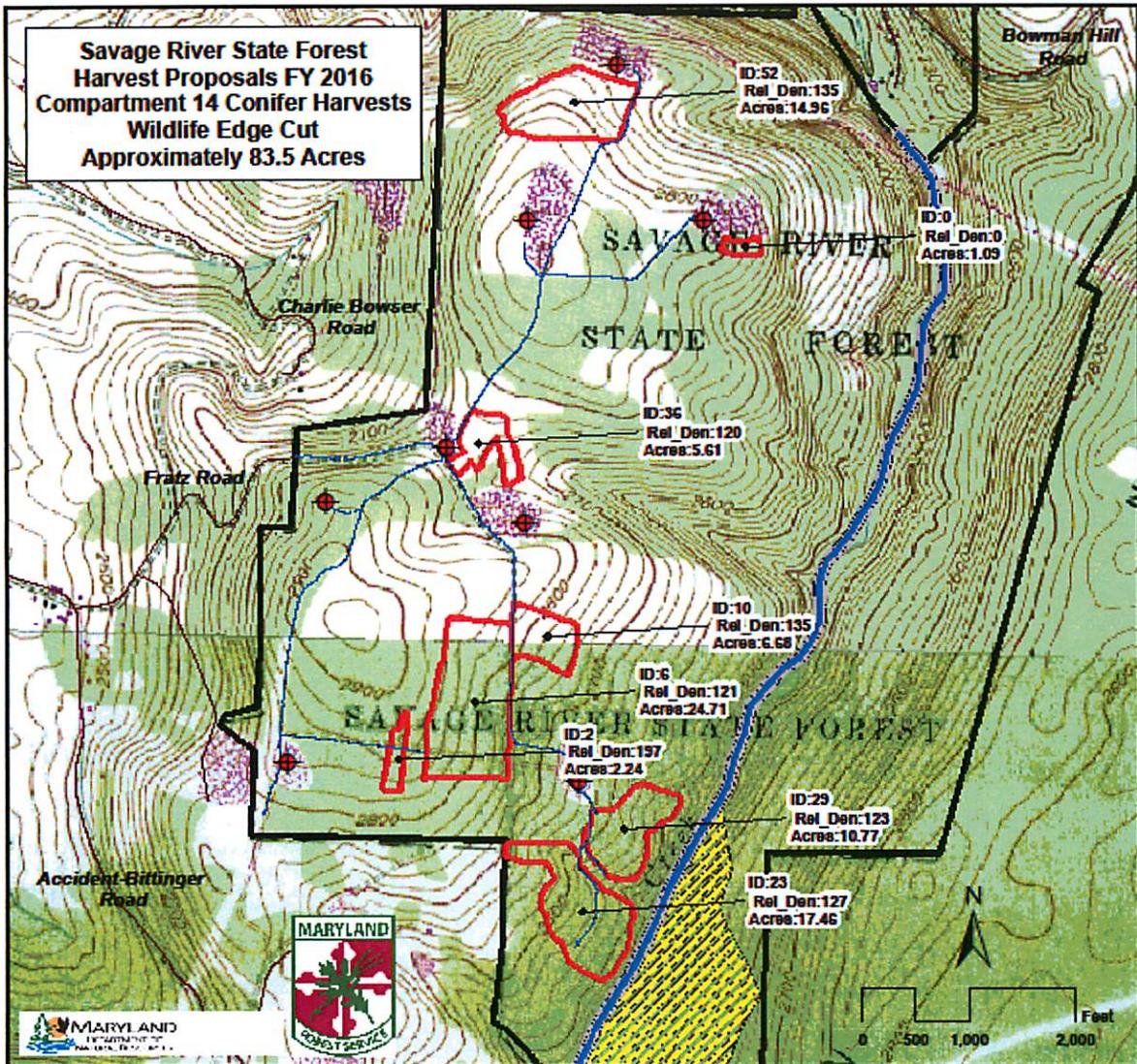
Soil Resources: The soils found in this stand are predominately Dekalb and Leetonia, very stony sandy loams, 0 - 15 percent slope. These soils are moderately deep, well-drained soils formed from sandstone. These soils have an estimated site index of about 60 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1950's. The stand has been thinned. The residual planting rows are not distinguishable. Evidence of recent fire was not observed in the stand during the recon.

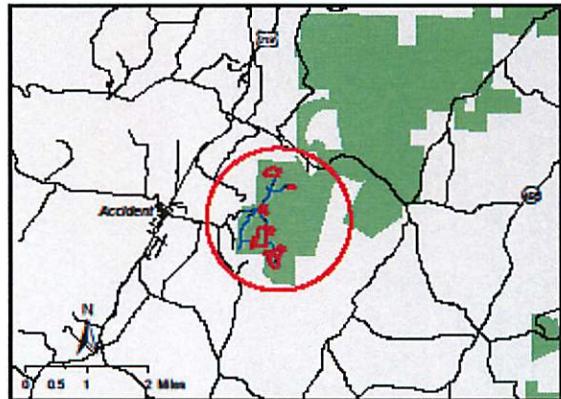
Recreation Resources: There is a camp site on the northern part of this stand that will be excluded from the harvest operation.

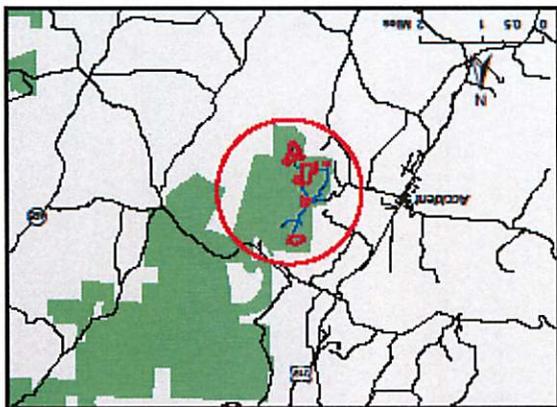
Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 186 square feet. This will be accomplished by selectively thinning the poorest quality trees. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

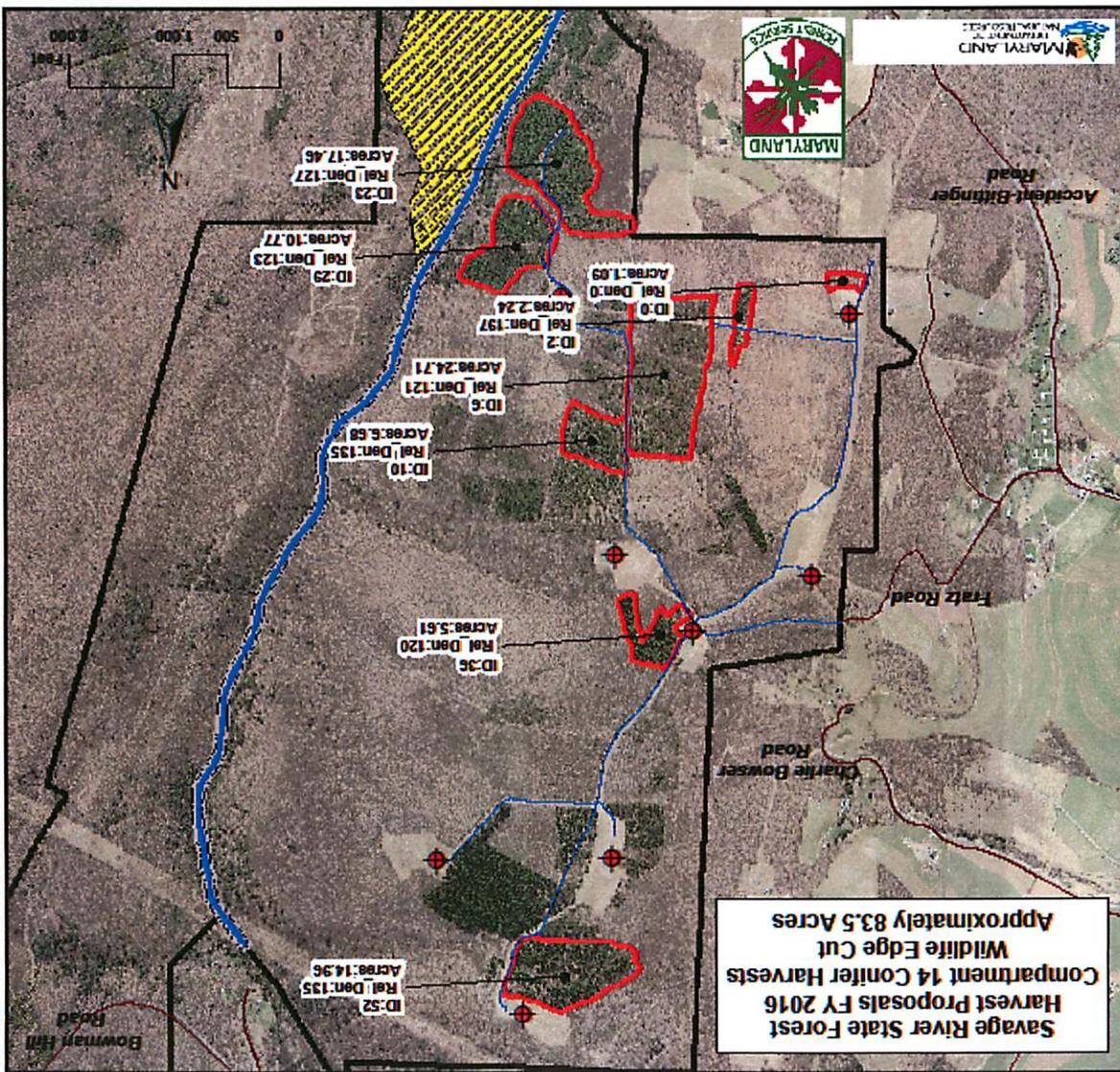


- Margroff Gaswells
- Wildlands
- Environmentally Sensitive Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland of State Concern
- Streams and 50' Buffer
- Compartment 14 Harvest Proposals
- SRSF Boundary





- Margruff Gaswells
- Wetlands
- Environmentally Sensitive Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland of State Concern
- Streams and 50' Buffer
- Compartment 14 Harvest Proposals
- SRSF Boundary



Compartment 14 – Stand 6 Conifer Thinning (24.7 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by white pine, black cherry, and red maple. Other species present include: sweet birch, black locust, black gum, red pine and white oak. The stand is over-stocked with a relative density of 121 percent and a basal area of 169 square feet. (Stand summary data is in Appendix fifteen.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There are no streams or ponds within or near the sale boundary.

Soil Resources: The soils found in this stand are predominately Dekalb channery loam, 0 - 10 percent slope. These soils are moderately deep, well-drained soils of medium texture. These soils have an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1950's. The stand has been thinned. The residual planting rows are not easily distinguishable. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: Within this stand there is a mountain bike trail that will be closed during the harvest operation, but special attention will be paid to keep it open otherwise. The adjacent gravel road is also a snowmobile trail and may be closed if conditions require it. Only a few camp sites are occupied during the week days so the disturbance to camping from the haul road will likely be minor.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 112 square feet. This will be accomplished by selectively thinning the poorest quality trees. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Compartment 14 – Stand 10 Conifer Thinning (6.7 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer type that is dominated by white pine and red pine. Other species present include: red maple, chestnut oak, sweet birch and black cherry. The stand is over-stocked with a relative density of 135 percent and a basal area of 180 square feet. (Stand summary data is in Appendix sixteen.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There are no streams or ponds within or near the sale boundary.

Soil Resources: The soils found in this stand are predominately Calvin, Ungers, Lehew channery loam, 10 - 20 percent slope. These soils are moderately deep, well-drained soils on the uplands. These soils have an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1950's. The planting was laid out in a square pattern. Evidence of recent fire was not observed in the stand during the recon. **Recreation Resources:** Within this stand there is a mountain bike trail that will be closed during the harvest operation, but special attention will be paid to keep it open otherwise. The adjacent gravel road is also a snowmobile trail and may be closed if conditions require it.

Recreation Resources: Within this stand there is a mountain bike trail that will be closed during the harvest operation, but special attention will be paid to keep it open otherwise. The adjacent gravel road is also a snowmobile trail and may be closed if conditions require it. Only a few camp sites are occupied during the week days so the disturbance to camping from the haul road will likely be minor.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 120 square feet. The stand had a previous thinning where every third row was removed. This thinning will be accomplished by selectively thinning within the rows. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Compartment 14 – Stand 23 Conifer Thinning (17.5 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer type that is dominated by white pine. Other species present include: red maple, black cherry, white ash, sweet birch, black locust and pin cherry. The stand is over-stocked with a relative density of 127 percent and a basal area of 180 square feet. (Stand summary data is in Appendix seventeen.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There is an intermittent stream on the northern part of the sale boundary that feeds into Bear Creek and Bear Creek itself is approximately 200 from the eastern boundary.

Soil Resources: The soils found in this stand are predominately Gilpin channery silt loam, 10 - 20 percent slope. The Gilpin soils are moderately deep, well-drained soils formed on the uplands. These soils are fairly productive and have an estimated site index of about 80 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1950's. The planting was laid out with most of the rows going downhill towards Bear Creek. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: Within this stand there is a mountain bike trail that will be closed during the harvest operation, but special attention will be paid to keep it open otherwise. The adjacent gravel road is also a snowmobile trail and may be closed if conditions require it. Only a few camp sites are occupied during the week days so the disturbance to camping from the haul road will likely be minor.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. The stand had a previous thinning where every third row was removed. The proposed treatment will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 120 square feet. This will be accomplished by selectively thinning every third tree within rows. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Compartment 14 – Stand 29 Conifer Thinning (10.8 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer type that is dominated by white pine and red pine. Other species present include: black cherry, red maple and sugar maple. The stand is overstocked with a relative density of 123 percent and a basal area of 207 square feet. (Stand summary data is in Appendix eighteen.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: The stand boundary is approximately 500 feet upslope from Bear Creek. Plus there is an intermittent stream on the south that separates this stand from stand 23.

Soil Resources: The soils found in this stand are predominately Calvin, Ungers, Lehew channery loam, 10 - 20 percent slope. These soils are moderately deep, well-drained soils on the uplands. These soils have an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1950's. The planting was laid out with most of the rows going downhill towards Bear Creek. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: Within this stand there is a mountain bike trail that will be closed during the harvest operation, but special attention will be paid to keep it open otherwise. The adjacent gravel road is also a snowmobile trail and may be closed if conditions require it. Only a few camp sites are occupied during the week days so the disturbance to camping from the haul road will likely be minor.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 137 square feet. This will be accomplished by selectively thinning within the rows. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Compartment 14 – Stand 36 Conifer Thinning (5.6 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is a Norway spruce plantation. The stand is overstocked with a relative density of 120 percent and a basal area of 230 square feet. (Stand summary data is in Appendix nineteen.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There are no streams or ponds within or near the sale boundary.

Soil Resources: The soils found in this stand are predominately Dekalb channery loam, 0 - 10 percent slope. These soils are moderately deep, well-drained soils of medium texture. These soils have an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1950's. Appears to have been thinned but residual rows are not distinguishable. Evidence of recent fire was not observed in the stand during the recon.

Recreation Resources: Within this stand there is a mountain bike trail that will be closed during the harvest operation, but special attention will be paid to keep it open otherwise. The adjacent gravel road is also a snowmobile trail and may be closed if conditions require it. Only a few camp sites are occupied during the week days so the disturbance to camping from the haul road will likely be minor.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 153 square feet. This will be accomplished by selectively thinning every third tree. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Compartment 14 – Stand 52 Conifer Thinning (15.0 acres)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed conifer - hardwood type that is dominated by Norway spruce, red oak and black cherry. Other species present include: red maple, sweet birch white ash, and black locust. The stand is over-stocked with a relative density of 135 percent and a basal area of 190 square feet. (Stand summary data is in Appendix twenty.)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There are no streams or ponds within or near the stand boundary.

Soil Resources: The soils found in this stand are predominately Dekalb channery loam, 0 - 10 percent slope. These soils are moderately deep, well-drained soils of medium texture. These soils have an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site was an abandoned field that was planted to conifers during the 1950's. It appears that this stand has been thinned. Evidence of recent fire was not observed in the stand during the recon

Recreation Resources: Within this stand there is a mountain bike trail that will be closed during the harvest operation, but special attention will be paid to keep it open otherwise. The adjacent gravel road is also a snowmobile trail and may be closed if conditions require it. Only a few camp sites are occupied during the week days so the disturbance to camping from the haul road will likely be minor.

