

CHESAPEAKE FOREST

ANNUAL WORK PLAN

FISCAL YEAR 2011

Prepared:

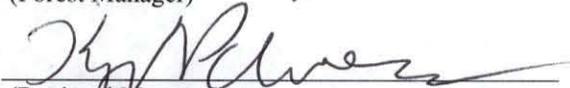


(Forest Manager)

4-28-10

Date

Reviewed:

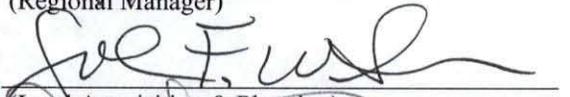


(Regional Manager)

4-28-10

Date

Reviewed:



(Land Acquisition & Planning)

5/4/10

Date

Approved:



(Environmental Specialist)

5.4.10

Date

Prepared By:

Michael G. Schofield, MFS – Chesapeake Forest Manager

Contributors:

Larry Walton, Vision Forestry, LLC

DNR Interdisciplinary Team

Citizens Advisory Committee



Good For You, Good For Our Forest
Certificate NSF-SFIS-0Y301-S2
www.sfiprogram.org



© 1996 Forest Stewardship Council A. C.
The mark of responsible forestry
Certificate SCS-FM/COC-00069P
FSC Supplier

CHESAPEAKE FOREST ANNUAL WORK PLAN SUMMARY

This document summarizes the proposed activities that will occur on the Chesapeake Forest during the 2011 fiscal year. The fiscal year runs from July 1, 2010 to June 30, 2011. The following proposed activities are the results of a multi-agency effort. The multi-agency approach has ensured that all aspects of these lands have been addressed within the development of this plan.

Plan Activities

Network with Maryland DNR agencies:

- Wildlife & Heritage – Identify and develop restoration projects, report and map potential Ecological Significant Areas (ESA) as found during fieldwork, release programs for game and non-game species. Mapping will be done with Global Positioning Systems (GPS). Participates on the Inter-Disciplinary Team (ID Team) and assists in the development of a forest monitoring program.
- Natural Resource Police – Enforcement of natural resource laws on the forest.
- Public Lands Policy & Planning – Provides assistance in the development of plans, facilitates meetings with various management groups, develops Geographic Information System (GIS) maps for public review, and conducts deed research and boundary recovery. Also participates on the ID Team.
- Maryland Conservation Corps (MCC) – Assists in painting boundary lines, installing gates and trash removal.
- State Forest & Park Service – Participates on the ID Team.
- Chesapeake & Coastal Watershed Service – Develops watershed improvement projects, assists in the development of a forest monitoring programs and participates on the ID Team.

Network with other agencies:

- DNR Contract Manager – Assists the Forest Manager in the designs and implementation of management activities on the donated portion of the forest. Also participates on the ID Team.
- Sustainable Forestry Initiative (SFI) – Provides third party forest certification by conducting annual audits.

- Forest Stewardship Council (FSC) – Provides third party forest certification by conducting annual audits.
- The Conservation Fund – Provides guidance in the development of management activities on the forest.
- The Chesapeake Bay Foundation – Assists in the implementation of water quality improvement projects by providing volunteers for reforestation efforts.
- National Wild Turkey Federation – Establishes and maintains handicap-hunting opportunities within the forest and provides funding for habitat protection and restoration.
- US Fish & Wildlife Service – Assists in prescribed burns for Delmarva Fox Squirrel (DFS) habitat. Also assists in maintaining open forest road conditions as fire breaks.
- Maryland Forest Association - Master Loggers Program provides training in Advanced Best Management Practices for Forest Product Operators (i.e. Foresters & Loggers) workshops on the forest.

Network with Universities and Colleges:

- Maryland Environmental Lab, Horn Point – Conducts water quality monitoring on a first order stream not influenced by agriculture. These samples will serve as a local base line for other samples taken on other Delmarva streams.
- Yale School of Forestry – Conduct annual field tour for forestry student's showcasing Silviculture practices on Delmarva.
- Allegany College – Conduct annual field tour for forestry school student's showcasing Sustainable Forest Management practices on the forest under dual third party certification.

Maintenance:

- Forest roads will undergo general maintenance to maintain access for forest management activities (i.e. logging, prescribed burning and wildfire control). Interior roads within each complex will be brush hogged where possible by the MFS & the WHS. Many of the roads have grown shut and require special heavy equipment to remove the larger trees. Brushing of these roads will improve access for the public and help maintain firebreaks for communities at risk from wildfire.
- Forest boundary lines will continue to be converted from the old Chesapeake Corporation white square markings to the DNR yellow band markings. Signs will be placed along the boundary lines designating they type of public access to the property.
- Illegal trash dumps will continue to be removed off the forest as they are discovered. The average amount of trash removed from the forest each year has been 36 tons.

Recreation:

- Develop, improve and post public parking areas for the 30,000 acres designated for public use.
- Host the annual lottery for vacant tracts designated for hunt club access only. Vacant tracts are those that existing clubs opted not to continue to lease or land that has recently become available due to acquisition or right-of-ways being opened.
- Continue to explore additional Resource Based Recreational (RBR) opportunities on the forest. This may include hunting, horseback riding; water trails, hiking trails, bird watching opportunities, etc.
- Establish Geocaches on the forest that will encourage the public to enjoy and explore their public land. The web site www.Geocaching.com will be the vehicle used to register individual caches. Partnerships will be developed with local cachers or caching clubs to assist with the placement and maintenance of individual caches. A list of established caches will be placed on the Chesapeake Forest web site, advertizing the new recreational opportunity. Logs located within each cache will be used as a form of monitoring to determine the level of use and the need for future caches.
- Chesapeake Forest (CF) Foster 2010 Trail Enhancement Project – This project will improve the existing 16 miles of hiking and horse back riding trails within the 4,769 acre CF along Snow Hill road in Worcester County. The trail system is used frequently by hikers, bird watches, horse back riders and hunters. The forest trails are located along old woods roads that require routine maintenance to provide users with a quality outdoor experience. Many of the trails have grown shut due to a lack of timber harvesting activity in the area. Certain sections of the trail have developed large wet holes, which need to be filled in. Other sections of trails are blocked by downed trees and over hanging branches and vines.
The project will involve widening sections of the trail with a mower, removing overhanging vegetation and downed trees with chainsaws. Several sections of the trails will require fill material to stabilize wet holes and make them passable. Gates that allow horse passage will also be installed to prevent ATV traffic. Parking areas at the rail heads will be mowed and marked with parking signs. Partial funding for this project will be obtained through a 2010 National Recreation Trails Grant.

Total estimated cost: \$33,600.

Special Projects:

- Maintain dual forest certification from the Forest Stewardship Council (FSC) and the Sustainable Forest Initiative (SFI).
- Conduct information and educational opportunities on the forest.
- Update and maintain forest information in a GIS database, which will result in a new updated forest wide field map.
- Continue the effort to inventory and protect historic sites (i.e. cemeteries, old home sites, Native American Indian sites) using GPS and GIS technology.

Silvicultural Activity Overview

Table 2 summarizes the proposed silvicultural activities for the 2011 annual work plan on approximately 1,330 acres (2%) of the CF.

Table 2. 2010 Silvicultural Activity Overview.

Activity	Acres
1. Variable Retention/Final Harvest	239
2. Pre-commercial Thinning	81
3. 1 st Commercial Thinning	924
4. 2 nd Commercial Thinning	86
Total acres	1,330

The following is a list of definitions of proposed management activities that occur within this plan:

Reforestation – Reforestation reestablishes forest cover either naturally or artificially (hand planting), and is usually accompanied by some kind of site preparation during the same fiscal year. The nature of the site preparation will be determined by field examination. It is almost always followed, in the same fiscal year, with grass control in the form of chemicals (hand-applied by ground crews). Site conditions will dictate application rates, etc., in each case.

Site Preparation/Regeneration - While natural regeneration is the preferred method of reforesting harvested areas, alternative plans should be in place in case natural regeneration is unsuccessful. Alternatives include prescribed burning, herbicide, light mechanical disturbance, or a combination thereof followed by planting of native pines or hardwoods as the management zone dictates.

Pre-Commercial Thinning – Pre-commercial thinning is the removal of trees to reduce over crowded conditions within a stand. This type of thinning concentrates growth on more desirable trees while improving the health of the stand. This treatment is usually done on stands 5 to 10 years of age. The number of trees retained will depend on growth, tree species present, and site productivity. This activity is conducted with hand held power tools and not heavy equipment, thereby reducing adverse impact to the soil.

First Commercial Thinning – Usually performed on plantations 15-20 years old. The objective is to facilitate forest health and promote development of larger trees over a shorter period of time. This is accomplished in plantations by removing every 5th row of trees and selectively thinning (poor form & unhealthy trees) between rows. In naturally regenerated stands, thinning corridors will be established every 50 feet and the stand will be selectively thinned along both sides of the corridor. Approximately 30-35% of the total stand volume will be removed in this process.

Second Commercial Thinning - Usually performed on stands 30-40 years old. The objective is to lengthen the rotation age of the stand and produce larger healthier trees. In some cases, this technique is used to improve habitat for the Delmarva Fox Squirrel (DFS) and Forest Interior Dwelling Species (FIDS). Approximately 30-35% of the total stand volume will be removed in this process.

Selection Harvest – This includes the removal of single trees and groups of trees within a given stand. This method will be used to distribute age classes and to adjust species composition within a given stand (i.e. riparian buffers, ESA's, DFS & FID areas).