Silvicultural Prescription

The goal of the silvicultural treatment in this stand is to promote the vigor and health of the residual trees. This will be accomplished by cutting and removing approximately 1/3 of the basal area of the standing timber. The residual basal area will be approximately 126 square feet. This will be accomplished by selectively thinning every third tree. The selectively thinned trees will be unacceptable small saw timber size and pulpwood size trees. The residual trees will be evenly distributed across the stand and will be receiving more sunlight, water and nutrients.

Compartment 14 – Stand 62 Wildlife edge cut (1 acre)

Description/Resource Impact Assessment

Forest Community Type: The forest type is now a mixed hardwood type that is dominated by red oak and black cherry. Other species present include: red maple, sweet birch white ash, and black locust. The stand is over-stocked with a relative density of 135 percent and a basal area of 190 square feet.

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: There are no streams or ponds within or near the stand boundary.

Soil Resources: The soils found in this stand are predominately Dekalb channery loam, 0 - 10 percent slope. These soils are moderately deep, well-drained soils of medium texture. These soils have an estimated site index of about 70 for mixed oak. The productivity of the site will be protected by minimizing the haul roads and skid trails in accordance with our BMP and rutting guidelines.

Historic Conditions: This site, like most of SRSF was likely cutover and burned around the turn of the last century. No evidence of recent fire activity was observed in the stand during the recon.

Recreation Resources: No developed recreation resources in this stand.

Silvicultural Prescription

The goal of the silvicultural treatment is to create a soft edge facing the gas well from the southern side. This will be accomplished by cutting and leaving all the trees on this side for a depth of 66 feet.

Compartment 15 – Stand 34 Commercial Thinning (23.1 acres)

Description/Resource Impact Assessment

Forest Community Type: This area is a mixed hardwood type dominated by northern red oak and red maple. Other species present include: white oak, chestnut oak, sweet birch, black cherry, sassafras, American beech and white ash. The stand is overstocked, the relative density is 122 percent and the basal area is 172 sq. ft. (Stand summary data is included in Appendix twenty-one)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site.

Water Resources: Along the northern portion of the stand there are a number of intermittent streams.

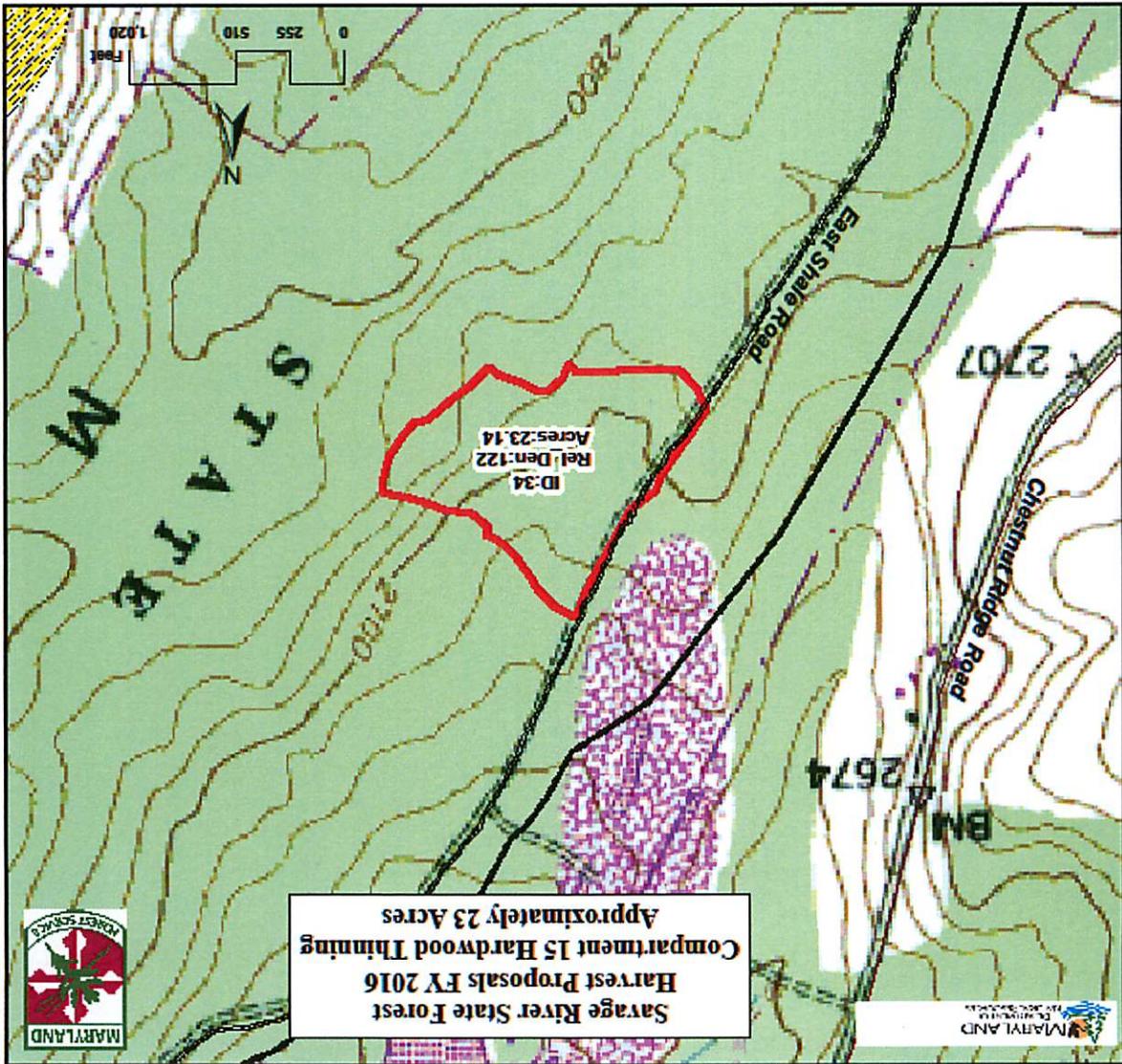
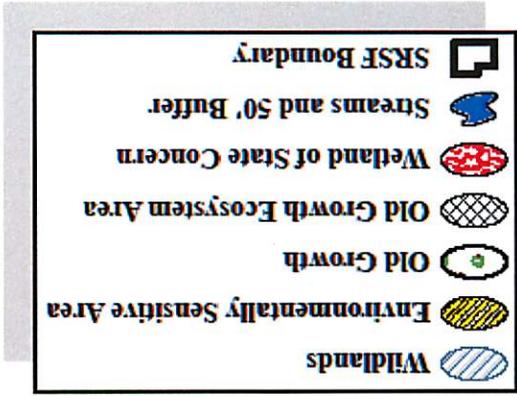
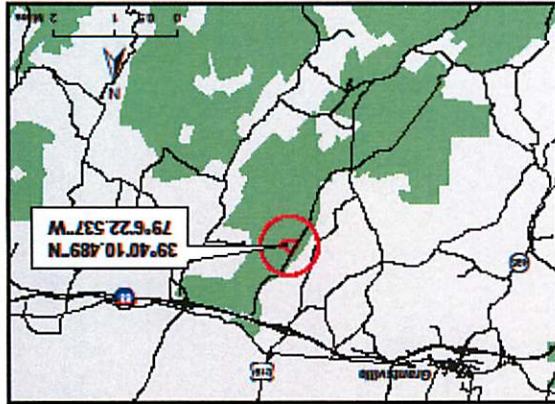
Soil Resources: The soils found on this site are the Cookport and Ernest very stony silt loams. These soils are somewhat poorly drained to well drained and very stony at the surface. The soils are fairly productive with an estimated site index of 80 feet. The productivity of the site will be protected by minimizing the haul roads and skid trails as outlined by our BMP and rutting guidelines.

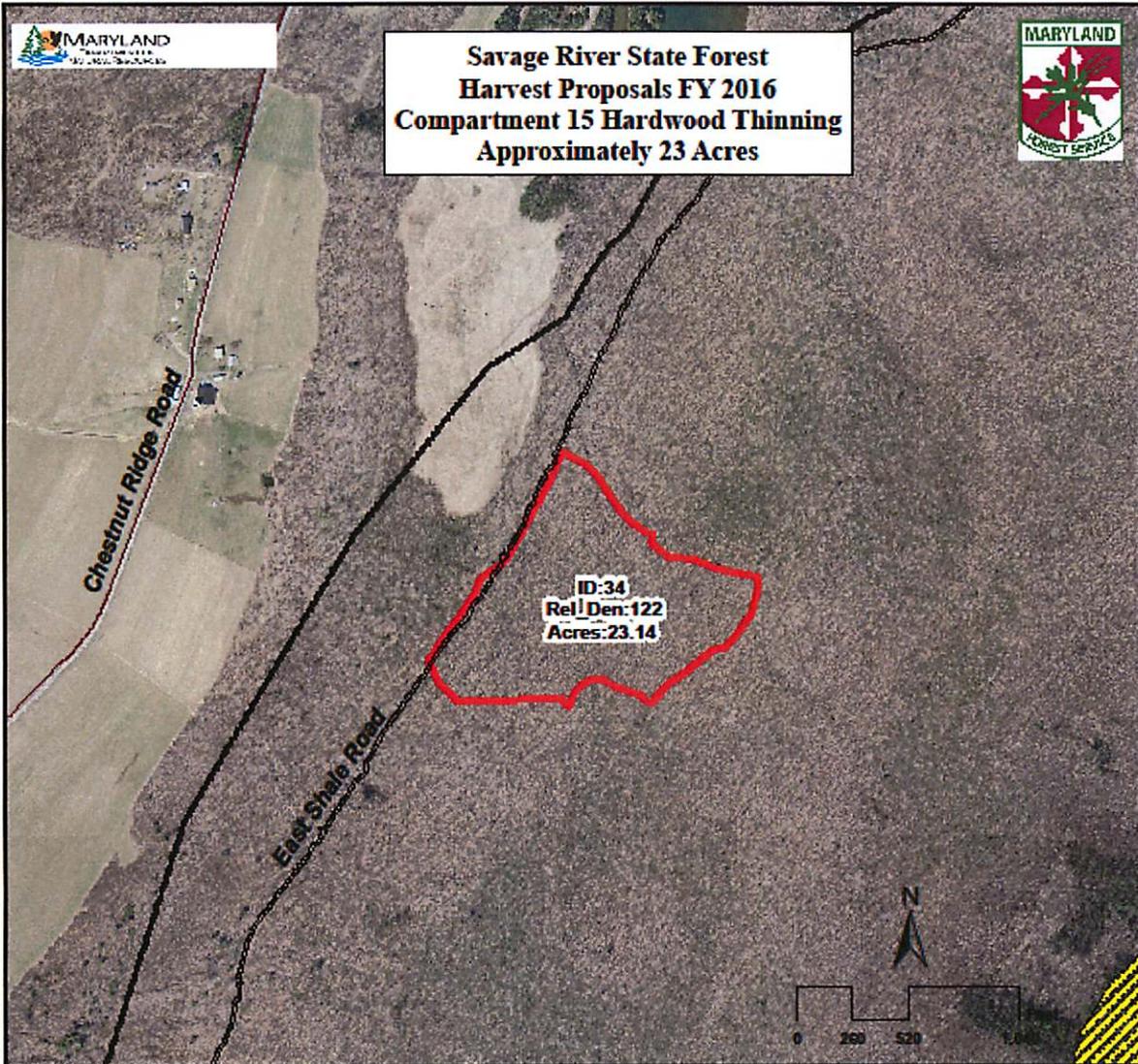
Historic Conditions: This site, like most of SRSF was likely cutover and burned around the turn of the last century. No evidence of recent fire activity was observed in the stand during the recon.

Recreation Resources: East Shale Road is an OHV trail and will be closed during the harvest operations.

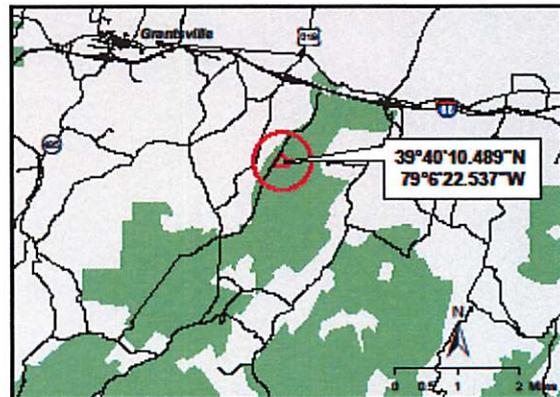
Silvicultural Prescription

This stand is approaching maturity and there is very little advanced regeneration in the stand. These two characteristics drive the recommendation to prepare the stand for regeneration. The first step is to control the striped maple and witch hazel in the shrub layer and the abundant ferns. If a broadcast application is practical then the entire shrub and fern layers can be controlled. This will increase the light level on the forest floor and stimulate the young oak seedlings present and stimulate the germination of any new acorns. The next step is to conduct the first cut of a shelterwood sequence, namely by removing most of the pulpwood and the unacceptable sawtimber. The target residual basal area is 115 sq. ft.





- Wildlands
- Environmentally Sensitive Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland of State Concern
- Streams and 50' Buffer
- SRSF Boundary



Compartment 45 – Crop Tree Release (37 acres)

Description/Resource Impact Assessment

Forest Community Type: This area is a mixed hardwood type dominated by sweet birch and red maple. Other species present include: black cherry, chestnut oak, northern red oak, cucumber tree, black locust, scarlet oak, hickory, sassafras and American chestnut. The stand is adequately stocked with a relative density of 70 percent and a basal area 57 (Stand summary data is included in Appendix twenty-three)

Rare, Threatened and Endangered species: There are no known rare, threatened or endangered species on this site or impacted by the silvicultural prescription.

Habitats and Species of Management Concern: There are no known habitats or species of management concern on this site; however this stand is part of the Old Growth Ecosystem Management Area (OGEMA).

Water Resources: The headwaters to Mill's Run are approximately 500+ feet east of the stand boundaries.

Soil Resources: The soils found on this site are the Dekalb and Leetonia very stony sandy loams. These soils are well drained, fairly acid and very stony at the surface. The soils are somewhat productive with an estimated site index of 60 feet. The productivity of the site will be protected since there will be no roads installed during this treatment.