Shelterwood Harvest – The shelterwood method involves the gradual removal of the entire stand in a series of partial cuttings that extend over a fraction of the rotation (Smith 1986). The number of trees retained during the first stage of the harvest depends on the average tree size (diameter at breast height) on the site. As with seed tree regeneration, the shelterwood method works best when overstory trees are more than 30 years old and in their prime period of seed production potential (Schultz 1997).

Seed Tree Harvest – This type of harvest is designed to regenerate pine on the site by leaving 12 to 14 healthy dominant trees per acre as a seed source. The seed trees are typically left on the site for another rotation. The seed tree method regenerates loblolly pine effectively and inexpensively in the Coastal Plain, where seed crops are consistently heavy (Schultz 1997).

Variable Retention Harvest – This harvest type focuses on the removal of approximately 80 percent of a given stand in one cutting, while retaining approximately 20 percent as wildlife corridors/islands, visual buffers and legacy trees. The preferred method of regeneration is by natural seeding from adjacent stands, or from trees cut in the clearing operation. Coarse woody debris (slash/tree tops) is left evenly across the site to decompose. A Variable Retention Harvest (VRH) is prescribed to help regulate the forest growth over the entire forest, ensuring a healthy and vigorous forest condition. Harvesting of young loblolly pine stands is done to help balance the age class distribution across the forest. Currently, 50% of the forest is 19 years of age or younger. VRH are also used to regenerate mixed natural stands within ESA's, DFS & Core FIDS areas. If adequate natural regeneration is not obtained within 3 years of the harvest, hand planting of the site is typically required (not required for certain restoration projects, such as bay restoration).

Aerial Release Spraying - An aerial spray of herbicide is used to reduce undesirable hardwood species (i.e. sweet gum & red maple) within the stand. In many cases, a reduced rate (well below the manufacturer's recommendation) is used. A reduced rate has been used on the CF successfully to kill the undesirable species while maintaining the desirable ones (yellow poplar & oaks). All forms of aerial spraying are based on precision GPS mapping and accompanied by on-board flight GPS controls. GPS-generated maps show each pass of the aircraft and are provided by the contractor to demonstrate precision application. Aerial applications are not allowed over High Conservation Value Forest (HCVF) areas, riparian buffers or wetland areas on the forest.

Prescribed Fire – Prescribed fires are set deliberately by MFS personnel, under proper weather conditions, to achieve a specific management objective. Prescribed fires are used to enhancing wildlife habitat, encouraging fire-dependent plant species, reducing fuel loads that feed wildfires, and prepare sites for planting.

Riparian Buffer Zone Establishment – Riparian buffer zones are vegetated areas adjacent to or influenced by a perennial or intermittent bodies of water. These buffers are established and managed to protect aquatic, wetland, shoreline, and/or terrestrial environments and ultimately the Chesapeake Bay. Boundaries of riparian buffer zones will be marked, surveyed (GPS) and mapped (GIS). Selective harvesting and/or thinnings may occur in these areas to encourage a mixed hardwood-pine composition.

Literature Cited

Schulz, Robert P. 1997. The Ecology and Culture of Loblolly Pine, Loblolly Pine, U.S. Gov. Printing Office, Washington, D.C. 5-13, 5-14 pp.

Smith, David M. 1986. The Practice of Silviculture. Wiley, New York. 403 pp.

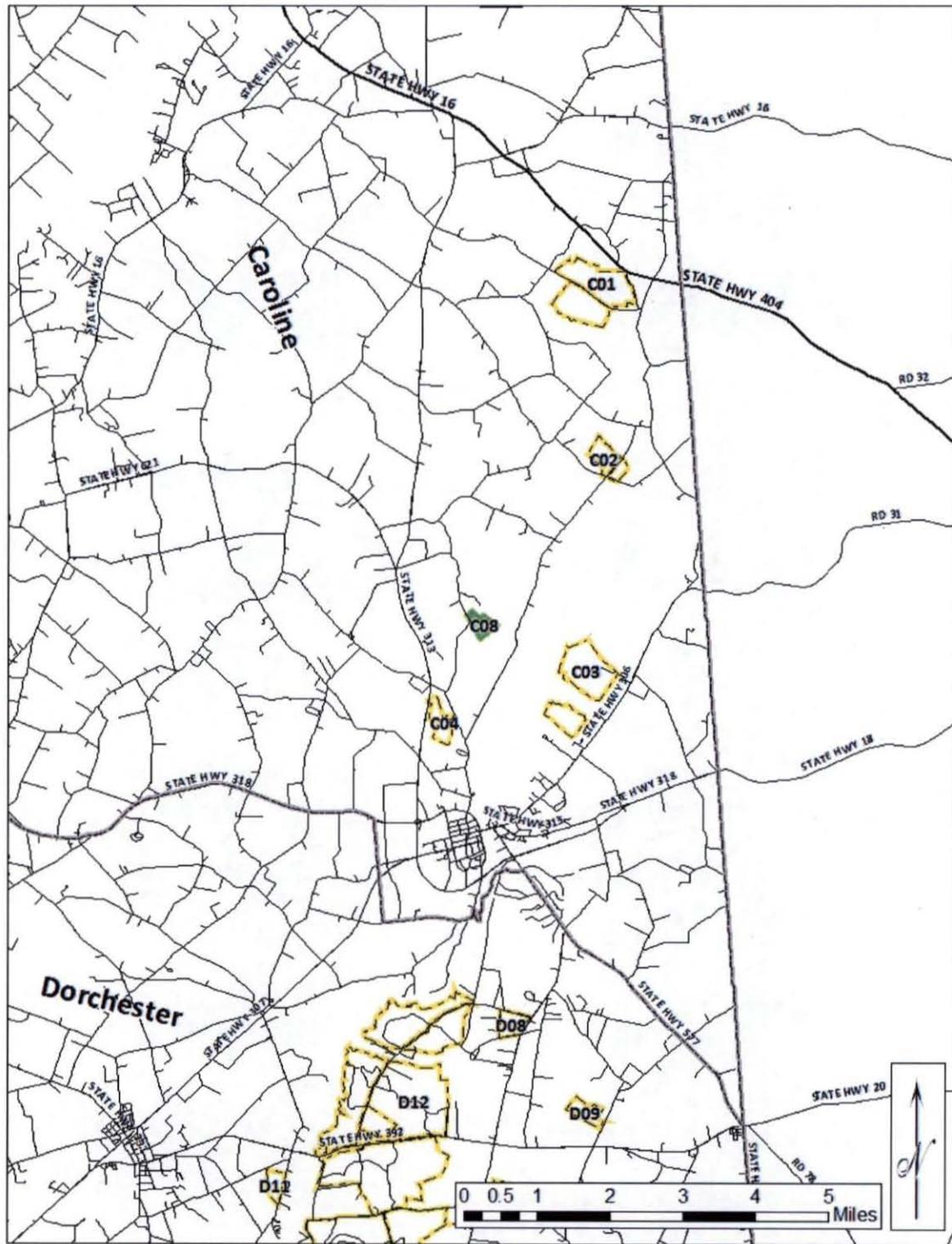
Wenger, Karl F. 1984, Forestry Handbook, For the Society of American Foresters, Wiley, New York. 418 pp.

**Locations & Descriptions
Of
Silvicultural Activities**

Description of 2011 Activities – Caroline County

Complex C08 Long Swamp

A first thinning is proposed for Stand 1. Stand 1 is a 48.1-acre loblolly pine plantation established in 1989. This stand is a recent land acquisition by the State.



FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : C08 Long Swamp

ASC-DNR Forest Service 05/07/2009

Silviculture Prescription:

A first thinning is proposed for Stand 1.
Stand 1 is a 48-acre loblolly pine plantation established in 1989.

Guidelines:

Description of 2011 Activities – Dorchester County

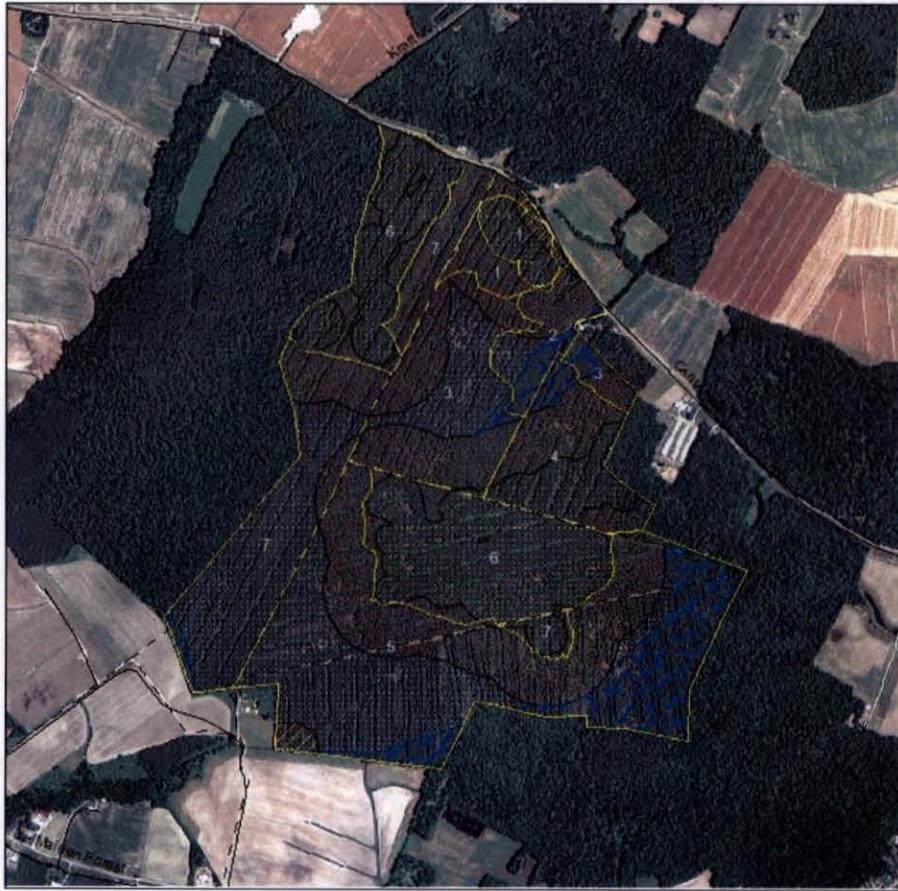
Complex D21 LeCompte

A first thinning is proposed for stands 3 & 4. Stands 3 & 4 are a 91.9-acre loblolly pine plantation, which was established in 1988 and 1989. These stands are located in an ESA zone 1 & 2 Management Zone.

Complex D29 Lee Jones

A first thinning is proposed for stand 1. Stand 1 is 42.7-acre loblolly pine plantation, which was established in 1988. Any thinning within the HCVF will be done to help establish a mixed forest community. There will be a 50 foot no cut buffer along the stream. This stand is part of a recent acquisition by the State.

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : D21 LeCompte Complex

ASC-DNR Forest Service 05/07/2009

Silviculture Prescription:

A first thinning is proposed for Stands 3 and 4. These stands are loblolly pine plantations totaling 91.9-acres established in 1988 and 1989.

This stand is in an ESA Area.

Guidelines:

Legend

MANAGEMENT

-  DFS
-  ESA Zone 1
-  ESA Zone 2
-  ESA Zone 3 pulp wood
-  ESA Zone 3 Saw Timber
-  FIDS
-  Stream Buffer

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : D29 Lee Jones Complex

ASC-DNR Forest Service 05/29/2009

Silviculture Prescription:

A first thinning is proposed for stand 1.

Stand 1 is 42.7-acre loblolly pine plantation, which was established in 1988. Any thinning within the HCVF will be done to help establish a mixed forest community.

There will be a 50 foot no cut buffer along the stream.

This stand is part of a recent acquisition by the State.

Guidelines:

50' No cut buffer along stream

Legend

MANAGEMENT

- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 pulp wood
- ESA Zone 3 Saw Timber
- FIDS
- Stream Buffer

Description of 2011 Activities – Wicomico County

Complex W09 Waller Taylor

A final harvest is proposed for Stand 2. Stand 2 is a 41.7 acre loblolly pine plantation that is 38 years old (established in 1971). A herbicide application to eliminate the exotic species at an old house site along the road will be conducted prior to the harvest. This site is located within an ESA zone 1 and 2.

Complex W12 Steffen

A first thinning is proposed for Stand 1. Stand 1 is a 25.2-acre loblolly pine plantation, which was established in 1993. This site is located within the General Management Area.

Complex W17 R.F. Rhichardson

A first thinning is proposed for Stands 3, 4, & 5. These stands are a 100.1-acre loblolly pine plantation that was established in 1989, 1992, & 1995 respectfully. There is a HC VF area along the southern border of this thinning. Any thinning within this HC VF will be done in order to establish a mixed forest community.

A final harvest is proposed in the southern portion of Stand 1. The 40-acre portion to be harvested was established in 1971 and thinned in 1999. The site will be planted with loblolly pine the year following the harvest. Herbicides may also be used to ensure the establishment of pine regeneration if needed.

Both treatments occur within the General Management Area.

Complex W18 Humphrey's

A first thinning is proposed for Stand 4. Stand 4 is a 43.7-acre loblolly pine plantation. This stand was established in 1994. This site is located within the General Management Area.

Complex W24 Glenmore Wright

A final harvest is proposed for Stands 1 & 4. Stand 1 is a 25.5-acre mixed hardwood pine community that was established in 1984. Stand 4 is an 8.1-acre naturally regenerated loblolly pine community that was established in 1972. A 100' no cut buffer will be retained for aesthetics along Wetipquin road. The site will be planted with loblolly pine the year following the harvest. Herbicides may also be used to ensure the establishment of pine regeneration if needed.

Both stands are located within the General Management Area.

Complex W35 Messick

A final harvest is proposed for a portion of Stand 5. The harvest area is a 40-acre loblolly pine plantation, which was established in 1969 and second thinned in 1998. The site will be planted with loblolly pine the year following the harvest. Herbicides may also be used to ensure the establishment of pine regeneration if needed.

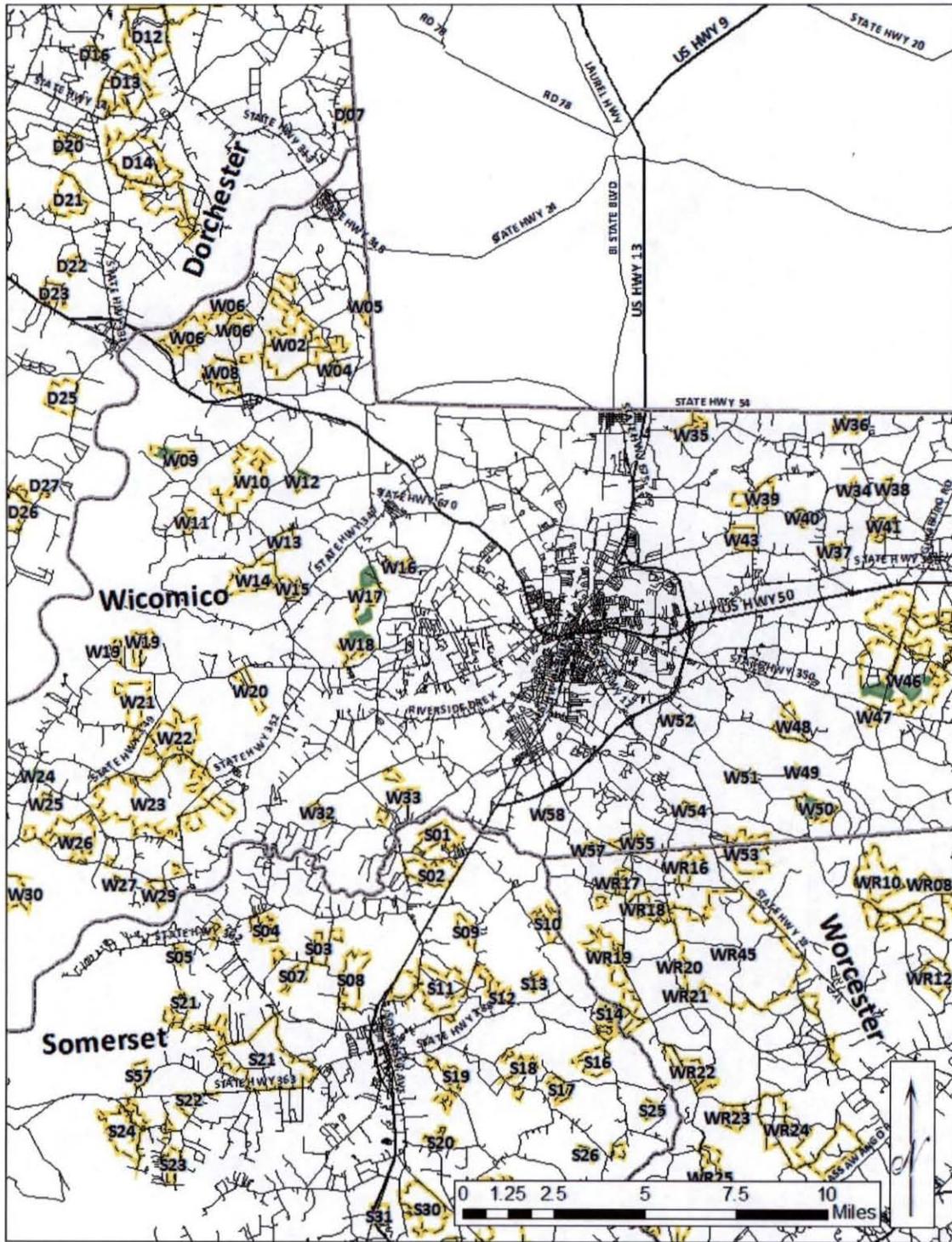
This site is located within the General Management Area.

Complex W46 Campbell

A first thinning is proposed for Stands 125, 126, 127, 111 & 109. These stands are all young loblolly pine plantations that are overstocked and stagnate. The total area to be thinned is 267.9 acres. This thinning will improve the health, species diversity and the growth of the stand as per DFS management guidelines. Stands 127, 111 & 109 are located within an ESA and will be thinned to a basal area of 50 – 60 sq. ft. Stands 125 & 126 are located within the DFS Management Area and will be thinned to 70 – 80 sq. ft. of basal area.

Complex W50 Piney Grove

A first thinning is proposed for stands 3, 6 & 5. Stands 3 & 6 were established in 1992 and stand 5 was established in 1989. The total area to be thinned is 84-acres. These stands are located within the General Management Area. There is an ESA located to the north of stand 6. This area will be flagged out by Heritage Staff prior to the thinning operation.



FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : W09 Waller Taylor Complex

ASC-DNR Forest Service 05/29/2009

Silviculture Prescription:

A final harvest is proposed for Stand 2.

Stand 2 is a 41.7 acre loblolly pine plantation that is 38 years old (established in 1971). A herbicide application to eliminate the exotic species at an old house site along the road will be conducted prior to the harvest.

A 100 foot buffer for Taylor's Trail Road is displayed in orange.

This site is located within an ESA zone 1 and 2.

Guidelines:

Chemically treat invasives along road edge prior to harvest

Legend

MANAGEMENT

-  DFS
-  ESA Zone 1
-  ESA Zone 2
-  ESA Zone 3 pulp wood
-  ESA Zone 3 Saw Timber
-  FIDS
-  Stream Buffer

FY11 Annual Work Plan



1 inch = 1,320 feet

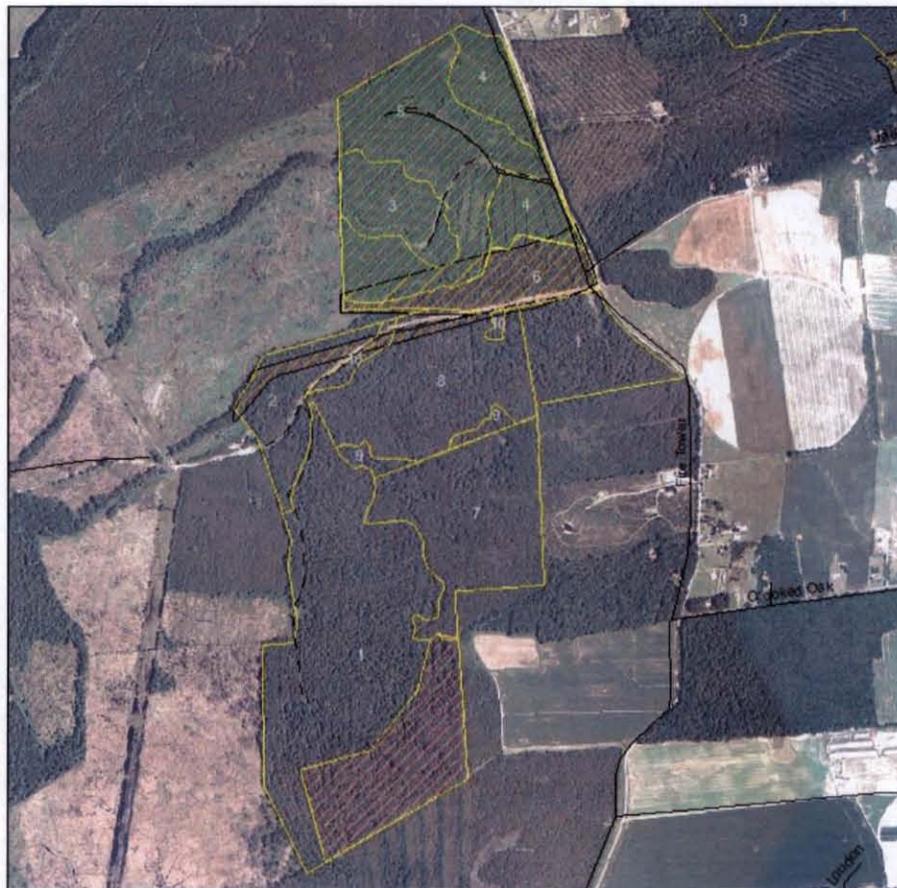
Complex : W12 Steffen Complex

DEB-DNR Forest Service 02/17/2009

Silviculture Prescription:
A first thinning is proposed for Stand 1.
Stand 1 is a 25.2-acre loblolly pine plantation established in 1993.
This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : W17 R. F. Richardson Complex ASC-DNR Forest Service 05/06/2009

Silviculture Prescription:

A first thinning is proposed for Stands 3, 4, & 5. The stands are loblolly pine plantations totaling 100.1-acres established in 1989, 1992, & 1995.

A final Harvest is proposed for part of stand 1. This proposed final harvest area is a 37 acre loblolly pine plantation established in 1972. Stand 1 was first thinned in 1994, and second thinned in 1999.

These stands are in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : W18 Humphrey's Complex

ASC-DNR Forest Service 05/09/2009

Silviculture Prescription:

A first thinning is proposed for Stand 4.
Stand 4 is a 43.7-acre loblolly pine plantation
established in 1994.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : W24 Glenmore Wright Complex ASC-DNR Forest Service 05/29/2009

Silviculture Prescription:

A final harvest is proposed for Stands 1 & 4. Stand 1 is a 25.5-acre mixed Hardwood Pine stand that was established in 1984. Stand 4 is an 8.1-acre naturally regenerated loblolly pine stand that was established in 1972.

These stands are in a General Management Area.

A 100' no cut buffer (displayed in orange) will be retained for aesthetics along Wetipquin road.

Guidelines:

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : W35 Messick Complex

ASC-DNR Forest Service 05/29/2009

Silviculture Prescription:

A final harvest is proposed for Stand 5. Stand 5 is a 40-acre loblolly pine stand that was established in 1969 and second thinned in 1998.

The site will be planted with loblolly pine the year following the harvest. Herbicides may also be used to ensure the establishment of pine regeneration if needed.

This stand is in a General Management Area.

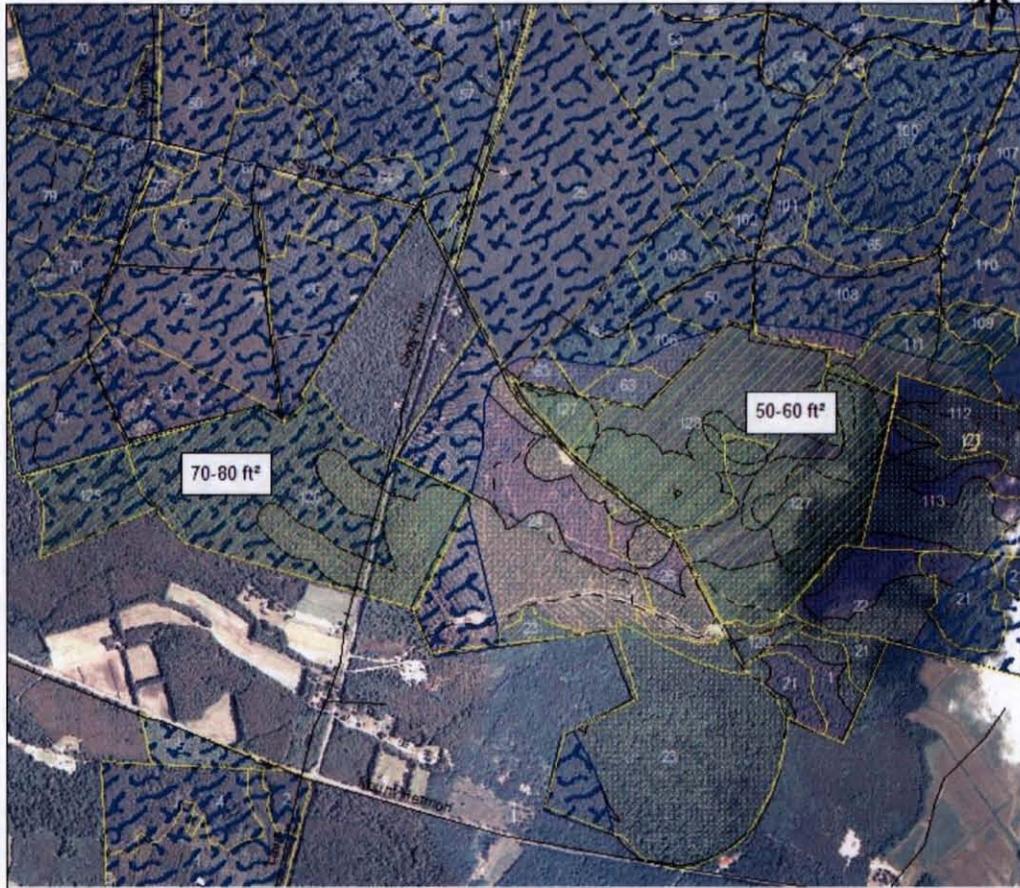
Guidelines:

Legend

MANAGEMENT

- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 pulp wood
- ESA Zone 3 Saw Timber
- FIDS
- Stream Buffer

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : W46 Campbell Complex

ASC-DNR Forest Service 03/07/2009

Silviculture Prescription:

A first thinning is proposed for Stands 125, 126, 127, 111 & 109. These stands are all young loblolly pine plantations that are overstocked and stagnate. The total area to be thinned is 267.9 acres.

This thinning will improve the health, species diversity and the growth of the stand as per DFS management guidelines.

Stands 127, 111 & 109 are located within an ESA and will be thinned to a basal area of 50 – 60 sq. ft. Stands 125 & 126 are located within the DFS Management Area and will be thinned to 70 – 80 sq. ft. of basal area.

Guidelines:

Legend

MANAGEMENT

-  DFS
-  ESA Zone 1
-  ESA Zone 2
-  ESA Zone 3 pulp wood
-  ESA Zone 3 Saw Timber
-  FIDS
-  Stream Buffer

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : W50 Piney Grove Complex

ASC-DNR Forest Service 08/28/2009

Silviculture Prescription:

A first thinning is proposed for Stands 3, 6, & 5.
These stands are loblolly pine plantations totaling 84-acres.