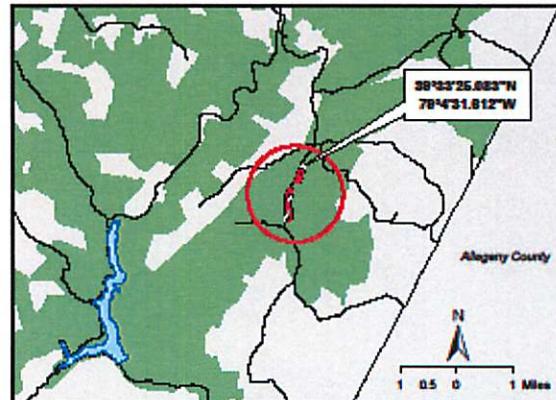
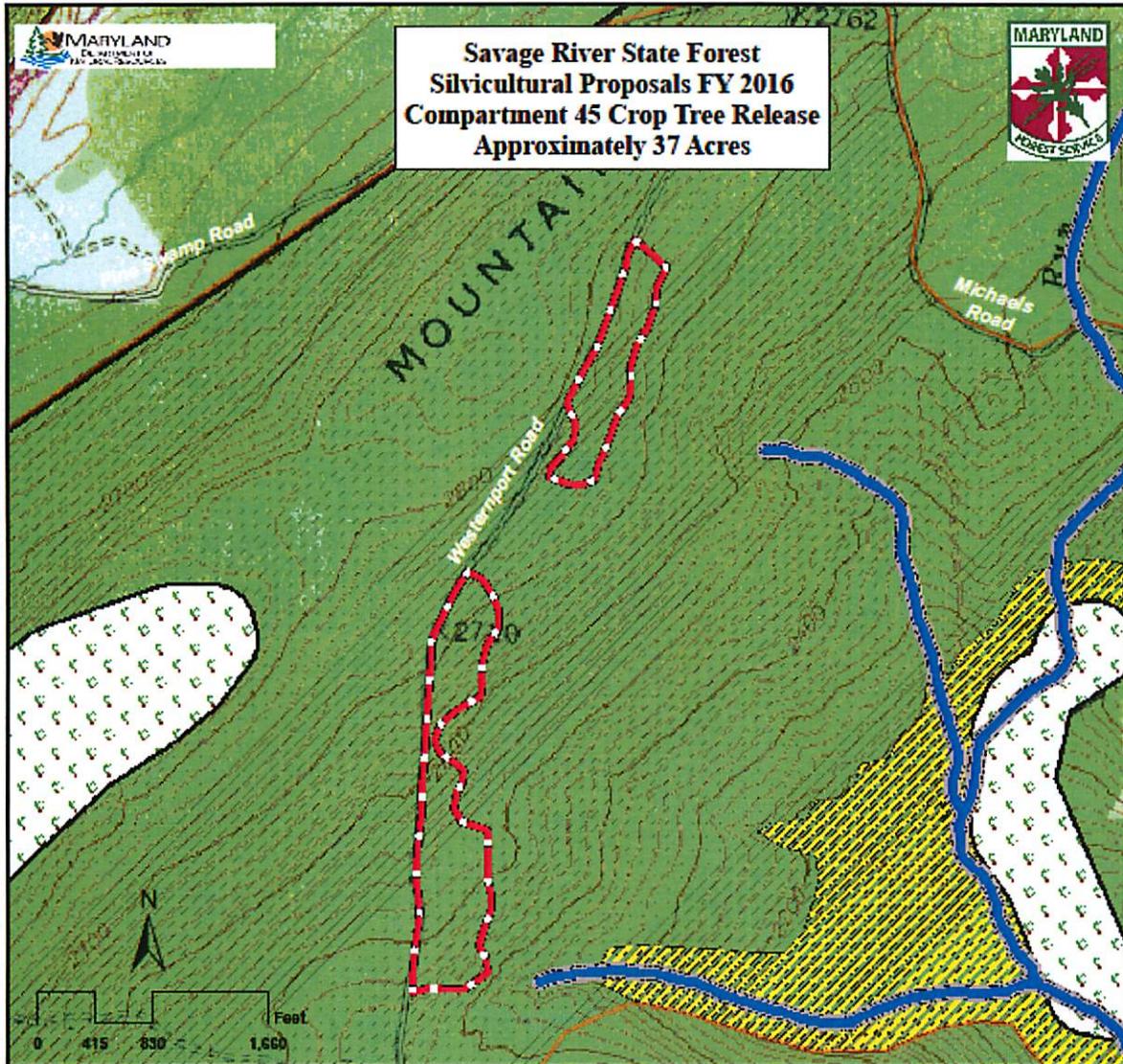
Historic Conditions: This site, like most of SRSF was likely cutover and burned around the turn of the last century. The stand had a regeneration clearcut in the late 2003. No evidence of recent fire activity was observed in the stand during the recon.

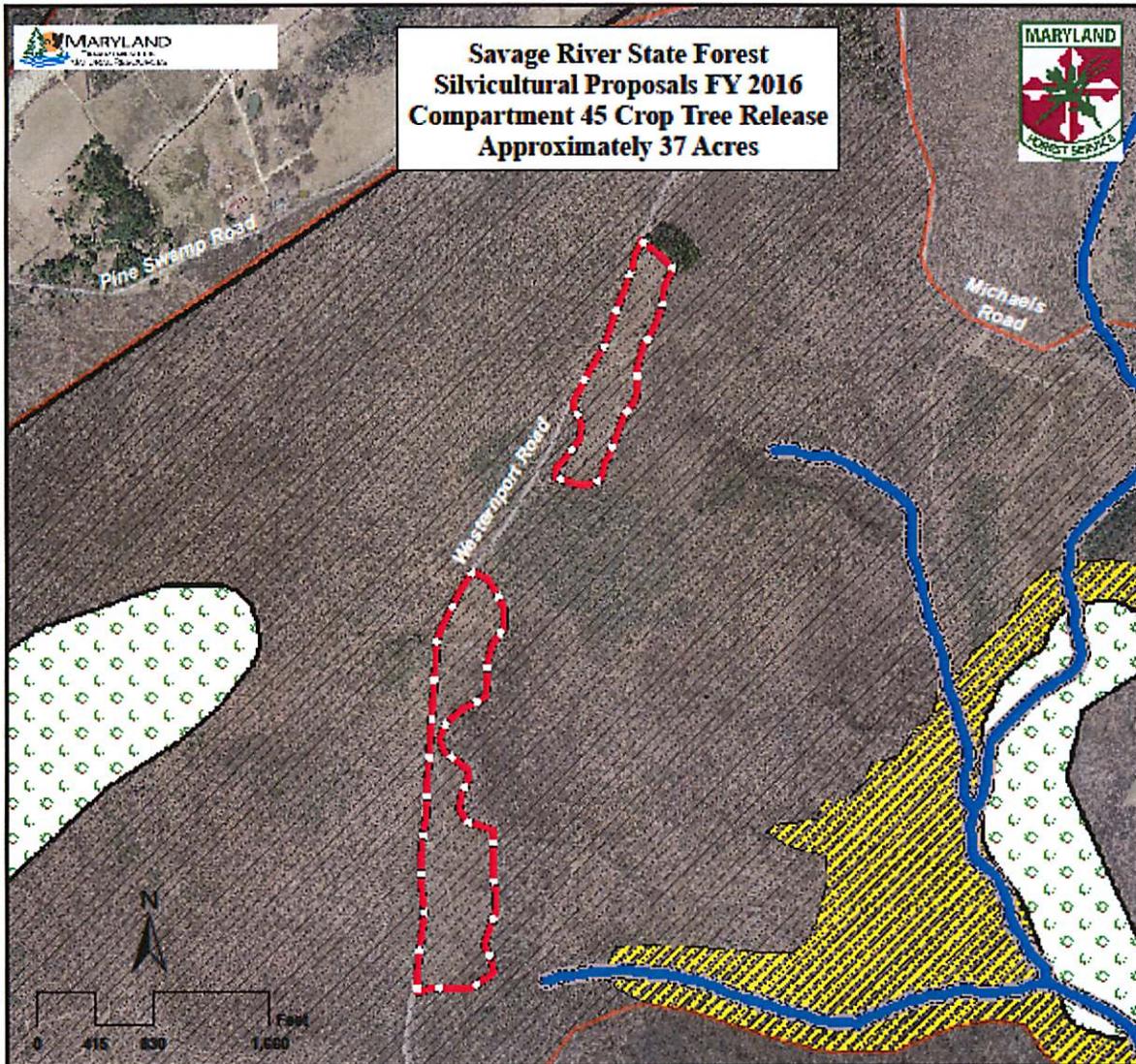
Recreation Resources: No developed recreation resources in the stand.

Silvicultural Prescription

This stand is a regenerating clearcut within an Old Growth Ecosystem Management Area. The overall goals of this OGEMA are to connect two Old Growth Areas and to become a future Old Growth Area. The objectives of the Crop Tree Release in these stands are to ensure that a diverse canopy develops that includes oak; to enhance vertical and horizontal diversity. Fifty to seventy-five crop trees should be released per acre. By doing this it will ensure that diverse, thrifty crop trees will be part of the new canopy. Releasing the crop trees with a 4 sided release will cause the crop trees to respond with rapid growth; thereby increasing the vertical diversity within the stand.

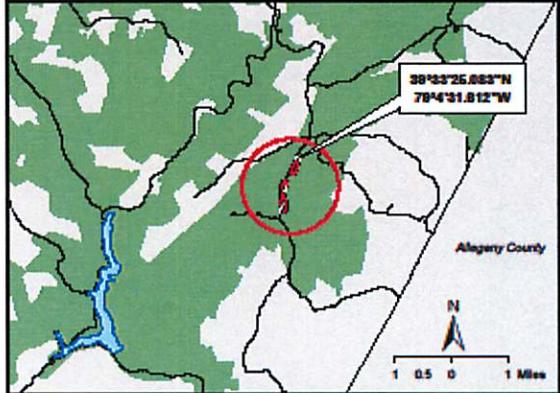
This stand will be divided into quarters with each quarter being randomly assigned a treatment. The four treatments are CTR in FY 16, CTR in FY 26, CTR in FY 36 and a control. The results of the sprouting competition on the growth of the crop trees will be monitored and reported to the wider forest community.





**Savage River State Forest
Silvicultural Proposals FY 2016
Compartment 45 Crop Tree Release
Approximately 37 Acres**

-  Wildlands
-  Environmentally Sensitive Area
-  Old Growth
-  Old Growth Ecosystem Area
-  Wetland of State Concern
-  Streams and 50' Buffer
-  SRSF Boundary



Review Process:

Savage River State Forest's Citizens Advisory Committee (CAC) Meeting September 6, 2014

Summary of Comments By Wade Dorsey

There was engaged conversation regarding the Annual Work plan for FY16, plans for the OHV trail and during the site visits. These bullet points are being presented to capture the essence of the meeting and tour.

The initial bullet points were developed from my notes and the recollection of Scott Campbell and myself. The initial bullet points were then shared with the Citizen's Advisory Committee for revision. Some committee members could not make the meeting and some committee members had more thoughts after the meeting and their emailed comments are explicitly included at the end of the summary.

Response to the comments are directly associated with the bullet point put in an italic font.

- A comment was made that the conifer stands could be thinned heavier than suggested in the plan. *Generally only 1/3 of conifer stands are removed to protect quality of the residuals and reduce the risk of wind and storm damage.*
- A comment was made especially in the red pine stands that are 50 - 60 years old that instead of thinning these stands should be regenerated. *We agree that at 50 -60 years the stand is approaching maturity but we want to retain as much conifer cover for wildlife as we can.*
- It was noted that the amount of timber being cut is much below the annual growth on the state forest and the amount of timber being removed should be increased to approach annual growth. *Acknowledged*
- Some frustration with the way the state forest gets funded was expressed by some CAC members and with the level of revenue being returned to the County in lieu of taxes. *Acknowledged*
- A number of editorial and grammatical comments were made. *These corrections have been made.*
- In the Description/Resource Impact Assessment area for particular silviculture treatments, the comment was made that the description/impact on the recreational resources should be made explicit. *Adopted in this AWP.*
- On the maps the location of the recreation resources (trails etc) should also have its own layer so the impact on these resources can be visually seen; like the ESA and other layers. *Will be adopted in future AWP's*
- Question was raised about what we mean by a "sustainable OHV trail." *This is a very board question, but briefly items that we include in our sustainable OHV trail definition include: a trail corridor that minimizes fragmentation of property and habitat; suitable soils for OHV use; minimize impact on rare, threatened or endangered plants and animals; minimize impact on wildlife species; minimize*

impact on water quality and quantity; minimize safety hazards to riders; incorporate social feedback from riders, neighbors and other stakeholders; and minimize maintenance costs.

- Request was made to have power-point notes given to the CAC. *Notes will be handed out to CAC members at future meetings.*
- A number of volunteer groups do work on the forest and they do not get any recognition from Annapolis. *Made tentative arrangements for folks from Headquarters to visit and acknowledge volunteer effort in the spring.*
- Request was made that staff contact Dave Brinker – Goshawk expert to understand the explicit tradeoffs in management. *Mr. Brinker visited the forest in March and is in agreement with the thinning operations for Goshawk habitat improvement.*
- Suggestion was made that we should consider restricting or eliminating firewood cutting within 10 feet of the edge of a stream. *Suggestion was incorporated into our firewood regulations.*

1) Emailed CAC comments from Steve Green

9/6/2014

ORV Trails – DNR should better define what a sustainable ORV trail means. The International Mountain Bike Association uses a 10% Average Trail guideline with allowances for steeper sections above 10% for short distances to help guide sustainable trail development. Rock surfaces which will not degrade can handle steeper trails and would be an exception to the guidelines. I have attached the 5 principles for sustainable trail building from IMBA as an example. *Slope and surface conditions are critical for sustainable OHV trails and consideration of these aspects will be included by the OHV design firm.*

Margraff Plantation – While there is a need to manage the timber resource here it needs to be balanced out with the recreational trail resource here. As additional work is planned it would be nice to have the MCC Crews come in behind to help reopen the trails. Trail in new clearcut areas will need much more maintenance going forward as the vegetation will be growing quicker into the trail. Also better communications with Garrett Trails of trail openings and closings would be recommended so that notice can be put on social media to inform trail users before they get to the trails. DNR Social Media postings would be a bonus also. Thanks to Wade for having future logging in trail areas require the logger to preserve the trail. Also thanks to Wade for allowing Garrett Trails to work on reestablishing the trail in the first Margraff area to be cut. *Use of social media is something we are new to but we will take advantage of both Garrett Trails and DNR social media platforms.*

Maps – There needs to be Recreational GIS data overlaid on the maps ie trails and other valuable recreational assets. There seems to be no mention of existing trails in the text either. This information should be provided to make decisions. *Maps will be included in future AWP's and textual inclusion in this AWP.*

2) Further emailed CAC Comments from Chuck Hoffeditz, PhD.

9/6/2014

My comments are fundamentally philosophical in nature. They are based on the fact that according to the 2016 Savage River State Forest Annual Work-plan, the harvest will be approximately 1 million board feet (1 mm BF) of saw timber.

According to the Savage River State Forest Sustainable Plan, (http://www.dnr.state.md.us/forests/pdfs/SRSF_Sustainable_Plan_2012.pdf) the annual growth is 12.9 mm BF on the forest. Even in just the General Work Zone, the annual growth is 6.5 mm BF. Therefore, the 2016 Work Plan falls far short of cutting growth and should be significantly increased. *Acknowledged. We are trying to work in our overstocked stands first and doing so does not produce as much volume and value as final harvests.*

There are many reasons for increasing the harvest. Most of them are economical. There could be more staff hired on the State Forest to mark timber for cuts. Colleges could teach more foresters to work in the State Forests. Harvesting more timber will enable more loggers to cut and haul the timber. The economy of Garrett County would be significantly enhanced. I have even personally seen large 18 wheeler box trucks filled with chips headed down RT 135 toward the Luke Paper mill with West Virginia plates. It just seems that it would be better to thin timber in the Savage River State Forest and take the thinning's to the Luke mill rather than have chips hauled in from out of state. One must remember that a young forest is a healthy forest. *Acknowledged.*

The plan also provides for the payment of only \$37,500 to the county in lieu of property taxes. This is a paltry amount of money and could, in some cases, even be termed – embarrassing. Given that there are 55,155 acres in the State Forest that boils down to a “tax rate” of only \$0.67 per acre. Some could even consider this shameful. I have some examples that I received from the tax assessor in Garrett County (see attached) of taxes paid by individuals that own forested property that can be used in comparison to the \$0.67 and they are, Farms owned by private individuals that have forested land typically pay from \$1.55 to \$5.55 per acre. Woodland owners – under the FCMA Forestry Program or those with a Forest Stewardship Program pay property taxes of either \$1.40 or \$1.93 per acre and large Forestry Corporations owning Forest Land would typically pay approximately \$2.14 per acre. Furthermore, I know personally that a private forest land owner without any plan pays approximately \$60 per acre in taxes. *With time as we shift from thinning overstocked stands to regenerating stands the volume and value will increase and so will the revenue to the county.*

Assuming the Savage River State Forest did indeed harvest growth, (6.5 mm BF), the “taxes” paid to the county could be up to 6.5 times what is planned (\$37,500) or \$243,750.00 (which is approximately what was paid back in 2006). That would compute to a “tax rate” of \$4.42 per acre which is certainly not at all out of line.

One could go so far as to say that it would appear that it might be in order for the State of Maryland to sell the Savage River State Forest to a large private Forestry Corporation so that more monies could be paid to the County as property tax's, more foresters could be hired to cut and haul the timber, more students could be trained at colleges to mark the timber for cutting etc. The economy of Garrett County would also presumably be made better. Furthermore, the forest (that we currently know of as the Savage River State Forest) would be more healthy.

3) Follow-up CAC e-mail from Steve Green regarding Mr. Hoffeditz' comments.

9/9/2014

I would echo Chuck's comments that we are not harvesting what we can sustain-ably harvest and live within good environmental and recreational stewardship of our resources. Garrett County in my opinion is still recovering and this contribution to our economy would sure help the fine folks in this County. *Acknowledged.*

Interdisciplinary Team Comments
Summary comments by
Jack Perdue



Savage River State Forest

FY 2016 Annual Work Plan AWP ID Team Review
September 17, 2014

Attendance: Wade Dorsey, George Eberling, Eric Null (Parks), Jim Mullen (W&HS - Wildlife), Pete Hartman (MDE), Jack Perdue, Scott Campbell, Rick Latshaw (W&HS - Wildlife), Ed Thompson (W&HS - Natural Heritage), Alan Klotz (Fisheries), John Wilson (LAP), Steve Carr (LAP).

Below is a list of annual work plan issues discussed by the review team and proposal sites visited. This is not a complete list of AWP proposals.

Recreation

- A recreation study is to be done by Frostburg State employee Natalie Butta.
- Continental Divide loop bike trail will go through SRSF
- Plans are to implement the Margroff wildlife habit plan and Fairview plan
- ORV trail at St Johns Rock — August 25, 2014 state-holders meeting

New acquisitions

- Round's property near the Bear Pen Wildlands headwaters
- Owings-Magin property
- Newman-Miller property
- Enforcement against ORV misuse has become a DNR priority
- Wilson will be collecting priority ORV issue locations to be submitted to DNR NRP for enforcement action

Silviculture

- Working to improve conifer stand health and position
- All treatments will be thinning, with one regeneration harvest
- Red pine plantation — Wade will be working with Dave Brinker (Heritage) to better assess the proposals in regard to developing goshawk habitat

Compartment 7 (conifer thinning)

- Stand 44 (10.3 ac)
- Stand 6 (7.9 ac)
- Stand 8 (1.8 ac)
- Stand 7 (6.5 ac)
- Remove ~1/3 BA

Compartment 11

107.2 ac in total, a mixture of conifer and hardwood thinning projects

Stand 67

- near 50% slope
- Control understory
- Shelterwood stage one
- The plan is to fence after final removal

Stand 70

- At southern end over 50% slope
- No new roads

Stand 48

- Plant red spruce in developed openings

Stand 43

- Plant white pine with shelters

Compartment 14

Conifer thinning projects across eight stands

Stand 23

- 17.5 ac

Stand 29

- 10 Ac
- Remove ~1/3 BA

Stand 6

- White pine plantation

Stand 10

- Pine thinning
- Close to bike trail. Will temporarily close the trail during harvest period.

Stand 36

- 5.6 ac

Stand 52

- Bike trail through it

Compartment 15

- Stand 34
- Hardwood stand, commercial thinning
- 3-stage shelterwood

Compartment 45

- OGEMA zone
- Work to enhance old growth character
- Release 50-70 trees/ac CTR

Watershed Improvements

- Red spruce under-plantings
- Big Run stream bank stabilization project

Ecosystem Restoration

- Chop and Drop into streams
- May be working with County Roads for funding
- Exotic and invasive control

Monitoring Projects

- BMP checks
- Regeneration checks at 5-yrs
- Research projects
- Invasive plant control and monitoring
- Knotweed control

Budget

- Has remained at about the same levels

Recreation Trail Grants

- Carr reported on the status of the grants
- All were approved except \$5k for St Johns Rock ORV trail maintenance

Site Visits

East Shale Road

Question raised by the review team, “Do we buffer watercourses that are not intermittent?” “Should

we? “

Task — Send Savage River State Forest SMZ guidelines to WMD IDT

Collier Place

Steep slopes to harvest

Notes

- This site would be a good place to bring IDT back after harvest is completed.
- Part of this site will be fenced
- The slopes will be harvested but only from limited access with only minor soil exposure

Other Proposals

It was not deemed necessary by the ID Team to visit any other proposal sites
Unless otherwise noted, they can proceed as proposed

1) Emailed from Steve Carr

9/22/2015

Inventoried Trail Counters were given to the Forest Manager with instructions regarding installation. Questions should be directed to the vendor. The forest is entirely responsible for this new equipment. Trail data will be shared with the DNR Land Trails planner at the end of each season (January).

The Land Trails Division will check the ORV report that Paul prepared which includes a comprehensive list of sites (with GPS coordinates) where illegal ORV use has taken place.

All of the trails in the forest trail guide are the officially maintained trails, and they were GPS'd under a grant in 2010. There are other trails on the forest, but they are not official and they are not maintained.

The RTP grants are getting very competitive and future RTP grants from the forest should continue to focus on actual trail work, rather than purchasing equipment, unless the equipment clearly benefits trails.

The forest wants to produce more trail guides. This needs to be coordinated between Rodney Vese and Scott Campbell. Scott needs to send Rodney Vese all of the trail data they have, including trailheads, camp sites, shelters, bathrooms, and other recreational infrastructure for inclusion in the Recreational Trail Atlas. Rodney can help them figure out how to print color copies for all three forests. (rodney.vesejr@maryland.gov)

Compartment 6 in the Margraff plantation will require that the mountain bike trail be closed during harvesting. The contractor will be required in his contract to maintain the bike trail. This protocol was followed in previous timber harvests and Garrett Trails thought it was great, and they were even allowed to ride on weekends.

There was significant erosion on the skid trail **and** bike trail in the compartment recently cut on the Margraff plantation, but it was self-contained by the slash below and will heal within the next year. The buffer adjacent to the intermittent stream was adequate and there were no impacts related to erosion from the skid trails. But ORV trails and bike trails are held to a much higher standard than logging trails, and it is likely that the public will ask DNR why there are two standards. We need to develop a response that we ALL use. The ID Team's answer was that forest skid trails are closed after logging and are not used again, allowing them to quickly heal over, while recreational trails are in constant use.

We should explore building mountain bike trails in certain cutting units right after they have been cut, following the skid trails.

2) Emailed from John Wilson

There was considerable discussion on the illegal ORV use on DNR land and the fact that DNR has made this a law enforcement priority. There was also some discussion on the "on-going" research and monitoring that was occurring on the forest. ID team members were not aware of some of the research projects much less the results. In fact, there was some concern that certain projects may not have received an internal review. I also have to second Steve's issue with the apparent "double standard" when it comes to skid trails versus the standard we hold the other trail users to.

Public Comments

1) Emailed from Dan Gomez

11/29/2015

I advocate the cutting of mature trees in accordance with timber management best practices. The cutting of mature trees will help regenerate young forest habitat, and promote much desired biodiversity in plant species and wildlife species within the region. A mature forest is a dying forest. A healthy forest will provide benefits for all concerned.

As a father, I want my children and their children to be able to experience the benefits of a healthy, regenerating forest system. As a bird hunter, I am a user of the forest, and want it to be able to support my activities.

I'd like to thank the MD DNR Forest Service for all of their great work in the past, and encourage their initiative. Thank you for the opportunity to comment.

2) Emailed from Trout Unlimited

12/4/2015

The Maryland Department of Natural Resources (DNR) is seeking public comment on the proposed 2016 fiscal year work plan for Potomac Garrett, Green Ridge, Savage River, Chesapeake and Pocomoke State Forests. The State Forest annual work plans identify the work that is to be accomplished on the forest in the next fiscal year within the scope of the forest's long-range management plan. The plans will address establishment, growth, composition, health and quality

forest management operations, along with maintenance and construction projects, and other required work. Comments will be received through December 5, 2014.

The Mid-Atlantic Council of Trout Unlimited represents over 2500 members in Maryland and the immediate environs. We are always watchful of any activities that might have any impact on our cold water resources, particularly when our native brook trout are in the planned area of any such activities.

We have reviewed the plans for FY 2016 for the Savage River State Forest. This forest protects the only relatively secure population of wild, native brook trout in the state and the immediate area. The loss of any forest cover over any stream inhabited by trout could mean a serious thermal impact to those fish. From our review of the plans for this forest, we do not see any significant impacts to the native brook trout in the Savage River watershed.

We would appreciate being kept informed of any changes to these or any other plans for this forest.

Sincerely, Don Haynes, Chair Mid-Atlantic Council Trout Unlimited

3) Emailed from J. Swope

12/5/2015

The following comments are for all 4 Maryland State Forests annual work plans for fiscal year 2016, including Green Ridge State Forest, Savage River State Forest, Potomac & Garrett State Forest and the Chesapeake & Pocomoke State Forest. They are general comments for all the forest work plans in Maryland and not specific to each work plan. I'm very experience about Green Ridge Forest, spending much time hiking and exploring the forest and hiking the Green Ridge Trail-starting in Pa. along 15 mile creek and other public lands, all the way to the C&O Canal and Potomac River. I have also commented at many public hearings at Green Ridge and other places in Maryland about Maryland forests and other public lands. I also have spent time in the Savage River Forest and it's trails and other areas. The Potomac/Garrett Forest areas I have visited but have spent less time there, as well as a few trips to the Pocomoke Forest. I oppose all of the work plans, as I do not agree on how Maryland and the DNR do there so called management plans. My first area, of comments, is all about the so called economic value and benefits to the state and it's citizens, taxpayers and to local and regional communities. The state forests are under attack by logging/timber companies, many from other states, and not from Maryland. Contracts awarded to these mostly out of state companies, does not provide much economic value to Maryland citizens and taxpayers, and local employment to Maryland workers. The finished wood products, pulpwood and saw timber goods are often made from out of state producers (mills and factories) or even sent as raw material to oversea countries. The use of public lands for forest goods directly competes with the private land owners and their ability to profit from their own private property. Another aspect is that is deters more acquisition and protection of forest lands in Maryland by private ownership, which would benefit the environment, wildlife and tax base for Maryland citizens and taxpayers. There is much more economic value, for Maryland citizens and taxpayers, coming from recreational, tourism and increase property values, that are year long lasting and not from a short term time frame natural resource extraction, such as logging that has a negative impact on the environment and wildlife. There have been many economic reports and studies to back this up, for positive policies that benefits from environmental sound practices versus negative use of public

lands and forests. State timber and logging contracts (based on state forest management plans by state employees) are also approved by some of the same state employees and politicians, who may benefit, either directly or indirectly, from such actions. They have an inherent conflict of interests, of being too close to the logging and timber industries, who are awarded contracts, with potential personal, business, financial and political ties, including going to work or as personal consultants, for these companies, later on after leaving the employment for the state of Maryland. The state of Maryland should not ever be in direct business competition with the private land and forest owners of Maryland citizens and taxpayers for economic gain, advantage and profit. Maryland and DNR- must stop using this economic bias, as a reason for timber and logging, on our public lands, as a benefit for its citizens, taxpayers and certainly not to promote forest health. The only true winners at the money table are the timber companies, consultants and maybe some state employees or politicians for Maryland. The forests, wildlife, habitats, biodiversity and the environment, along with the citizens, taxpayers and local communities, end up as the big losers of these forest plans. While I have listed that the economics of Maryland state forest plans are a negative reason for opposition to all 4 plans, it is the least of my concerns, on the overall, DNR and states so called management of our public forests and public lands. The following issue points, listed next, starting with the most destructive, first- now allowed under current management practices and policies of the state of Maryland and DNR for all state forest and public lands are my objections to each and every one of these forest plans.

- 1- Logging/timber resource extraction (listed in plans under many names of silviculture harvesting practices)
- 2-Road building and all other permanent man made structures/activities
- 3-Off road and all other motorized trails
- 4-All other types of resource extraction operations
- 5-Use of chemicals, herbicides and pesticides
- 6-Allowing very intensive and damaging high level activities with large numbers of participants and motor vehicles
- 7-Connections to educational institutions (example-Allegheny College of Maryland-Forestry Program and its Summer Harvesting Course)-while preaching a multi-use and even age stand forest practices and then setting aside public lands for them to timber and harvest as an experimental project. Public land use should not be used this way, allowing only this certain practice as the only way.
- 8-Any and all other private development and or use of public lands

Commercial logging and timber harvesting, along with the above mentioned items-should never be allowed on our forest and other public lands in Maryland. They are destructive practices that bring many threats to a natural forest ecosystem and all living processes within. We must do all we can to protect the biodiversity of these forests, and its wildlife, birds, reptiles, amphibians, fish, other aquatic species, bats and other pollinators, plants, flowers, rare, threatened and endangered species-in other words all flora and fauna. The above mentioned 8 items, also bring problems by use of heavy industrial equipment, skid (logging) staging areas, runoff, erosion, pollution of waterways, lack of strong regulations and enforcement of buffers, steep slope activities, compaction of soils, and poor oversight, before, during and after logging. The percentage of Maryland public state lands, compared to that in private ownership in Maryland and to other states is very small and needs to be used for other purposes that private ownership does not provide, for the common good and benefits

of all citizens and not for resource extractions or very damaging environmental practices. They also have a negative impact on migration routes (air-water-land), hiking trails, fire safety, hunting, and historical sites. Still more they open up areas for invasive and non-native species, reduce larger tracts of land space for interior forests dwelling species that need it to breed, raise it's young, food sources, and shelter so they may survive and flourish and to prevent devastating impact from outside activities and edge forest type predators. These activities also create noise, light, air and visual pollution, mar scenic sites-all of which can last for a long time and have negative consequences for forest inhabitants and their daily and seasonal activities. Trees may be the major component and most visible of forest systems-but to survive it needs many others-different layers of flora and fauna from the top canopy to beneath the ground and soils-decaying matter-snags-insects-fungi-bacteria-worms-pollinators-seed carriers-root systems-many different animals-birds and plants-all interconnected to a living, vibrant community that has a symbiotic relationship for a healthy natural and diverse forest. Long before many of the early inhabitants of this country and state set foot on this land-we had immense large tracts and intact old growth forests that stretch from the Atlantic to prairie states and plains-fill with large and abundant species of many sizes and quantities, in our forests and in our waterways and skies-doing just fine without a management plan. It has been mainly human activities that have brought the diseases, even insects and drought, along with greedy consumption of resources-both of flora and fauna-without considering the carrying capacity of the lands, waters and skies-for a more sustainable presence and to share with future generations. The Maryland DNR can call it what ever they like-timber-logging-even age management-multi use(more like abuse)-monoculture-silviculture practices(retention harvest-timber stand improvement-variable retention-clear cut(not so much now-this label-because of public outcry)-commercial thinning-shelterwood-understory control-culling and whatever else they come up with),all of which equals to treating our public lands-like a plantation crop and nothing more-even though they try to throw in a few crumbs of environmental hype-here and there-calling it mixed use. They also come up with such names as managed areas-harvest areas-general management areas to cover up their board feet quotas to satisfy a so called sustainable management plan/principles/practices-which it is not. I believe you can not have a healthy forest-using their current practices-for a species to survive-like the American Chestnut-you don't keep on logging-until you reach a point of no return (if you would really know or care)-and destroy all the surrounding components so that a species is no longer healthy enough to survive a blight and pass on its genetic diversity to a next generation of American Chestnut. We could have save it and others-if not for greed and ignorance. Lastly, I will give my opinions on how and what the state of Maryland and DNR can really do-to protect-preserve and enjoy the wonders of our states public forests and public lands.

Positive actions and steps for a healthy, sustainable, natural forest ecosystem

1-Stop all of the harmful and destructive actions-mentioned in my 8 points above

2-Protect against all the negative issues and practices-mentioned above

3-Increase and enforce stronger environmental regulations to preserve biodiversity, habitats, species, wildlife and protect our water-air-land from pollution and degradation

4-Increase budgets for all public lands and-forests acquisitions and protection

5-Increase the areas and sites for wildlands

6-Acquisitions priorities-connection to already owed lands-inholdings-larger intact tracts-adjoining to other states public lands and trails-to missing links and migration routes (air-land-water)

7-Change Program Open Space Funding-so that all funds go to land acquisitions and none to development-giving larger tracts and sensitive areas-top priority

8-Increase old growth forests-by various means

9-Provide more incentives for private land owners to invest in forest (large tracts) and practice sound environmental and long lasting sustainable practices and policies, if they log and harvest their lands.