These stands are in a General Management Area.

Guidelines:

Description of 2011 Activities – Worcester County

Complex WR24 Johnson & Johnson

A first thinning is proposed for Stand 8. Stand 8 is a 39-acre loblolly pine plantation that was established in 1991.

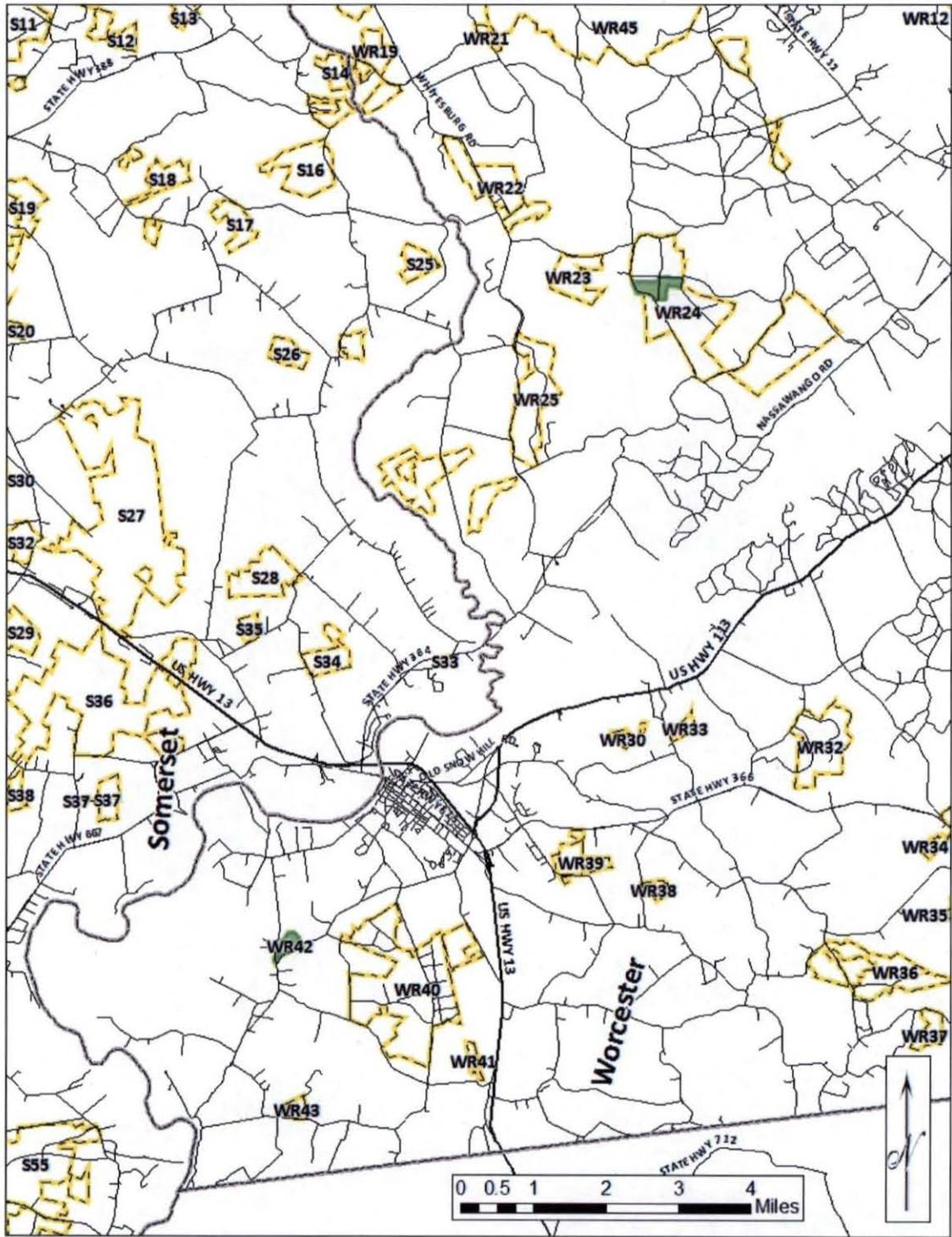
A seed tree harvest is proposed for a portion of stand 3. The area to be harvested is 40-acres along Corner House road. A 100 foot no cut buffer will be retained for aesthetics along Corner House road.

These stands are located within a DFS Management Area.

Complex WR42 Mason

A final harvest is proposed for Stand 1. Stand 1 is a 43.4-acre loblolly pine plantation that was established in 1971 and seconded thinned in 2001. The harvest area will be monitored for natural regeneration. If this does not occur, the site will be planted with loblolly pine. Herbicides may also be used to ensure the establishment of pine regeneration if needed.

This stand is located within the General Management Area.



FY11 Annual Work Plan



1 inch = 1,320 feet Complex : WR24 Johnson & Johnson Complex ASC-DNR Forest Service 05/29/2009

Silviculture Prescription:

A first thinning is proposed for Stand 8. Stand 8 is a 39-acre loblolly pine plantation that was established in 1991.

A seed tree harvest is proposed for a portion of stand 3. The area to be harvested is 40-acres along Corner House road. A 100 foot no cut buffer displayed in orange will be retained for aesthetics along Corner House road.

These stands are in a DFS Future Area.

Guidelines:

Legend

MANAGEMENT

- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 pulp wood
- ESA Zone 3 Saw Timber
- FIDS
- Stream Buffer

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : WR42 Mason Complex

ASC-DNR Forest Service 05/29/2009

Silviculture Prescription:

A Final Harvest is proposed for stand 1.

Stand 1 is a 43.4-acre loblolly pine plantation that was established in 1971 and seconded thinned in 2001. The harvest area will be monitored for natural regeneration. If this does not occur, the site will be planted with loblolly pine. Herbicides may also be used to ensure the establishment of pine regeneration if needed.

A 100 foot buffer displayed in orange will be retained along Cypress and Cedar Hall Roads.

Management activities in a portion of the stand will account for an eagle nesting site south of Cedar Hall Road.

This stand is in a General Management Area.

Guidelines:

Description of 2011 Activities – Somerset County

Complex S04 English

A second thinning is proposed for Stands 3, 9 & 11. These stands make up a 32.7-acre loblolly pine plantation. These stands were established in 1982 & 1973. This thinning is located within the General Management Area.

Complex S07 Pusey

A final harvest is proposed for part of Stand 1. The portion of stand 1 to be harvested does not include any area within the adjacent HCVF. Stand 1 is a loblolly pine plantation that was established in 1950. The area to be harvested is 16.4 acres. This site will be monitored for 2 years post harvest for successful pine regeneration. If the site fails to regenerate pine, planting will occur.

A second thinning is proposed for Stands 4 & 5. Stands 4 & 5 are a 53.6-acre loblolly pine plantation that was established in 1982 and 1978 respectfully.

These stands are located within the General Management Area.

Complex S21 E. Mace Smith (Evans Tract)

A pre-commercial thinning is proposed for stand 51. Stand 51 is a 33.1-acre loblolly pine plantation (with natural pine regeneration) that was established in 2002. This stand is a part of a recent acquisition by the State, which is adjacent to Monie Creek. This stand is located in the General management area.

Complex S22 Reid

A pre-commercial thinning is proposed for stand 2. Stand 2 is a 14.3-acre loblolly pine plantation (with natural pine regeneration) that was established in 1999. This stand is located within the General Management Area.