10-Provide more incentives for in state manufacturers, sawmills and factories to produce sustainable and environmental friendly local wood products, from those private forest lands-yes it can be done

11-Eliminate any and all conflict of interest issues between state employees and politicians of the State of Maryland, from personal, business, relatives, financial and political connections.

12-Have a much more open and public disclosure of all Maryland public land issues, by various news media (all types), weekly updates and disclosures, county by county monthly public meetings, all public meetings and hearings announced 2-3 months in advance and weekly notices the last 4 weeks before those meetings and hearings-at least 60 days for all comment periods-frequent communications with organizations and groups that have like concerns with land issues and wildlife in Maryland with DNR. The meetings and hearings should be held at places and times, that most citizens and working folks can attend in each and every county in Maryland and not at the Holidays (esp.- Nov.15 to Jan.7-or holiday weekends) and postpone with adequate notification because of bad weather- I included all of these examples-because of my past experiences with local-state and federal officials and agencies.

We can reverse all the negative environmental accumulative impacts from past policies and practices of Maryland's and DNR State Forests and other public lands, only if we start the process now-for it will not happen overnight and may need adjustments and additions.

We all need to work together for a brighter and more healthy future for the generations to come, so all can share the joy and wonder of our Forests and all public lands in Maryland, to protect, explore and enjoy the natural world and all its gifts.

Thank You for the opportunity to voice my opinions, share my concerns and comments on Maryland's State Forest Work Plans.

FOREVER WILD/FOREVER FREE

4) Emailed from Ruffed Grouse Society (Linda Ordiway)

12/5/2015

Conifer plantations within the landscape provide a unique habitat component for some obligate species of primarily songbirds. From a historic perspective these stands should be managed to remain as legacy stands within SRSF.

RGS would suggest the creation or maintenance of cutback borders around the herbaceous and wildlife openings for increased benefit to wildlife as potential escape cover where appropriate. We would also request the opportunity to comment or assist in the development of the Margroff wildlife habitat unit operating plan scheduled for completion during the upcoming FY.

Following the completion of surveys of the Rounds and Owings Property and a determination of management direction is reached, RGS would be very interested in providing assistance in developing the management plan and subsequent implementation for quality ESH creation on these two properties. Engaging potential stakeholders in the initial stages may prove beneficial long-term.

Under the proposed Silviculture treatments / prescriptions it becomes very apparent there is a uniform lack of advanced desirable regeneration on most of these stands. The regeneration present is of undesirable and interfering woody / herbaceous species. The focus for the following FY and in previous plans then involves intensive stand prep for future commercial harvests. Altering the pre - or immediate post-harvest procedures could eliminate the added cost during stand development. This effect of deer legacy seems perpetual within this forest. The willingness of the staff of SRSF to focus on the development of future stand conditions is professionally appreciated.

Historically the acres completed comprise less than 50% of the acres proposed for work during any given Plan beginning in 2002 (excluding the proposed prescribed fire acreage). The RGS would again strongly support increasing the accomplished acres with regard to silviculture treatment.

The soft edge creation proposed for the gas well site to a distance of one chain states cutting and leaving all stems within this zone. If this is accomplished as stated it is difficult to conceptualize how the edge created as soft. I would suggest establishing a criteria such as all stems whose canopy will enter the well site area be removed with preference for leave trees being given to species beneficial for wildlife. This list would be developed with input from the Wildlife and Natural Heritage personnel. Other suggestive criteria could include to leave no more than 2 trees >12" DBH within 100' linear distance, and removal of stems > 3" DBH.

5) Emailed from D. Wolf (RGS member-Backbone Mtn, Chapter)

12/5/2015

Thank you for the opportunity to make a public comment on the upcoming work plans for the Management of the State Forest.

Thank you for all the present and past work that the MD DNR does and has accomplished on the State Forest.

I briefly reviewed the plans for the Savage River State Forest and Potomac-Garrett State Forest. The plans were very extensive.

I am a Member of the Ruffed Grouse Society/Backbone Mountain Chapter and a user of the State Forest to enjoy hunting with my bird dogs and enjoying the pursuit of Ruffed Grouse and the American Woodcock.

I support all efforts to create habitat for the Ruffed Grouse and American Woodcock which also benefits other wild game species and songbirds.

This habitat support is for the creation of more young regenerating Forest through timber management.

Their is also the importance of varying standing aged trees and structure to increase overall forest health.

This type of habitat is necessary for a variety of declining wildlife species within the region.

Thank you once again for the opportunity to provide comments on your management plans.

Your consideration and hard work in managing the State Forest is greatly appreciated.

6) Emailed from Ducks Unlimited (C. Heaps)

12/5/2015

I would like to make a couple of quick comments on the upcoming FY 2016 MD State Forest Annual Work Plans for Green Ridge State Forest, Savage River State Forest, Potomac-Garrett State Forest and Chesapeake Forest/Pocomoke State Forest.

I am an upland bird and turkey hunter and a user of the Forests in Maryland and I would like to thank MD DNR Forest Service for their past work and the opportunity to provide comments on the management of your State Forests.

I support the creation of more Young Regenerating Forest Habitat through timber management and stress the importance of varying stand age and structure to increasing overall forest health. This type of habitat is necessary for a variety of declining wildlife species within the region.

Thanks again for the opportunity to comment.

G. Watershed Improvement Projects

Stream bank stabilization along Big Run Road is now being done in conjunction with the “chop and drop” project (below). Big Run is eroding into the bank and threatening Big Run Road in three places. We are working with Watershed Services, Freshwater Fisheries, Wildlife and Heritage Service and a private engineering firm to design and implement appropriate measures to reduce the erosion of the bank without causing problems down stream.

In conjunction with the Youghiogheny Chapter of Trout Unlimited, the Savage River Watershed Association, and students from Frostburg State University, efforts are being made to keep our streams clean from trash and tires. The Savage River Watershed Association has also taken the lead in underplanting a number of hemlock stands with red spruce in the hopes of maintaining conifer cover over streams in the advent of serious hemlock woolly adelgid infestation and resulting mortality.

E. Ecosystem Restoration Projects

In fiscal year 2012, the Inland Fisheries Service and the staff at SRSF submitted a grant request to implement a “chop and drop” program where woody biomass is selectively added to Big Run to improve habitat for brook trout. This effort should be completed in FY 15 but may run into FY 16. If this effort is successful we will continue the program in other streams.

In the Fairview Wildlife Habitat unit there are a number of areas with exotic and invasive plants that will be controlled in conjunction with the Wildlife and Heritage Service, the Savage River Watershed Association, students from Frostburg State University and other volunteers. These activities will also be occurring prior to silvicultural activity unless they will be controlled during or after the silvicultural treatment.

Along Dry Run there was discovered an infestation of yellow archangel, an urban land cover that we have been working to eliminate from the forest. We expect to be successful because it is limited in size. Because of buried seed, however, it may take a few years of treatment.

Monitoring Projects

On going silvicultural timber operations will be monitored at least weekly and more often during adverse weather conditions.

Regeneration harvests will be monitored 5 and 10 years after harvest.

Ongoing research projects may continue in FY 2016.

Northern Flying Squirrel Acoustic Study

Submitted Budget Request

The Budget for Savage River State Forest is \$612,977. Of that amount, \$335,645 goes to fund classified salaries and benefits for four employees, \$124,115 goes to fund six contractual employees, and \$37,500 to Garrett County in lieu of taxes payment, leaving \$115,717 to conduct forest operations. Savage River has for many years generated revenue that greatly exceeded its cost of operation. The majority of revenue is obtained from the sale of forest products. Successful marketing by selling the mix of species and grades of wood products that the market most demanded contributed substantially to successful revenue generation over the years.

Operational Management

1. Introduction

This section of the plan is designed to cover the annual cost and revenues associated with the operational management of Savage River State Forest (SRSF). It is the Department's intent that all revenues generated from SRSF will be used to pay for the management and operation of the Forest. The numbers expressed in this section are only estimates and averages of annual expenses and revenues. These numbers will fluctuate each year based on management prescriptions, economic conditions and public use of the forest.

The following information is a breakdown of Revenues and Operational costs associated with SRSF. These figures are only estimates that are based on projected revenues and operational expenses. Yearly changes in timber markets and weather conditions can severely affect revenues. Operational expenses will vary from year to year and the numbers below are based on the budget request submitted for FY-2016

2. SRSF Funding Sources: Estimated - \$612,977

State Forests in Maryland are funded from several sources. The first source is the revenue generated by the forests. These funds are deposited in the Department of Natural Resources' Forest or Park Reserve Fund and must be appropriated by the General Assembly through the annual budgeting process before being spent. The state forest budget is prepared approximately one year before the beginning of the fiscal year in which it will be spent. The budget then goes through the legislative approval/review process along with all other state operating budgets. Once adopted, the budget goes into effect the first day of the fiscal year (July 1st). Revenue generated by the state forest is designated special fund revenue. There may be special funds provided from the Department of Natural Resources' Forest or Park Reserve Fund that are not generated by this particular forest or there may be less special funds shown in the budget than was generated on this specific forest. The target for timber sale revenue in FY 16 is \$150,000. It is estimated that revenue from recreation activities on the forest will be approximately \$20,000.

The second source is included in the Maryland Forest Service's Off Road Vehicle (ORV) Budget. This separate budget is based on revenue generated from ORV permit sales statewide and is allocated back to the state forests through the budgeting process. ORV funds generated as permit sales at SRSF do not necessarily reflect funds allocated back to the SRSF operating budget. These

funds must be appropriated before being spent. ORV funds are a restricted special fund and can only be spent for ORV Trail related expenditures. The optimistic estimate for ORV funds in FY 16 is \$6,000

3. Operational Cost: Estimated Annual Expenses - \$612,977

Operational expenses are those costs paid directly out of the SRSF operational budget by the State Forest Manager. The Forest Manager prepares a proposed operational budget for the forest based on instructions provided by Department of Budget and Management approximately one year in advance of the fiscal year. The FY-2016 budget proposal will be prepared in August of 2014.

-Classified Salaries, Wages and Benefits: \$124,115

This cost is associated with Special Funds which are state tax revenues provided annually. These funds are used to pay SRSF Maryland Classified Employee Salaries.

-Contractual Staffing: \$124,115

This cost is associated with contractual staffing associated with operations of the state forest. Contractual personnel are responsible for conducting work outlined in the annual work plan, visitor services and administrative work, managing the daily activities on the forest, including boundary line work, maintenance of trails, forest roads, maintaining primitive campsites, a public shooting range, overlooks, wildlife habitat areas, and implementing all maintenance, recreational, silviculture, and ecosystem restoration projects.

- Land Operation Cost: \$115,717

This includes expenses for office and field equipment, vehicles, gates, gravel, signs, boundary paint, roadwork contracts and construction, trash removal from illegal dumping, boundary line work & surveying, tree planting, site preparation, control of invasive species, non-commercial thinning and other forest management practices. These costs vary greatly from year to year based on the activities identified in the Annual Work Plan.

- County Payments: \$37,500

These are revenue payments to local county governments which will vary every year. Payments are made on an annual basis to Garrett County based on 25% of the gross timber sale revenue generated from SRSF. These payments are used to help the counties offset the loss in property tax revenues which are not paid on state owned lands.

4. Summary

This is the general breakdown on Revenues and Operational Costs associated with the SRSF. As described, these figures will vary from year to year.

Total Revenue	\$612,977
Total Expenditure	\$612,977

Appendices

Appendix 1

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

 (Mar 13 2014 - 7-6.sil)

SPECIES >	ALL SP	NS	BC	WP	AUP	RP	RM
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COMPOSITION -- BA, % OF BA, TREES

TOT BA	220.0	100.0	45.0	30.0	20.0	15.0	10.0
SPECIES%	100.	45.	20.	14.	9.	7.	5.
# TREES	372.	113.	46.	82.	27.	33.	72.

QUALITY -- % IN AGS

SAPS	0.	0.	0.	0.	0.	0.	0.
POLES	80.	100.	100.	80.	0.	100.	0.
SM SAW	83.	100.	88.	100.	0.	0.	0.
MED SAW	100.	100.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	82.	100.	89.	83.	0.	100.	0.

DIAMETERS AND AGES -- INCHES, YEARS

DIAM	12.7	14.6	13.8	9.0	12.0	9.3	6.0
DIAM MER	12.9	14.6	13.8	9.0	12.0	9.3	8.0
QUAD DIA	10.4	12.8	13.4	8.2	11.7	9.2	5.1
YRS MAT	31.	23.	21.	60.	40.	58.	50.
EFCT AGE	79.	97.	69.	60.	80.	62.	40.

STRUCTURE

Q FACTOR	1.23	1.07	0.95	1.66	1.40	0.78	0.00
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RELATIVE DENSITY -- %

REL DEN	130.	58.	18.	22.	12.	11.	9.
AGS RDEN	103.	58.	16.	18.	0.	11.	0.

VOLUMES AND VALUES - INT 1/4" LOG RULE

GTOT CDS	65.1	31.6	14.9	7.4	6.0	4.0	1.2
NTOT CDS	47.3	25.3	11.9	5.9	0.0	3.2	1.0
PULP CDS	21.9	7.4	6.8	4.7	0.0	2.0	1.0
GRS BDFT	20373.	13445.	3241.	988.	1528.	1172.	0.
NET BDFT	14918.	11001.	2597.	677.	0.	643.	0.
DOLLARS	1109.	148.	937.	15.	0.	7.	2.

Appendix 2

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

 (Mar 13 2014 - 7-7.sil)

SPECIES > ALL SP	NS	NRO	SB	WP	RP	
COMPOSITION -- BA, % OF BA, TREES						
TOT BA	212.0	180.0	12.0	8.0	8.0	4.0
SPECIES%	100.	85.	6.	4.	4.	2.
# TREES	301.	221.	25.	41.	7.	7.
QUALITY -- % IN AGS						
SAPS	100.	100.	0.	0.	0.	0.
POLES	60.	100.	0.	0.	0.	100.
SM SAW	97.	100.	0.	0.	50.	0.
MED SAW	100.	100.	100.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.
ALL SIZE	91.	100.	33.	0.	50.	100.
DIAMETERS AND AGES -- INCHES, YEARS						
DIAM	13.5	14.1	11.3	6.0	14.0	10.0
DIAM MER	13.7	14.3	11.3	6.0	14.0	10.0
QUAD DIA	11.4	12.2	9.3	6.0	14.0	10.0
YRS MAT	28.	25.	33.	80.	27.	53.
EFCT AGE	90.	95.	57.	40.	93.	67.
STRUCTURE						
Q FACTOR	1.16	1.08	1.59	0.00	0.00	0.00
RELATIVE DENSITY -- %						
REL DEN	128.	105.	8.	7.	5.	3.
AGS RDEN	112.	105.	2.	0.	2.	3.
VOLUMES AND VALUES - INT 1/4" LOG RULE						
GTOT CDS	65.1	57.0	3.4	1.0	2.6	1.1
NTOT CDS	52.1	45.6	2.7	0.8	2.1	0.9
PULP CDS	16.8	12.5	2.0	0.8	0.9	0.4
GRS BDFT	26879.	25147.	411.	0.	852.	469.
NET BDFT	21336.	20036.	380.	0.	663.	257.
DOLLARS	338.	191.	136.	2.	8.	2.