Complex S29 Cottage Grove

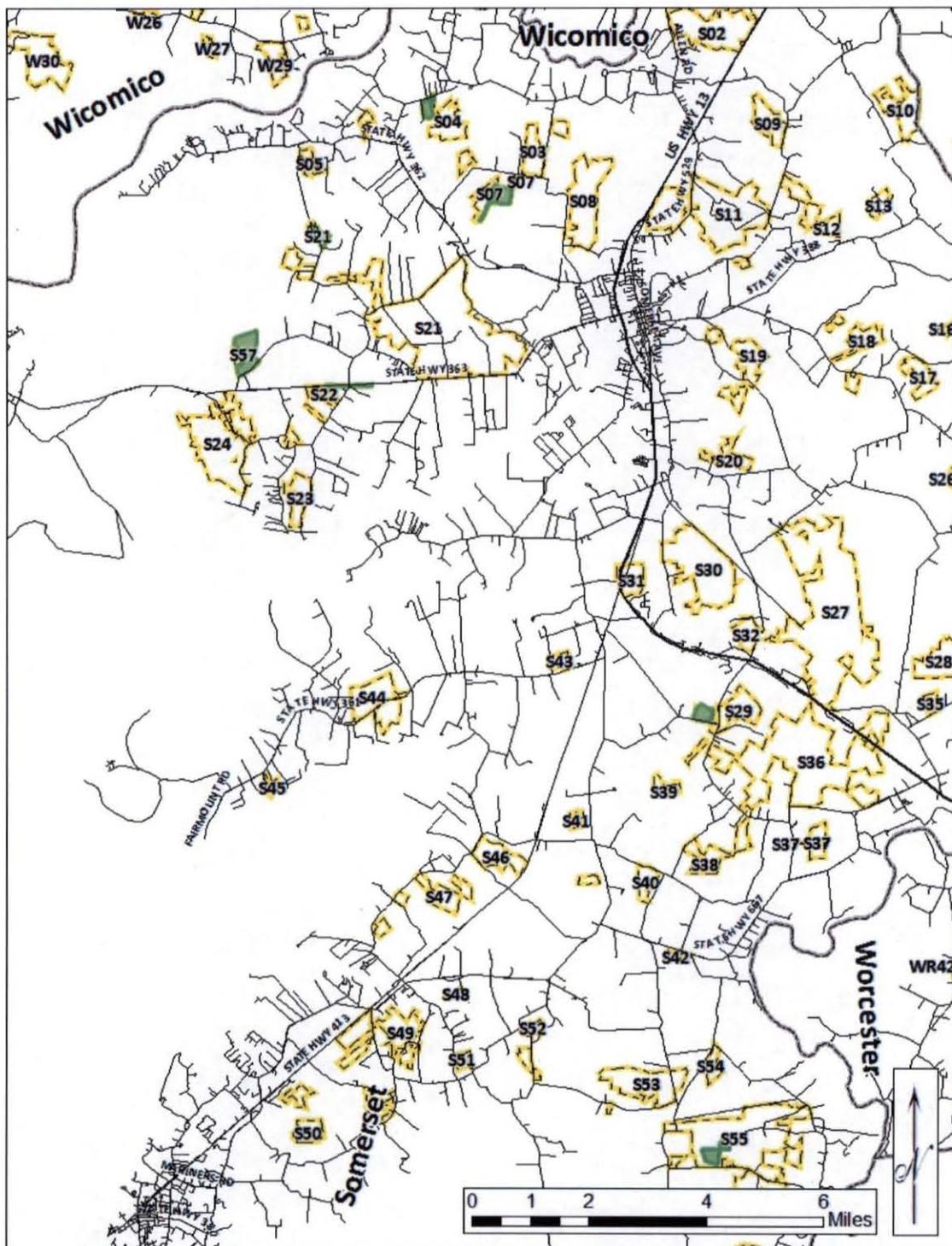
A first thinning is proposed for Stands 4 & 7. These stands are a 45.8-acre loblolly pine plantation, established in 1990 and 1992 respectfully. These stands are located within a DFS Management Area.

Complex S55 Marumsco

A pre-commercial thinning is proposed for Stand 34. Stand 34 is a 34-acre naturally regenerated loblolly pine community established in 2005. This stand is located within the General Management Area.

Complex S57 Lankford

A first thinning is proposed for Stands 1 & 3. These stands are a 120-acre loblolly pine plantation that was established in 1989. These stands are a part of a recent land acquisition by the State. The stands are located within the General Management Area.



FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : S04 English Complex

ASC-DNR Forest Service 05/29/2009

Silviculture Prescription:

A Second Thinning is proposed for stands 3, 9, & 11. These stands make up a 32.7 acre loblolly pine plantations. Stands 3 and 9 were established in 1982 and stand 11 was established in 1973.

These stands are in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : S07 Pusey Complex

ASC-DNR Forest Service 05/29/2009

Silviculture Prescription:

A Second Thinning is proposed for stands 4 & 5. These are 53.6 acre loblolly pine stands established in 1982 and 1978, respectively.

A final Harvest is proposed for stand 1. Stand 1 is a 16.4 acre loblolly pine stand that was established in 1950.

These stands are in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Complex : S21 E. Mace Smith Complex

ASC-DNR Forest Service 05/07/2009

Silviculture Prescription:

A Pre Commercial Thinning is proposed for stand 51. This stand is 33.1 acre loblolly pine plantation established in 2002.

This stand is in a General Management Area.

Guidelines:

Empty box for guidelines.

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : S22 Reid Complex

DEB-DNR Forest Service 02/18/2009

Silviculture Prescription:

A Pre Commercial Thinning is proposed for stand 2. This stand is 14.3 acre loblolly pine plantation established in 1999.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : S29 Cottage Grove Complex

DEB-DNR Forest Service 02/18/2009

Silviculture Prescription:

A First Thinning is proposed for stands 7 & 4.
 These stands are 45.8 acre loblolly pine plantation established in 1990 & 1992.

This stand is in a DFS Area.

Guidelines:

Legend

MANAGEMENT

-  DFS
-  ESA Zone 1
-  ESA Zone 2
-  ESA Zone 3 pulp wood
-  ESA Zone 3 Saw Timber
-  FIDS
-  Stream Buffer

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : S55 Marumsko Complex

ASC-DNR Forest Service 05/07/2009

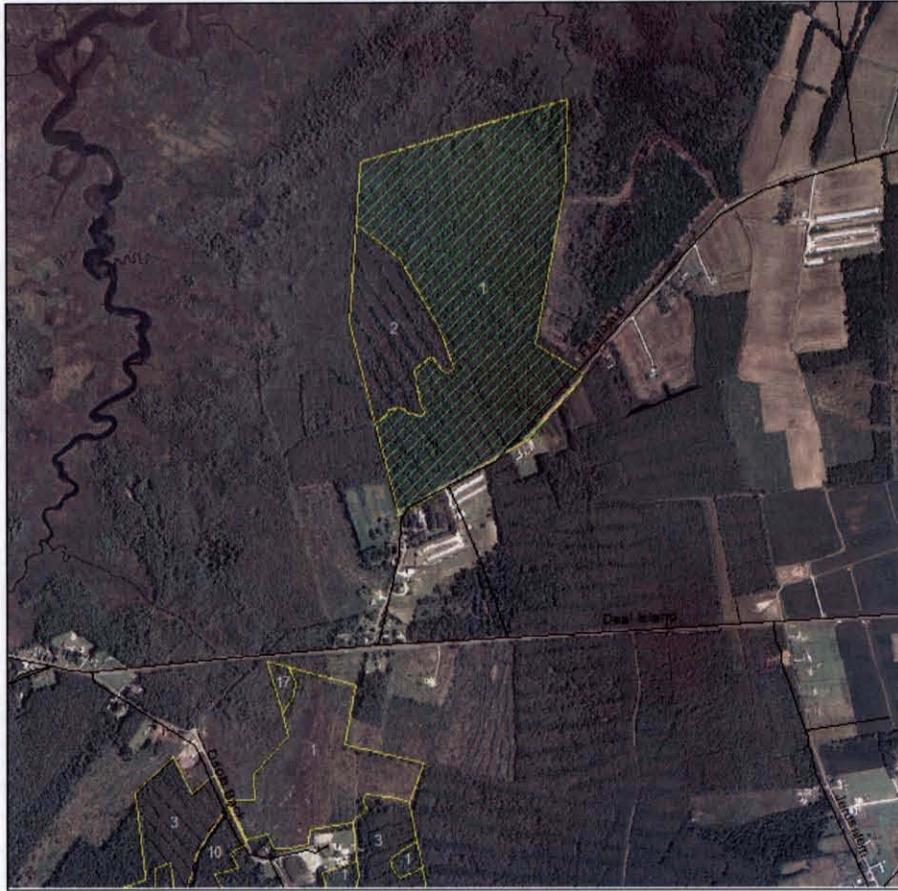
Silviculture Prescription:

A Pre Commercial Thinning is proposed for stand 34.
This stand is 34.0 acre loblolly pine established in 2005.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 1,320 feet

Complex : S57 Lankford Complex

DEB-DNR Forest Service 02/18/2009

Silviculture Prescription:

A first thinning is proposed for stands 1 & 3. These stands are a loblolly pine plantation established in 1989, totalling 120.0 acres.

This stand is in a General Management Area.

Guidelines:

**Locations & Descriptions
Of
Restoration Projects**

Horsebridge Creek

Watershed Improvement Project

by Joe Fehrer, TNC – Nassawango Project

Horsebridge Creek, located in Wicomico County was first channelized in the late 1950's to aid with farming (draining the fields) in the area, then abandoned for a period of time until when in the early 1980's it was re-ditched and is now a "tax ditch" with the Horsebridge Creek PDA Assoc. assuming control of maintenance etc. The Nature Conservancy has been working in the Nassawango Creek watershed since 1978 to protect and preserve the rare and unique habitats found there and presently owns 10,000 acres spanning Worcester and Wicomico Counties. Horsebridge Creek is the only tax ditch which flows directly into Nassawango Creek and as such is the greatest direct contributor of nutrient and sediment loads to the Nassawango, these creeks meet immediately upstream of Twilley Bridge in Wicomico County.

The goal of this project is to allow for the seasonal flooding regimen to occur behind the large earthen berm (the now cut-off floodplain) presently in place and consisting of the dredge spoils from the creek/ditch. We hope that by installing large (3 foot) dia. culvert pipes strategically along and through the berm we will achieve not only the restoration of some flow but also the settling out of some nutrient/s and sediment/s that now flow unabated into the Nassawango, we also expect this diversion of floodwater will slow the flow of storm water entering the Nassawango as well.

While the immediate project of installing culverts will be a first step, eventually it's hoped that a total restoration of the creek to a more natural state can be achieved all the while maintaining the benefit to the farming community upstream.

Since the berm was established there has been no seasonal natural flooding of the floodplain to the south of Horsebridge Creek, this area is dominated by a mix of cypress, black and tupelo gum and red maple and is dependant on the cyclical flooding of the bottomland hardwood forest there. To recap, the primary reason in pursuing this restoration project is to restore flow but equally as important, to remove some of the nutrient and sediment loads before they reach the main stem of the Nassawango Creek.