Appendix 3

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

(Mar 13 2014 - 7-44.sil)

SPECIES >	ALL SP	RM	BC	RP	NS	AUP	WA	SVB	WP
COMPOSITION -- BA, % OF BA, TREES									
TOT BA	196.7	63.3	46.7	40.0	30.0	6.7	3.3	3.3	3.3
SPECIES%	100.	32.	24.	20.	15.	3.	2.	2.	2.
# TREES	479.	207.	42.	87.	76.	14.	6.	38.	10.
QUALITY -- % IN AGS									
SAPS	50.	0.	0.	0.	100.	0.	0.	0.	0.
POLES	41.	13.	0.	75.	100.	0.	0.	0.	100.
SM SAW	85.	50.	92.	100.	100.	0.	0.	0.	0.
MED SAW	100.	0.	100.	0.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	63.	21.	93.	83.	100.	0.	0.	0.	100.
DIAMETERS AND AGES -- INCHES, YEARS									
DIAM	10.7	8.5	14.7	9.8	11.3	10.0	10.0	4.0	8.0
DIAM MER	10.9	8.5	14.7	9.8	12.2	10.0	10.0	0.0	8.0
QUAD DIA	8.7	7.5	14.3	9.2	8.5	9.4	10.0	4.0	8.0
YRS MAT	40.	47.	16.	54.	38.	53.	40.	120.	67.
EFCT AGE	61.	43.	74.	66.	82.	67.	50.	0.	53.
STRUCTURE									
Q FACTOR	1.77	2.15	1.51	1.02	1.36	1.50	0.00	0.00	0.00
RELATIVE DENSITY -- %									
REL DEN	127.	48.	18.	28.	20.	5.	2.	4.	3.
AGS RDEN	71.	9.	17.	22.	20.	0.	0.	0.	3.
VOLUMES AND VALUES - INT 1/4" LOG RULE									
GTOT CDS	50.8	13.7	15.3	10.4	7.8	1.8	0.9	0.0	0.8
NTOT CDS	39.2	11.0	12.3	8.3	6.3	0.0	0.7	0.0	0.6
PULP CDS	26.1	9.6	6.8	5.3	3.0	0.0	0.7	0.0	0.6
GRS BDFT	10456.	1000.	3817.	2702.	2678.	259.	0.	0.	0.
NET BDFT	7288.	576.	3075.	1685.	1952.	0.	0.	0.	0.
DOLLARS	1261.	39.	1178.	19.	22.	0.	1.	0.	1.

Appendix 4

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

(Mar 13 2014 - 11-10.sil)

SPECIES > ALL SP	NS	RM	BC	NRO	BO	
COMPOSITION -- BA, % OF BA, TREES						
TOT BA	204.0	84.0	56.0	44.0	16.0	4.0
SPECIES%	100.	41.	27.	22.	8.	2.
# TREES	1440.	815.	341.	49.	51.	183.
QUALITY -- % IN AGS						
SAPS	75.	75.	100.	0.	0.	0.
POLES	83.	100.	33.	50.	100.	0.
SM SAW	77.	100.	80.	50.	0.	0.
MED SAW	17.	0.	0.	33.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.
ALL SIZE	73.	95.	57.	45.	100.	0.
DIAMETERS AND AGES -- INCHES, YEARS						
DIAM	9.8	7.5	10.9	14.2	8.0	2.0
DIAM MER	11.1	8.7	12.9	14.2	8.0	0.0
QUAD DIA	5.1	4.3	5.5	12.8	7.6	2.0
YRS MAT	39.	62.	25.	19.	50.	120.
EFCT AGE	62.	58.	65.	71.	40.	0.
STRUCTURE						
Q FACTOR	1.80	2.07	1.59	1.63	1.67	0.00
RELATIVE DENSITY -- %						
REL DEN	147.	71.	41.	18.	12.	5.
AGS RDEN	113.	66.	27.	9.	12.	0.
VOLUMES AND VALUES - INT 1/4" LOG RULE						
GTOT CDS	45.3	14.8	12.9	14.0	3.5	0.0
NTOT CDS	36.2	11.9	10.3	11.2	2.8	0.0
PULP CDS	23.9	7.3	6.7	7.1	2.8	0.0
GRS BDFT	7903.	3775.	1736.	2392.	0.	0.
NET BDFT	5626.	2653.	938.	2035.	0.	0.
DOLLARS	950.	28.	30.	887.	6.	0.

Appendix 5

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

(Mar 13 2014 - 11-11.sil)

SPECIES >	ALL SP	RP	BC	NS	NRO	RM	WA
COMPOSITION -- BA, % OF BA, TREES							
TOT BA	253.3	173.3	40.0	20.0	6.7	6.7	6.7
SPECIES%	100.	68.	16.	8.	3.	3.	3.
# TREES	355.	200.	45.	19.	76.	12.	2.

QUALITY -- % IN AGS							
SAPS	100.	0.	0.	0.	100.	0.	0.
POLES	75.	100.	100.	0.	0.	0.	0.
SM SAW	93.	100.	0.	100.	0.	0.	0.
MED SAW	100.	0.	100.	0.	0.	0.	0.
LG SAW	100.	0.	0.	0.	0.	0.	100.
ALL SIZE	92.	100.	67.	100.	100.	0.	100.

DIAMETERS AND AGES -- INCHES, YEARS							
DIAM	13.1	12.8	14.0	14.0	4.0	10.0	26.0
DIAM MER	13.4	12.8	14.0	14.0	0.0	10.0	26.0
QUAD DIA	11.4	12.6	12.7	13.7	4.0	10.0	26.0
YRS MAT	29.	35.	20.	27.	90.	40.	0.
EFCT AGE	82.	85.	70.	93.	0.	50.	130.

STRUCTURE							
Q FACTOR	1.68	0.42	1.34	1.33	0.00	0.00	0.00

RELATIVE DENSITY -- %							
REL DEN	145.	104.	17.	11.	7.	4.	2.
AGS RDEN	135.	104.	11.	11.	7.	0.	2.

VOLUMES AND VALUES - INT 1/4" LOG RULE							
GTOT CDS	86.6	62.2	13.2	6.8	0.0	1.9	2.4
NTOT CDS	69.3	49.8	10.5	5.5	0.0	1.5	2.0
PULP CDS	10.9	1.2	7.0	0.6	0.0	1.5	0.6
GRS BDFT	42265.	35376.	2342.	3673.	0.	0.	875.
NET BDFT	31303.	25594.	2004.	2857.	0.	0.	848.
DOLLARS	1483.	130.	961.	15.	0.	3.	373.

Appendix 6

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

 (Mar 13 2014 - 11-12.sil)

SPECIES > ALL SP	NS	BC	RM	BL	SB	
COMPOSITION -- BA, % OF BA, TREES						
TOT BA	280.0	135.0	115.0	20.0	5.0	5.0
SPECIES%	100.	48.	41.	7.	2.	2.
# TREES	1341.	835.	235.	263.	6.	2.
QUALITY -- % IN AGS						
SAPS	40.	67.	0.	0.	0.	0.
POLES	71.	100.	42.	0.	0.	0.
SM SAW	53.	100.	30.	0.	100.	0.
MED SAW	67.	100.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.
ALL SIZE	62.	96.	35.	0.	100.	0.
DIAMETERS AND AGES -- INCHES, YEARS						
DIAM	10.1	9.1	11.0	8.0	12.0	22.0
DIAM MER	10.8	9.9	11.3	10.0	12.0	22.0
QUAD DIA	6.2	5.4	9.5	3.7	12.0	22.0
YRS MAT	41.	54.	34.	40.	40.	0.
EFCT AGE	62.	66.	56.	50.	80.	147.
STRUCTURE						
Q FACTOR	1.85	1.87	1.86	1.83	0.00	0.00
RELATIVE DENSITY -- %						
REL DEN	184.	104.	58.	17.	3.	2.
AGS RDEN	120.	98.	19.	0.	3.	0.
VOLUMES AND VALUES - INT 1/4" LOG RULE						
GTOT CDS	70.5	31.4	32.1	3.9	1.4	1.6
NTOT CDS	56.4	25.1	25.7	3.1	1.1	1.3
PULP CDS	35.6	12.3	19.1	2.8	0.8	0.7
GRS BDFT	16026.	10054.	4341.	339.	686.	606.
NET BDFT	11608.	7508.	3269.	216.	207.	408.
DOLLARS	1003.	63.	901.	19.	3.	17.

Appendix 7

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

 (Aug 25 2014 - 11-13.sil)

SPECIES > ALL SP | SCP BC RP STM

COMPOSITION -- BA, % OF BA, TREES

TOT BA	180.0	80.0	60.0	20.0	20.0
SPECIES%	100.	44.	33.	11.	11.
# TREES	731.	160.	495.	19.	57.

QUALITY -- % IN AGS

SAPS	50.	0.	50.	0.	0.
POLES	33.	0.	100.	0.	0.
SM SAW	25.	0.	0.	100.	0.
MED SAW	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.
ALL SIZE	33.	0.	67.	100.	0.

DIAMETERS AND AGES -- INCHES, YEARS

DIAM	9.8	12.0	6.0	14.0	8.0
DIAM MER	11.4	12.0	10.0	14.0	8.0
QUAD DIA	6.7	9.6	4.7	14.0	8.0
YRS MAT	39.	40.	40.	27.	67.
EFCT AGE	69.	80.	50.	93.	53.

STRUCTURE

Q FACTOR	1.39	1.49	0.00	0.00	0.00
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RELATIVE DENSITY -- %

REL DEN	137.	52.	54.	11.	20.
AGS RDEN	43.	0.	32.	11.	0.

VOLUMES AND VALUES - INT 1/4" LOG RULE

GTOT CDS	38.6	21.8	5.7	6.4	4.7
NTOT CDS	9.6	0.0	4.6	5.1	0.0
PULP CDS	4.7	0.0	4.6	0.1	0.0
GRS BDFT	9584.	5476.	0.	4108.	0.
NET BDFT	3199.	0.	0.	3199.	0.
DOLLARS	25.	0.	9.	16.	0.

Appendix 8

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

(Mar 13 2014 - 11-21.sil)

SPECIES >	ALL SP	CO	RM	NRO	BC	BG	AB	SB	WO	CUC
COMPOSITION -- BA, % OF BA, TREES										
TOT BA	152.7	66.4	36.4	27.3	5.5	5.5	5.5	3.6	1.8	0.9
SPECIES%	100.	43.	24.	18.	4.	4.	4.	2.	1.	1.
# TREES	356.	42.	73.	133.	18.	6.	16.	56.	1.	10.
QUALITY -- % IN AGS										
SAPS	80.	0.	100.	80.	100.	0.	0.	0.	0.	100.
POLES	63.	50.	67.	100.	100.	50.	40.	33.	0.	0.
SM SAW	80.	85.	77.	100.	100.	33.	100.	0.	0.	0.
MED SAW	93.	98.	67.	92.	100.	0.	0.	0.	100.	0.
LG SAW	100.	100.	100.	100.	0.	0.	0.	0.	0.	0.
ALL SIZE	83.	92.	75.	93.	100.	33.	50.	25.	100.	100.
DIAMETERS AND AGES -- INCHES, YEARS										
DIAM	15.4	18.0	12.8	16.7	10.7	13.7	8.7	5.0	19.0	4.0
DIAM MER	16.2	18.0	13.3	19.4	12.0	13.7	8.7	6.0	19.0	0.0
QUAD DIA	8.9	17.0	9.6	6.1	7.5	12.5	7.8	3.5	18.9	4.0
YRS MAT	11.	0.	24.	0.	30.	29.	62.	80.	0.	90.
EFCT AGE	93.	120.	66.	97.	60.	91.	58.	40.	127.	0.
STRUCTURE										
Q FACTOR	1.28	1.02	1.37	1.15	1.50	2.88	1.82	0.00	0.00	0.00
RELATIVE DENSITY -- %										
REL DEN	120.	62.	23.	17.	3.	3.	5.	4.	2.	1.
AGS RDEN	100.	56.	17.	16.	3.	1.	3.	1.	2.	1.
VOLUMES AND VALUES - INT 1/4" LOG RULE										
GTOT CDS	46.4	22.8	10.5	7.7	1.4	1.7	1.2	0.4	0.6	0.0
NTOT CDS	37.1	18.3	8.4	6.2	1.1	1.4	0.9	0.3	0.5	0.0
PULP CDS	17.5	6.9	5.0	2.5	0.9	0.9	0.9	0.3	0.1	0.0
GRS BDFT	12998.	7297.	2602.	2270.	175.	289.	125.	0.	241.	0.
NET BDFT	11115.	6522.	1803.	2139.	147.	250.	38.	0.	217.	0.
DOLLARS	1314.	211.	130.	826.	63.	5.	2.	1.	76.	0.

Appendix 9

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

 (Mar 13 2014 - 11-30.sil)

SPECIES >	ALL SP	AB	CUC	SB	BC	NRO	RM	YB	SM	AMC	YP
COMPOSITION -- BA, % OF BA, TREES											
TOT BA	153.3	35.0	33.3	31.7	28.3	8.3	6.7	3.3	3.3	1.7	1.7
SPECIES%	100.	23.	22.	21.	18.	5.	4.	2.	2.	1.	1.
# TREES	1293.	373.	232.	393.	180.	15.	66.	22.	6.	2.	5.
QUALITY -- % IN AGS											
SAPS	46.	33.	33.	64.	50.	0.	0.	100.	0.	0.	0.
POLES	85.	50.	100.	75.	85.	100.	100.	0.	100.	0.	100.
SM SAW	80.	89.	100.	0.	100.	0.	0.	0.	0.	0.	0.
MED SAW	100.	100.	0.	0.	0.	100.	0.	0.	0.	0.	0.
LG SAW	100.	0.	0.	0.	0.	100.	0.	0.	0.	0.	0.
ALL SIZE	74.	67.	90.	68.	82.	100.	25.	50.	50.	0.	100.
DIAMETERS AND AGES -- INCHES, YEARS											
DIAM	7.9	10.4	6.7	4.6	7.3	16.8	4.5	7.0	12.0	14.0	8.0
DIAM MER	9.7	13.5	7.3	6.0	7.9	16.8	6.0	10.0	12.0	14.0	8.0
QUAD DIA	4.7	4.1	5.1	3.8	5.4	10.1	4.3	5.3	10.1	14.0	8.0
YRS MAT	47.	30.	54.	80.	51.	6.	60.	53.	40.	27.	50.
EFCT AGE	55.	90.	36.	40.	39.	84.	30.	67.	80.	93.	40.
STRUCTURE											
Q FACTOR	1.76	1.60	2.53	0.00	2.26	1.24	0.00	0.00	1.41	0.00	0.00
RELATIVE DENSITY -- %											
REL DEN	138.	36.	29.	32.	21.	5.	7.	3.	3.	1.	1.
AGS RDEN	96.	23.	25.	21.	15.	5.	1.	2.	2.	0.	1.
VOLUMES AND VALUES - INT 1/4" LOG RULE											
GTOT CDS	22.9	6.3	4.9	1.6	5.3	2.4	0.2	0.4	0.9	0.5	0.4
NTOT CDS	17.9	5.1	3.9	1.2	4.2	1.9	0.2	0.3	0.7	0.0	0.3
PULP CDS	13.3	2.1	3.7	1.2	3.9	0.9	0.2	0.3	0.5	0.0	0.3
GRS BDFT	4624.	3589.	172.	0.	101.	608.	0.	0.	0.	154.	0.
NET BDFT	2404.	1615.	138.	0.	69.	581.	0.	0.	0.	0.	0.
DOLLARS	314.	35.	8.	2.	21.	245.	0.	1.	1.	0.	1.

Appendix 10

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

 (Mar 13 2014 - 11-43.sil)

SPECIES > ALL SP | WP BC SM BL SB SCP RM

COMPOSITION -- BA, % OF BA, TREES

TOT BA	215.6	171.1	24.4	6.7	6.7	2.2	2.2	2.2
SPECIES%	100.	79.	11.	3.	3.	1.	1.	1.
# TREES	361.	239.	61.	21.	7.	25.	4.	3.

QUALITY -- % IN AGS

SAPS	0.	0.	0.	0.	0.	0.	0.	0.
POLES	78.	78.	83.	100.	0.	0.	0.	0.
SM SAW	89.	93.	0.	100.	67.	0.	0.	100.
MED SAW	60.	100.	33.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	84.	90.	55.	100.	67.	0.	0.	100.

DIAMETERS AND AGES -- INCHES, YEARS

DIAM	12.0	12.2	11.5	8.7	13.3	4.0	10.0	12.0
DIAM MER	12.0	12.2	11.5	8.7	13.3	0.0	10.0	12.0
QUAD DIA	10.5	11.4	8.5	7.7	13.0	4.0	10.0	12.0
YRS MAT	38.	38.	33.	62.	31.	120.	53.	30.
EFCT AGE	77.	82.	57.	58.	89.	0.	67.	60.

STRUCTURE

Q FACTOR	1.50	1.61	1.63	1.57	1.89	0.00	0.00	0.00
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RELATIVE DENSITY -- %

REL DEN	135.	106.	13.	7.	4.	2.	1.	1.
AGS RDEN	112.	93.	8.	7.	3.	0.	0.	1.

VOLUMES AND VALUES - INT 1/4" LOG RULE

GTOT CDS	63.4	52.0	6.6	1.5	2.0	0.0	0.6	0.7
NTOT CDS	50.2	41.6	5.3	1.2	1.6	0.0	0.0	0.5
PULP CDS	16.4	10.5	4.1	0.9	0.7	0.0	0.0	0.3
GRS BDFT	26568.	23991.	826.	282.	1058.	0.	129.	282.
NET BDFT	18466.	17022.	718.	143.	441.	0.	0.	143.
DOLLARS	490.	119.	360.	4.	4.	0.	0.	3.

Appendix 11

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

(Mar 13 2014 - 11-47.sil)

SPECIES >	ALL SP	SM	WP	RM	BC	BL	SCP	CUC	WA	WO	SB
COMPOSITION -- BA, % OF BA, TREES											
TOT BA	150.0	77.1	27.1	17.1	12.9	5.7	4.3	1.4	1.4	1.4	1.4
SPECIES%	100.	51.	18.	11.	9.	4.	3.	1.	1.	1.	1.
# TREES	641.	375.	56.	68.	28.	27.	12.	7.	65.	0.	2.
QUALITY -- % IN AGS											
SAPS	50.	40.	0.	0.	0.	100.	0.	0.	100.	0.	0.
POLES	72.	85.	50.	86.	50.	0.	0.	100.	0.	0.	0.
SM SAW	92.	100.	100.	100.	100.	0.	0.	0.	0.	0.	100.
MED SAW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LG SAW	67.	50.	0.	0.	0.	0.	0.	0.	0.	100.	0.
ALL SIZE	75.	81.	68.	83.	78.	25.	0.	100.	100.	100.	100.
DIAMETERS AND AGES -- INCHES, YEARS											
DIAM	9.8	9.2	10.6	9.2	11.3	9.0	8.0	6.0	2.0	36.0	12.0
DIAM MER	10.3	9.8	10.6	9.6	11.3	10.7	8.0	6.0	0.0	36.0	12.0
QUAD DIA	6.6	6.1	9.4	6.8	9.2	6.3	8.0	6.0	2.0	36.0	12.0
YRS MAT	48.	55.	49.	42.	33.	49.	67.	60.	90.	0.	40.
EFCT AGE	64.	65.	71.	48.	57.	71.	53.	30.	0.	240.	80.
STRUCTURE											
Q FACTOR	1.92	2.52	1.56	1.69	1.39	1.54	0.00	0.00	0.00	0.00	0.00
RELATIVE DENSITY -- %											
REL DEN	130.	77.	18.	13.	7.	4.	3.	1.	3.	1.	1.
AGS RDEN	97.	62.	12.	10.	4.	2.	0.	1.	3.	1.	1.
VOLUMES AND VALUES - INT 1/4" LOG RULE											
GTOT CDS	33.2	15.8	7.3	3.5	3.5	1.0	1.0	0.2	0.0	0.5	0.4
NTOT CDS	25.8	12.7	5.8	2.8	2.8	0.8	0.0	0.2	0.0	0.4	0.3
PULP CDS	18.0	10.8	2.8	1.8	1.5	0.5	0.0	0.2	0.0	0.2	0.2
GRS BDFT	6275.	1595.	2398.	756.	881.	425.	0.	0.	0.	0.	220.
NET BDFT	4155.	1062.	1651.	519.	701.	155.	0.	0.	0.	0.	66.
DOLLARS	408.	106.	16.	35.	247.	2.	0.	0.	0.	0.	1.

Appendix 12

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

(Mar 13 2014 - 11-67.sil)

SPECIES >	ALL SP	CO	RM	NRO	SB	BC	BW	WO	BG	SVB
COMPOSITION -- BA, % OF BA, TREES										
TOT BA	155.8	50.8	45.0	42.5	11.7	2.5	0.8	0.8	0.8	0.8
SPECIES%	100.	33.	29.	27.	7.	2.	1.	1.	1.	1.
# TREES	418.	39.	143.	64.	122.	39.	1.	0.	4.	4.
QUALITY -- % IN AGS										
SAPS	40.	0.	50.	100.	25.	0.	0.	0.	0.	0.
POLES	74.	75.	71.	50.	100.	0.	0.	0.	0.	0.
SM SAW	83.	76.	93.	92.	0.	0.	0.	0.	0.	0.
MED SAW	95.	95.	100.	93.	0.	100.	0.	0.	0.	0.
LG SAW	88.	64.	0.	100.	0.	0.	0.	100.	0.	0.
ALL SIZE	81.	80.	76.	94.	79.	67.	0.	100.	0.	0.
DIAMETERS AND AGES -- INCHES, YEARS										
DIAM	15.0	17.7	9.5	20.1	6.7	13.3	12.0	28.0	6.0	6.0
DIAM MER	15.7	17.7	9.9	20.5	8.2	19.0	12.0	28.0	6.0	6.0
QUAD DIA	8.3	15.5	7.6	11.0	4.2	3.4	12.0	28.0	6.0	6.0
YRS MAT	13.	2.	40.	0.	65.	0.	40.	0.	80.	80.
EFCT AGE	88.	118.	50.	102.	55.	95.	80.	187.	40.	40.
STRUCTURE										
Q FACTOR	1.41	1.09	1.90	1.15	1.49	0.00	0.00	0.00	0.00	0.00
RELATIVE DENSITY -- %										
REL DEN	118.	47.	33.	22.	10.	2.	1.	1.	1.	1.
AGS RDEN	92.	38.	24.	21.	7.	1.	0.	1.	0.	0.
VOLUMES AND VALUES - INT 1/4" LOG RULE										
GTOT CDS	44.9	16.8	10.8	14.2	1.7	0.6	0.2	0.3	0.1	0.1
NTOT CDS	35.9	13.5	8.7	11.3	1.3	0.5	0.2	0.2	0.1	0.0
PULP CDS	17.5	5.1	6.9	3.8	1.3	0.1	0.1	0.1	0.1	0.0
GRS BDFT	11821.	5170.	1484.	4719.	0.	216.	119.	114.	0.	0.
NET BDFT	10332.	4607.	928.	4431.	0.	199.	60.	107.	0.	0.
DOLLARS	2078.	144.	59.	1710.	3.	106.	0.	54.	0.	0.

Appendix 13

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

 (Mar 13 2014 - 11-70.sil)

SPECIES >	ALL SP	CO	RM	NRO	BG	SB	SO	AB	WO	EH
COMPOSITION -- BA, % OF BA, TREES										
TOT BA	165.0	76.7	36.7	20.0	15.0	6.7	3.3	3.3	1.7	1.7
SPECIES%	100.	46.	22.	12.	9.	4.	2.	2.	1.	1.
# TREES	517.	65.	150.	12.	246.	10.	3.	28.	1.	2.
QUALITY -- % IN AGS										
SAPS	30.	0.	67.	0.	0.	0.	0.	100.	0.	0.
POLES	50.	40.	53.	0.	0.	100.	0.	100.	0.	0.
SM SAW	79.	73.	100.	75.	0.	100.	0.	0.	100.	100.
MED SAW	81.	77.	0.	100.	0.	0.	100.	0.	0.	0.
LG SAW	100.	100.	0.	100.	0.	0.	0.	0.	0.	0.
ALL SIZE	70.	76.	64.	92.	0.	100.	50.	100.	100.	100.
DIAMETERS AND AGES -- INCHES, YEARS										
DIAM	14.3	18.2	8.3	20.0	4.9	11.0	15.0	5.0	16.0	12.0
DIAM MER	15.5	18.2	8.9	20.0	8.0	11.0	15.0	6.0	16.0	12.0
QUAD DIA	7.6	14.7	6.7	17.5	3.3	10.9	14.1	4.7	16.0	12.0
YRS MAT	15.	0.	45.	0.	67.	47.	20.	80.	13.	40.
EFCT AGE	93.	121.	45.	100.	53.	73.	100.	40.	107.	80.
STRUCTURE										
Q FACTOR	1.40	1.19	2.03	1.15	1.67	1.44	0.00	0.00	0.00	0.00
RELATIVE DENSITY -- %										
REL DEN	139.	71.	29.	10.	15.	4.	3.	4.	2.	1.
AGS RDEN	93.	54.	18.	9.	0.	4.	2.	4.	2.	1.
VOLUMES AND VALUES - INT 1/4" LOG RULE										
GTOT CDS	45.7	25.8	7.8	7.0	1.2	1.8	1.1	0.2	0.6	0.4
NTOT CDS	36.6	20.6	6.2	5.6	0.9	1.4	0.9	0.2	0.5	0.3
PULP CDS	18.1	8.3	5.3	1.8	0.9	1.0	0.4	0.2	0.1	0.1
GRS BDFT	12341.	7665.	889.	2319.	0.	795.	297.	0.	218.	157.
NET BDFT	10395.	6919.	512.	2161.	0.	240.	266.	0.	190.	107.
DOLLARS	1148.	258.	30.	794.	2.	3.	4.	0.	56.	1.

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

(Mar 13 2014 - 14-2.sil)

SPECIES > ALL SP | WP BC RM NS

COMPOSITION -- BA, % OF BA, TREES

TOT BA	280.0		120.0	80.0	40.0	40.0
SPECIES%	100.		43.	29.	14.	14.
# TREES	1014.		543.	156.	286.	29.

QUALITY -- % IN AGS

SAPS	100.		100.	0.	100.	0.
POLES	56.		80.	0.	100.	0.
SM SAW	100.		0.	100.	0.	100.
MED SAW	0.		0.	0.	0.	0.
LG SAW	0.		0.	0.	0.	0.
ALL SIZE	71.		83.	25.	100.	100.

DIAMETERS AND AGES -- INCHES, YEARS

DIAM	9.3		7.7	10.0	6.0	16.0
DIAM MER	10.2		8.4	10.0	8.0	16.0
QUAD DIA	7.1		6.4	9.7	5.1	16.0
YRS MAT	46.		64.	40.	50.	13.
EFCT AGE	59.		56.	50.	40.	107.

STRUCTURE

Q FACTOR	1.55		1.36	1.50	0.00	0.00
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RELATIVE DENSITY -- %

REL DEN	197.		97.	41.	37.	22.
AGS RDEN	147.		80.	9.	37.	22.

VOLUMES AND VALUES - INT 1/4" LOG RULE

GTOT CDS	61.5		21.9	21.9	4.6	13.0
NTOT CDS	49.2		17.5	17.5	3.7	10.4
PULP CDS	32.3		10.4	16.1	3.7	2.1
GRS BDFT	14252.		7029.	1214.	0.	6008.
NET BDFT	9797.		3856.	829.	0.	5112.
DOLLARS	298.		40.	187.	7.	64.

Appendix 15

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

 (Mar 13 2014 - 14-6.sil)

SPECIES >	ALL SP	WP	BC	RM	SB	BL	BG	RP	WO	P
COMPOSITION -- BA, % OF BA, TREES										
TOT BA	169.4	84.7	55.3	20.0	2.4	2.4	1.2	1.2	1.2	1.2
SPECIES%	100.	50.	33.	12.	1.	1.	1.	1.	1.	1.
# TREES	877.	123.	487.	234.	19.	4.	1.	1.	1.	6.
QUALITY -- % IN AGS										
SAPS	64.	0.	71.	43.	100.	0.	0.	0.	0.	0.
POLES	67.	71.	60.	0.	100.	100.	0.	0.	0.	100.
SM SAW	81.	91.	53.	75.	0.	0.	0.	100.	100.	0.
MED SAW	25.	100.	0.	0.	0.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	70.	86.	55.	35.	100.	100.	0.	100.	100.	100.
DIAMETERS AND AGES -- INCHES, YEARS										
DIAM	11.2	12.5	9.6	10.7	5.0	10.0	14.0	14.0	14.0	6.0
DIAM MER	12.8	12.5	13.1	16.0	6.0	10.0	14.0	14.0	14.0	6.0
QUAD DIA	6.0	11.2	4.6	4.0	4.7	10.0	14.0	14.0	14.0	6.0
YRS MAT	30.	37.	24.	10.	80.	53.	27.	27.	27.	80.
EFCT AGE	74.	83.	66.	80.	40.	67.	93.	93.	93.	40.
STRUCTURE										
Q FACTOR	1.67	1.40	1.41	1.57	0.00	0.00	0.00	0.00	0.00	0.00
RELATIVE DENSITY -- %										
REL DEN	121.	53.	44.	16.	2.	2.	1.	1.	1.	1.
AGS RDEN	84.	44.	27.	6.	2.	2.	0.	1.	1.	1.
VOLUMES AND VALUES - INT 1/4" LOG RULE										
GTOT CDS	41.3	25.3	10.4	3.5	0.1	0.6	0.4	0.4	0.4	0.2
NTOT CDS	33.1	20.2	8.3	2.8	0.1	0.5	0.3	0.3	0.3	0.1
PULP CDS	18.1	9.6	5.6	1.8	0.1	0.5	0.2	0.1	0.1	0.1
GRS BDFT	10448.	8113.	1189.	784.	0.	0.	94.	143.	125.	0.
NET BDFT	7965.	6102.	970.	597.	0.	0.	79.	111.	105.	0.
DOLLARS	522.	72.	360.	59.	0.	1.	1.	1.	27.	0.

Appendix 16

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

 (Mar 13 2014 - 14-10.sil)

SPECIES > ALL SP | WP RP RM CO SB BC

COMPOSITION -- BA, % OF BA, TREES

TOT BA	180.0	106.7	33.3	20.0	6.7	6.7	6.7
SPECIES%	100.	59.	19.	11.	4.	4.	4.
# TREES	1300.	125.	29.	229.	306.	306.	306.

QUALITY -- % IN AGS

SAPS	67.	0.	0.	67.	100.	0.	100.
POLES	100.	100.	0.	0.	0.	0.	0.
SM SAW	94.	92.	100.	0.	0.	0.	0.
MED SAW	100.	100.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	89.	94.	100.	67.	100.	0.	100.

DIAMETERS AND AGES -- INCHES, YEARS

DIAM	11.3	13.4	14.8	4.0	2.0	2.0	2.0
DIAM MER	13.7	13.4	14.8	0.0	0.0	0.0	0.0
QUAD DIA	5.0	12.5	14.5	4.0	2.0	2.0	2.0
YRS MAT	27.	31.	21.	90.	120.	120.	90.
EFCT AGE	87.	89.	99.	0.	0.	0.	0.

STRUCTURE

Q FACTOR	1.24	1.30	0.77	0.00	0.00	0.00	0.00
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RELATIVE DENSITY -- %

REL DEN	135.	63.	19.	22.	9.	8.	14.
AGS RDEN	115.	59.	19.	14.	9.	0.	14.

VOLUMES AND VALUES - INT 1/4" LOG RULE

GTOT CDS	44.5	33.5	10.9	0.0	0.0	0.0	0.0
NTOT CDS	35.6	26.8	8.7	0.0	0.0	0.0	0.0
PULP CDS	14.0	11.3	2.7	0.0	0.0	0.0	0.0
GRS BDFT	15996.	11664.	4332.	0.	0.	0.	0.
NET BDFT	12453.	8948.	3505.	0.	0.	0.	0.
DOLLARS	151.	111.	40.	0.	0.	0.	0.

Appendix 17

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

 (Mar 13 2014 - 14-23.sil)

SPECIES > ALL SP | WP RM BC WA SB BL PC

COMPOSITION -- BA, % OF BA, TREES

TOT BA	180.0	141.8	12.7	10.9	5.5	5.5	1.8	1.8
SPECIES%	100.	79.	7.	6.	3.	3.	1.	1.
# TREES	879.	165.	121.	200.	188.	188.	9.	9.

QUALITY -- % IN AGS

SAPS	50.	0.	0.	67.	100.	0.	0.	0.
POLES	68.	71.	80.	100.	0.	0.	0.	0.
SM SAW	92.	93.	0.	50.	0.	0.	0.	0.
MED SAW	86.	100.	0.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	82.	90.	57.	67.	100.	0.	0.	0.