Brookview Ponds ESA, Chesapeake Forest Restoration Plan for FY 2011

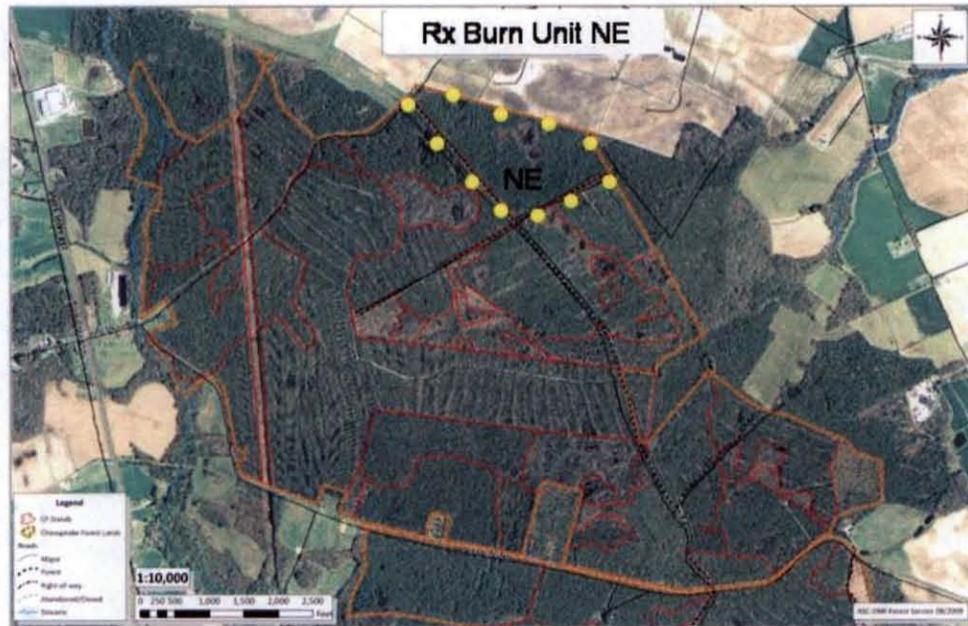
Wayne Tyndall, State Restoration Ecologist
Maryland Natural Heritage Program, Wildlife and Heritage Service
PO Box 68, Wye Mills, MD 21679
443 786 7164

During FY 2005 – 2007, Loblolly pine, Red maple, and Sweet gum were managed in and along the perimeter of wetlands with rare, threatened, or endangered plant species as well as rare natural communities in Brookview Ponds ESA. Management consisted of girdling pines and treating maples and gums with Arsenal via a drill-and-syringe technique or Garlon 4 via a basal bark treatment . During FY 2008 and 2009, resprouts of maple and gum were managed with Garlon 3A foliar treatments.

During FY 2010, a prescribed burn is planned for the northeastern section of the ESA (Fig.1; “NE”). Because of hydric conditions each spring, the anticipated burn window is October – November though conditions may allow burning before or after this time period. Primary objectives of the Rx burn are to kill reestablishing maples, gums, and pines along the perimeter of each wetland and to consume fallen trees deliberately killed during 2005-2007. A secondary objective is to begin the process of oak release in surrounding uplands by killing as many pines, gums, and maples as the low fuel load will permit. The Maryland Forest Service will lead the burn with the assistance of the Maryland Natural Heritage Program.

Pre-burn permanent-point photographs will be taken at the primary wetland complex of the NE section. During the 2010 field season, monitoring will focus on unexpected negative impacts such as invasive species appearance. Rare and endangered species will also be monitored for unexpected changes in population size or habitat conditions. The Natural Heritage Program will be responsible for monitoring activities.

Figure 1. Prescribed burn unit, NE, in Brookview Ponds ESA



Brookview Ponds ESA

Projected Annual Budget

CHESAPEAKE FOREST FY 2011 PROJECTED BUDGET

<i>Cost of Management</i>	
<i>(*Costs will vary from year to year)</i>	
State CF Salaries & Contract Management	\$ 300,000
Land Operation	\$ 400,000
Inventory & Monitoring Program	\$ 70,000
Sustainable Forest Certification	\$ 15,000
Watershed Improvement & Other Restoration Projects	\$ 80,000
County Payment (15% of revenues)	\$ 160,000
Fixed Cost (ditch drainage payments to counties)	\$ 8,000
TOTAL COST	\$1,033,000

<i>Operating Revenues & State Funding</i>	
Forest Product Sale Revenues	\$ 750,000
Hunt Club Revenues	\$ 332,000
State Funding	\$ 100,000
TOTAL REVENUES & FUNDING	\$1,182,000

**Interdisciplinary Team
Comments**

Agenda for CF
2011 AWP Field Review
September 23, 2009

- | | |
|------------|--|
| 10:00 A.M. | Meet at the Chesapeake Forest Office |
| 10:15 A.M. | Review Draft Annual Work Plan |
| 11:30 A.M. | Bag Lunch |
| 12:30 | Meet at TNC Furnace Town – Collect Short Leaf seed |
| 3:00 P.M. | Wrap up/Adjourn |

Maryland Department of Natural Resources
Wildlife & Heritage Services
Memorandum

TO: Chesapeake Forest Interdisciplinary Team
FROM: Wesley Knapp
DATE: 1 September 2009
RE: Chesapeake Forest FY11 Annual Work Plan – Natural Heritage Program Comments

In the FY11 AWP, 21 complexes and 40 stands have been proposed for management. I noted “hits” in 23 stands for sensitive resources, including 6 complexes and 10 stands within Ecologically Significant Areas (ESAs). An Excel spreadsheet (CFAWP11spreadsheet.xls) containing all areas proposed for management, “hits”, and abbreviated comments are attached.

In future work plans it would be useful in prioritizing fieldwork to include a county wide map showing the CF Tracts proposed for management. An example of this map type is shown in the CF FY05 AWP. Some errors were found on the maps in the AWP. The most significant issue was the absence of the Management Zone Layer and associated information that was updated for the Forest Service in the late winter of 2009. This information was submitted under the guise that the Forest Service had to have this data for modeling purposes, yet the management zone layer didn't make its way to Annual Work Plan. This layer has to be updated due to discoveries this field season. Once completed it will be distributed to Mike Schofield (Chesapeake Forest) for inclusion in future work plans.

For ESA's located in the plant we offer the following general comments:

1. For areas proposed within Riverine Swamp Forest ESA Zone 1 a 300 foot buffer extending to either side of a stream or the entire floodplain plus 50 feet, whichever is greater. The first 50-foot is a no-cut buffer closest to stream/floodplain. The remaining 250 feet should be managed for a minimum of 50% hardwood (or Atlantic White Cedar and/or Bald Cypress). Loblolly pine plantation thinning may be heavier than normal (post-thinning basal area of $> 70 \text{ ft}^2 / \text{acre}$). Planting of native genotype trees may be conducted as recommended by Heritage.

2. For areas located within ESA Complexes Zone 1 site-specific restoration plans are to be developed by Heritage. Within Zone 2 thinnings will be done in such a way that 75% of the area contains large pole timber and saw timber age classes (10" DBH and greater), which will be managed for longer stand rotations (50+ years). Forest Management activities such as commercial thinning in these stands shall maintain a minimum of 70 sq. ft. of BA with the goal that 50% or more of the stand composition will be comprised of hardwood species. When regeneration harvests occupy 25% of Zone 2, then natural regeneration must reach large pole timber size (10" DBH) before additional regeneration harvesting occurs. Within Zone 3 there will be no mechanical site preparation. Prescribed burning will be allowed as a management tool. There will be no chemical control of hardwoods except as may be deemed necessary after consultation between the Forest Manager and Heritage.

3. For areas located within Sand Ridge ESA Zone 1 site-specific restoration plans are to be developed by Heritage. Areas located within Zone 3 should have heavy thinnings, meaning a post-thinning basal area of $> 70 \text{ ft}^2 / \text{acre}$. This will aid the regeneration of mast producing hardwood species. The long-term management of this zone is for saw timber rotations of natural hardwood species. Prescribed fire should be implemented when feasible.

1. Delmarva Fox Squirrel (DFS) Management

The following were hits for DFS:

W46 (Stand 109 & 125) WR24 (Stand 3 & 8) S04 (Stand 3, 9, & 11) S29 (Stands 4 & 7)

The main focus of DFS management on the above tracts is to promote mature mixed forests with diverse species compositions, favoring hardwoods. Recommendations for stand management for DFS are somewhat similar to that of FIDS; retain hardwoods such as oaks and hickories to provide habitat and mast production. We recommend that the practice of aerial release spraying in DFS management areas be used ONLY in those stands where prescribed burns are unfeasible (safety/health concerns), ONLY at reduced formulations proven to retain oaks, and not within 300 feet of any place surface waters are present (as per label warnings), including Delmarva Bays. Non-ionic surfactants need to be used when spraying near wetlands and streams. Use of prescribed fire is preferred over aerial spraying and will promote a mixed stand more suitable for DFS than by use of herbicides. For stands where thinning is prescribed, we recommend thinning heavier than normal (<70 ft² basal area/acre). All larger hardwoods of any species in the mid to upper story should be retained, to provide habitat and mast production. Clearcut stands within DFS management areas should be natural regeneration ONLY with no site preparation.