DIAMETERS AND AGES -- INCHES, YEARS

DIAM	11.9	13.5	8.0	7.0	2.7	2.7	6.0	6.0
DIAM MER	12.9	13.5	9.0	11.3	0.0	0.0	6.0	6.0
QUAD DIA	6.1	12.6	4.4	3.2	2.3	2.3	6.0	6.0
YRS MAT	32.	30.	45.	33.	90.	120.	80.	80.
EFCT AGE	82.	90.	45.	57.	0.	0.	40.	40.

STRUCTURE

Q FACTOR	1.29	1.30	1.60	1.49	0.00	0.00	0.00	0.00
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RELATIVE DENSITY -- %

REL DEN	127.	84.	11.	13.	10.	7.	2.	2.
AGS RDEN	98.	75.	6.	8.	10.	0.	0.	0.

VOLUMES AND VALUES - INT 1/4" LOG RULE

GTOT CDS	48.4	44.5	1.8	1.5	0.0	0.0	0.3	0.3
NTOT CDS	38.5	35.6	1.4	1.2	0.0	0.0	0.2	0.0
PULP CDS	13.3	10.9	1.4	0.7	0.0	0.0	0.2	0.0
GRS BDFT	18314.	18143.	0.	171.	0.	0.	0.	0.
NET BDFT	14118.	14001.	0.	117.	0.	0.	0.	0.
DOLLARS	158.	132.	3.	23.	0.	0.	0.	0.

Appendix 18

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

 (Mar 13 2014 - 14-29.sil)

SPECIES >	ALL SP	RP	WP	BC	RM	SM
COMPOSITION -- BA, % OF BA, TREES						
TOT BA	206.7	93.3	73.3	23.3	13.3	3.3
SPECIES%	100.	45.	35.	11.	6.	2.
# TREES	441.	99.	74.	35.	230.	2.
QUALITY -- % IN AGS						
SAPS	67.	0.	0.	0.	67.	0.
POLES	83.	100.	100.	50.	0.	0.
SM SAW	98.	96.	100.	100.	0.	0.
MED SAW	67.	0.	100.	100.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.
ALL SIZE	92.	96.	100.	86.	50.	0.
DIAMETERS AND AGES -- INCHES, YEARS						
DIAM	13.5	13.5	14.3	12.9	8.0	20.0
DIAM MER	14.0	13.5	14.3	12.9	22.0	20.0
QUAD DIA	9.3	13.1	13.4	11.0	3.3	20.0
YRS MAT	25.	30.	25.	26.	0.	0.
EFCT AGE	88.	90.	95.	64.	110.	133.
STRUCTURE						
Q FACTOR	1.56	0.95	0.99	1.47	0.00	0.00
RELATIVE DENSITY -- %						
REL DEN	123.	55.	42.	11.	13.	3.
AGS RDEN	111.	53.	42.	9.	8.	0.
VOLUMES AND VALUES - INT 1/4" LOG RULE						
GTOT CDS	63.5	29.9	23.9	7.3	1.2	1.1
NTOT CDS	50.8	23.9	19.2	5.9	1.0	0.9
PULP CDS	9.3	2.4	2.9	3.3	0.5	0.2
GRS BDFT	29329.	15612.	11442.	1810.	0.	464.
NET BDFT	22805.	11818.	9154.	1431.	0.	402.
DOLLARS	677.	68.	66.	497.	1.	45.

Appendix 19

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

 (Mar 13 2014 - 14-36.sil)

SPECIES > ALL SP | NS SB

COMPOSITION -- BA, % OF BA, TREES

TOT BA	230.0		220.0	10.0
SPECIES%	100.		96.	4.
# TREES	226.		112.	115.

QUALITY -- % IN AGS

SAPS	0.		0.	0.
POLES	0.		0.	0.
SM SAW	100.		100.	0.
MED SAW	100.		100.	0.
LG SAW	0.		0.	0.
ALL SIZE	96.		100.	0.

DIAMETERS AND AGES -- INCHES, YEARS

DIAM	18.7		19.4	4.0
DIAM MER	19.4		19.4	0.0
QUAD DIA	13.6		19.0	4.0
YRS MAT	0.		0.	120.
EFCT AGE	129.		129.	0.

STRUCTURE

Q FACTOR	0.80		0.80	0.00
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RELATIVE DENSITY -- %

REL DEN	120.		110.	11.
AGS RDEN	110.		110.	0.

VOLUMES AND VALUES - INT 1/4" LOG RULE

GTOT CDS	79.3		79.3	0.0
NTOT CDS	63.4		63.4	0.0
PULP CDS	4.0		4.0	0.0
GRS BDFT	40769.		40769.	0.
NET BDFT	38186.		38186.	0.
DOLLARS	712.		712.	0.

Appendix 20

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

(Mar 13 2014 - 14-52.sil)

SPECIES >	ALL SP	NS	NRO	BC	RM	SB	WA	BS	BL
COMPOSITION -- BA, % OF BA, TREES									
TOT BA	190.0	104.0	32.0	22.0	12.0	8.0	8.0	2.0	2.0
SPECIES%	100.	55.	17.	12.	6.	4.	4.	1.	1.
# TREES	991.	117.	33.	671.	12.	49.	5.	10.	92.
QUALITY -- % IN AGS									
SAPS	90.	0.	0.	100.	0.	0.	0.	0.	100.
POLES	93.	100.	100.	100.	0.	100.	0.	0.	0.
SM SAW	84.	92.	100.	100.	50.	0.	0.	0.	0.
MED SAW	75.	88.	50.	100.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	84.	92.	88.	100.	50.	75.	0.	0.	100.
DIAMETERS AND AGES -- INCHES, YEARS									
DIAM	12.8	14.2	15.1	5.5	13.7	6.0	16.5	6.0	2.0
DIAM MER	14.1	14.2	15.1	14.0	13.7	6.7	16.5	6.0	0.0
QUAD DIA	5.9	12.7	13.3	2.5	13.5	5.5	16.4	6.0	2.0
YRS MAT	23.	25.	14.	20.	22.	76.	7.	80.	120.
EFCT AGE	83.	95.	76.	70.	68.	44.	83.	40.	0.
STRUCTURE									
Q FACTOR	1.31	1.18	1.38	1.34	1.89	3.56	3.80	0.00	0.00
RELATIVE DENSITY -- %									
REL DEN	135.	61.	18.	35.	7.	7.	3.	2.	3.
AGS RDEN	118.	56.	17.	35.	3.	5.	0.	0.	3.
VOLUMES AND VALUES - INT 1/4" LOG RULE									
GTOT CDS	53.1	33.0	10.3	2.0	3.8	0.9	2.7	0.3	0.0
NTOT CDS	42.4	26.4	8.2	1.6	3.1	0.8	2.2	0.2	0.0
PULP CDS	14.8	5.6	4.5	1.0	1.7	0.8	1.0	0.2	0.0
GRS BDFT	19515.	15276.	2138.	381.	986.	0.	734.	0.	0.
NET BDFT	15782.	12255.	1919.	324.	632.	0.	652.	0.	0.
DOLLARS	1077.	108.	583.	142.	42.	2.	200.	0.	0.

Appendix 21

OVERSTORY SUMMARY ORIGINAL STAND (2011) - LIVE TREES ONLY

(Mar 13 2014 - 15-34.sil)

SPECIES >	ALL SP	NRO	RM	WO	CO	SB	BC	SAS	AB	WA
COMPOSITION -- BA, % OF BA, TREES										
TOT BA	172.1	92.9	47.9	15.7	8.6	3.6	1.4	0.7	0.7	0.7
SPECIES%	100.	54.	28.	9.	5.	2.	1.	0.	0.	0.
# TREES	569.	93.	413.	14.	17.	17.	2.	8.	4.	2.
QUALITY -- % IN AGS										
SAPS	37.	0.	41.	0.	0.	0.	0.	0.	0.	0.
POLES	83.	76.	82.	50.	100.	100.	0.	0.	100.	100.
SM SAW	88.	89.	89.	71.	100.	0.	100.	0.	0.	0.
MED SAW	80.	84.	50.	75.	67.	0.	0.	0.	0.	0.
LG SAW	100.	100.	0.	100.	0.	0.	0.	0.	0.	0.
ALL SIZE	82.	88.	72.	77.	92.	80.	100.	0.	100.	100.
DIAMETERS AND AGES -- INCHES, YEARS										
DIAM	13.4	16.3	7.2	18.5	12.7	7.2	12.0	4.0	6.0	8.0
DIAM MER	14.3	16.3	8.5	18.5	12.7	8.0	12.0	0.0	6.0	8.0
QUAD DIA	7.4	13.5	4.6	14.5	9.8	6.2	12.0	4.0	6.0	8.0
YRS MAT	19.	8.	48.	0.	36.	67.	30.	120.	80.	50.
EFCT AGE	75.	82.	42.	124.	84.	53.	60.	0.	40.	40.
STRUCTURE										
Q FACTOR	1.47	1.25	2.49	1.12	1.42	1.67	0.00	0.00	0.00	0.00
RELATIVE DENSITY -- %										
REL DEN	122.	52.	42.	15.	8.	3.	1.	1.	1.	0.
AGS RDEN	96.	45.	28.	11.	8.	2.	1.	0.	1.	0.
VOLUMES AND VALUES - INT 1/4" LOG RULE										
GTOT CDS	46.5	29.9	7.7	5.2	2.4	0.6	0.4	0.0	0.1	0.2
NTOT CDS	37.2	23.9	6.1	4.2	1.9	0.5	0.4	0.0	0.1	0.1
PULP CDS	18.1	9.3	5.0	1.7	1.2	0.5	0.2	0.0	0.1	0.1
GRS BDFT	12114.	9053.	988.	1488.	450.	0.	135.	0.	0.	0.
NET BDFT	10766.	8306.	622.	1350.	396.	0.	92.	0.	0.	0.
DOLLARS	3331.	2749.	41.	510.	13.	1.	17.	0.	0.	0.

Appendix 22

OVERSTORY SUMMARY ORIGINAL STAND (2012) - LIVE TREES ONLY

 (Aug 25 2014 - 11-48.sil)

SPECIES > ALL SP | WP RP SM BC RM SCP NS

COMPOSITION -- BA, % OF BA, TREES

TOT BA	225.0	65.0	65.0	45.0	25.0	10.0	10.0	5.0
SPECIES%	100.	29.	29.	20.	11.	4.	4.	2.
# TREES	405.	95.	91.	152.	21.	14.	23.	9.

QUALITY -- % IN AGS

SAPS	100.	0.	0.	100.	0.	0.	0.	0.
POLES	88.	100.	100.	100.	0.	100.	0.	100.
SM SAW	100.	100.	100.	100.	100.	100.	0.	0.
MED SAW	0.	0.	0.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	93.	100.	92.	100.	100.	100.	0.	100.

DIAMETERS AND AGES -- INCHES, YEARS

DIAM	11.7	11.8	12.8	8.9	14.8	12.0	9.0	10.0
DIAM MER	11.9	11.8	12.8	9.5	14.8	12.0	9.0	10.0
QUAD DIA	10.1	11.2	11.5	7.4	14.7	11.5	8.8	10.0
YRS MAT	39.	41.	35.	57.	16.	30.	60.	53.
EFCT AGE	75.	79.	85.	63.	74.	60.	60.	67.

STRUCTURE

Q FACTOR	1.48	0.99	1.68	1.24	1.96	1.40	1.56	0.00
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RELATIVE DENSITY -- %

REL DEN	152.	41.	40.	45.	10.	6.	7.	3.
AGS RDEN	142.	41.	37.	45.	10.	6.	0.	3.

VOLUMES AND VALUES - INT 1/4" LOG RULE

GTOT CDS	64.3	19.3	19.6	9.9	8.5	3.0	2.6	1.4
NTOT CDS	49.4	15.5	15.7	7.9	6.8	2.4	0.0	1.1
PULP CDS	26.1	7.6	7.3	6.9	2.2	1.6	0.0	0.5
GRS BDFT	21620.	7379.	7284.	1301.	3804.	876.	290.	688.
NET BDFT	15597.	5257.	5667.	658.	3081.	556.	0.	377.
DOLLARS	1293.	43.	64.	26.	1124.	32.	0.	3.

Appendix 23

OVERSTORY SUMMARY ORIGINAL STAND (2014) - LIVE TREES ONLY Compartment 45 OGEMA Crop
Tree Release

(Aug 20 2014 - AWP 16.sil)

SPECIES >	ALL SP	SB	RM	BC	CO	NRO	CUC	BL	SO	WHL	H
COMPOSITION -- BA, % OF BA, TREES											
TOT BA	56.7	18.3	8.3	7.5	7.5	5.0	2.5	2.5	1.7	0.8	0.8
SPECIES%	100.	32.	15.	13.	13.	9.	4.	4.	3.	1.	1.
# TREES	1998.	749.	267.	164.	286.	159.	86.	115.	76.	38.	10.
QUALITY -- % IN AGS											
SAPS	36.	0.	0.	62.	89.	100.	100.	0.	100.	0.	100.
POLES	25.	0.	0.	0.	0.	50.	0.	0.	0.	0.	0.
SM SAW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MED SAW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LG SAW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ALL SIZE	35.	0.	0.	56.	89.	83.	100.	0.	100.	0.	100.
DIAMETERS AND AGES -- INCHES, YEARS											
DIAM	2.8	2.4	2.8	4.0	2.4	4.0	2.7	2.0	2.0	2.0	4.0
DIAM MER	8.0	6.0	0.0	10.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0
QUAD DIA	2.3	2.1	2.4	2.9	2.2	2.4	2.3	2.0	2.0	2.0	4.0
YRS MAT	59.	80.	90.	40.	120.	50.	90.	120.	120.	120.	120.
EFCT AGE	47.	40.	0.	50.	0.	40.	0.	0.	0.	0.	0.
STRUCTURE											
Q FACTOR	1.67	0.00	0.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00
RELATIVE DENSITY -- %											
REL DEN	70.	22.	10.	10.	9.	5.	3.	3.	2.	1.	1.
AGS RDEN	26.	0.	0.	6.	8.	5.	3.	0.	2.	0.	1.
VOLUMES AND VALUES - INT 1/4" LOG RULE											
GTOT CDS	0.6	0.1	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0
NTOT CDS	0.5	0.1	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0
PULP CDS	0.5	0.1	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0
GRS BDFT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NET BDFT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DOLLARS	1.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.

OVERSTORY SUMMARY - CONTINUED ORIGINAL STAND (2014) - LIVE TREES ONLY

(Aug 20 2014 - AWP 16.sil)

SPECIES > ALL SP | SAS AMC

COMPOSITION -- BA, % OF BA, TREES

TOT BA	56.7		0.8	0.8
SPECIES%	100.		1.	1.
# TREES	1998.		38.	10.

The following summary compares the work scheduled in each annual work plan against the amount of work implemented/completed in the field. Annual Works Plans (AWPs) are developed 18 months in advance of any work being implemented in the field to allow time for an internal departmental and public review process(as of 8/22/14).

Silvicultural Activity Summary By Annual Work Plan																		
Workplan Activity	2002		2003		2004		2005		2006		2007		2008		2009		2010	
	Plan Acres	Acres Comp.																
Regeneration Harvests	150	125	65	25	175	175	45	25	65	0	140	72	150	96			50	0
Various Thinning Harvests	355	355	450	221	485	383	250	250	615	218	120	71	75	0	302	13	74	39
Salvage Harvests	65	65									30	30		65	593	285		
Firewood			25	25														
Deferment			50	37	28	25	500	103			100	58					105	0
Hazard Reduction			50	50														
Pine/Spruce Management																		
Prescribed Fire															300	0		

Workplan Activity	2011		2012		2013		2014		Total	Total
	Plan Acres	Acres Comp.	Plan Acres	Acres Comp.						
Regeneration Harvests	21	0	37	0	7.5	7.5	41	0	946	525
Various Thinning Harvests	111	0	98	36	189	33	500	0	3624	1619
Salvage Harvests			92	51			50	0	830	496
Firewood									25	25
Deferment									783	223
Hazard Reduction									50	50
Pine/Spruce Management			18	0	30	10.3	10.3	10.3	58	10
Prescribed Fire							0	0	300	0