2. Bald Eagle Nest Sites:

The following tract is within the 0.25-mile protection zone for Bald Eagle nests:

WR 42 (Stand 1)

A map with eagle protection zones will be provided for this hit. In Zone 1, which is a 330-foot radius from the nest, no timber cutting should occur. In Zone 2, which extends from 330-feet to 660-feet from the nest, timber harvesting should only occur outside of the eagle nesting season (15 December - 15 June). Harvesting methods within Zone 2 should be restricted to selective thinnings and stand maintenance. In Zone 3, which extends from 660-feet to 0.25 mile from the nest, timber harvesting should only occur outside of the eagle nesting season. No restrictions on harvest method are needed in Zone 3. The Bald Eagle is being proposed for delisting by the Maryland Natural Heritage Program and if passed, the before mentioned restrictions will not be accurate.

3. Ecologically Significant Area (ESA) Management:

The following were hits for ESAs:

D21 (Stands 3 & 4) D29 (Stand 1) W09 (Stand 2) W50 (Stand 6)

D21 Centennial Ponds ESA: The first thinning proposed for stands 3 & 4 will act to encourage native hardwoods that have been suppressed by site prep & spray practices employed by Chesapeake Forest from a decade ago.

D29 Upper Blackwater River ESA: This area is mapped as a general management zone in the AWP, but a large portion of this area is ESA Zone 1, (Riparian ESA). The goal of this ESA is to attain old growth forest condition along the Blackwater River. Thinning is allowed, but a 50-foot no-cut buffer should be left along the stream.

W09 Taylors Trail Sand Ridge: This proposed clear-cut of a dense loblolly pine stand will be used to remove the sand ridge of non-indigenous vegetation. Before harvest a number of invasive species need to be managed. Present on site and along the roadside are Japanese know-weed (*Polygonum cuspidatum*), English ivy (*Hedra helix*), privet (*Ligustrum* sp.) and lesser periwinkle (*Vinca minor*). If these plants are not chemically treated and managed at this site their populations will explode after harvest making any management at the site in the future difficult. After the removal of loblolly pine natural regeneration should be allowed to reseed the site. If natural regeneration is not obtaining the desired outcome then supplemental planting of native genotype hardwoods may occur with consultation of Heritage. No mechanical site preparation should occur on site, and the area should be subjected to a prescribed burn to aid hardwood regeneration.

W50 Johnson Sand Ridge: This Sand Ridge ESA is not mentioned in the AWP, but the map depicting the location of the ESA is shown. Is this ESA proposed for management? If management is proposed for this ESA, the thinning should be heavier than normal in order to promote hardwood species.

4. DFS & ESA

The following were hits for both ESA & DFS:

D14 (Stands 27 & 28) W46 (Stands 109, 111, 125, 126, 127, & 128)

D14 Brookview Ponds: This diverse ESA supports an array of RTE species. A management plan is being written to aid in the management of this property. Portions of the proposed first thinning will be conducted as well as other innovative management practices within ESA zone 1 & 3. A meeting before the proposed first thinning should occur to discuss the areas where thinning is best suited. The areas of thinning will be less than what is currently proposed. A new ESA polygon will be supplied in the winter of 2010 and will require future fieldwork and refinement.

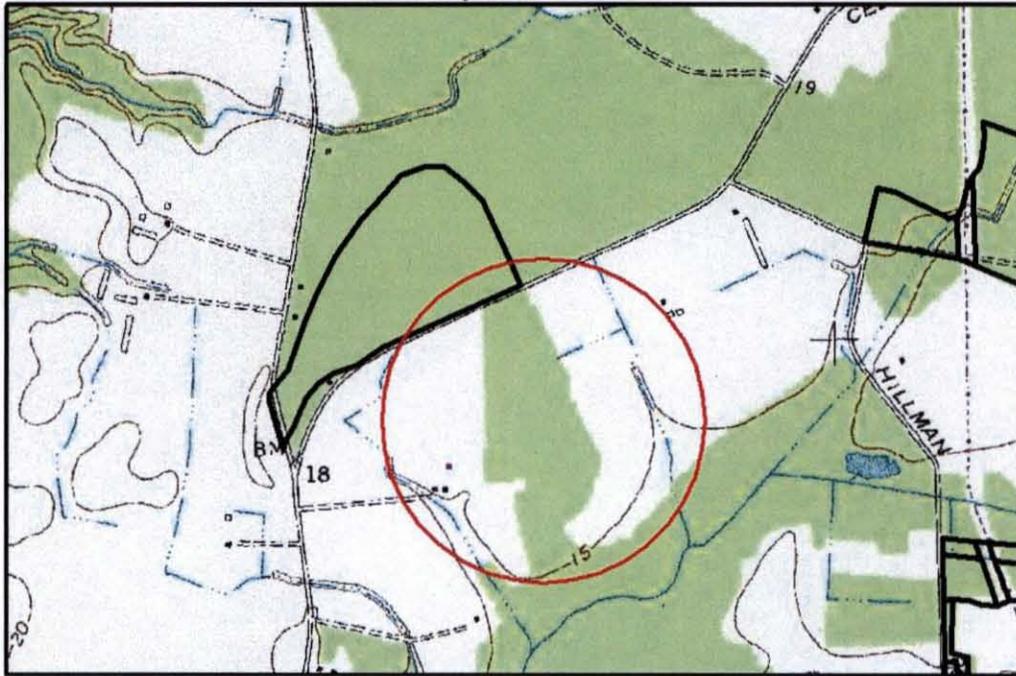
W46 Wango Pines: There are large portions of ESA Zone 1 within the areas of proposed thinning. An update to the management zone layer was created in the late winter for the Forest Service and should be included in future AWP's. The first thinning should proceed at a heavier than typical rate to encourage hardwood regeneration on the Sand Ridge ESAs. All native pine species (Pitch, Pond, or Short-leaf) should be retained during thinning.

5. No Concerns

The following were sites with no concern:

C08 (Stand 1) W12 (Stand 1) W17 (Stand 1, 3,4, & 5) W18 (Stand 4) W24 (Stands 1 & 4)
 W35 (Stand 5) W50 (Stand 3, 5, & 6) S07 (Stand 1, 4, & 5) S21 (Stand 51)
 S22 (Stand 2) S55 (Stand 34) S57 (Stands 1 & 3)

Cedar Hall Road
(WR 42 Stand 1)
Bald Eagle Nest Location



Legend
eagle_qmibuff_dis

0 0.03 0.06 0.12 0.18 0.24 Miles



**Citizen Advisory Committee
Comments**

AGENDA
CITIZEN'S ADVISORY COMMITTEE
MEETING

THURSDAY, DECEMBER 3, 2009

- 9:00** Meet at Nassawango (Public Lands Office)
- 9:00 - 9:45** Chesapeake Forest 2011 AWP Overview
- 9:45 - 10:30** Pocomoke Forest 2011 AWP Overview
- 10:30 - 11:15** O.R.V. Trail Status & Review
- 11:15 - 12:00** Draft Pocomoke Sustainable Forest Management Plan (SFMP) Presentation & Review

CITIZEN'S ADVISORY COMMITTEE MEETING

December 3, 2009

**IF YOU HAVE ANY CHANGES IN ADDRESS OR PHONE NUMBERS
PLEASE ADD TO THE BACK OF THIS PAGE**

Chesapeake & Pocomoke Forest Annual Work Plan Meeting

Participant Name: (Please Print)	Unit:
Joan Maloof	Citizen's Advisory Committee Email address: jemaloof@salisbury.edu
Adrienne Wtkowski	Citizen's Advisory Committee Email address: aw96940@salisbury.edu
Joe Fahrner	CAC Email address: jfahrner@tnc.org
Larry Beachamp	CAC CAC - Hunting Ref. Email address: llbeachamp@hotmail.com
Kip Powers	MD Forest Service Email address:
Alexander Clark	MD Forest Service Email address:
Samuel J. Bennett	MD - Forest Service Email address:
Michael G. Schofield	MFS - Chesapeake Forest Mgrs Email address:
Denise L. Snyder	Chesapeake State Forest Email address:
	Unit: Email address:
	Unit: Email address:

Citizens Advisory Committee (CAC)
Annual Work Plan (AWP) Meeting Minutes
December 3, 2009

Attendees: Joan Maloof, Ecologist, Salisbury University – CAC member
Adrienne Witkowski, Student, Salisbury University – CAC member
Joe Fehrer, Conservation Interest – Nature Conservancy – CAC member
Larry Beauchamp, Hunter – CAC member
Kip Powers, Regional Forester - MD DNR
Alexander Clark, Forester – MD DNR
Samuel J. Bennett, Pocomoke Forest Manager – MD DNR
Michael G. Schofield, Chesapeake Forest Manager – MD DNR
Denise L. Snyder, Office Secretary, Chesapeake & Pocomoke Forest

Review of Chesapeake Forest AWP:

- Kip Powers reviewed new & potential land acquisitions:
- Larry Beauchamp
 - Somerset Co. – some hold ups with his sale of property to State - 231 acres on Pocomoke River, Somerset County – program open space
- Joe Fehrer
 - Thanked Mike for his help with the Horsebridge Creek Restoration Project
- Joan Maloof
 - Include page numbers on CF plan
 - Appreciates the over view maps included this year
 - Requested the names of herbicides be included in the plan. Mike responded that we do not like to use the names because they can change based on site visit.

- Joe Fehrer
 - Asked how much aerial spraying we do. Response was a couple hundred acres/year
- Larry Beauchamp
 - Requested an overview of timber marketing practices during the recession. Are you giving timber away?
- Mike Schofield
 - Brief overview of the Brookview Ponds Restoration project by Wayne Tyndall. Plans to burn in the fall. The full restoration plan is to be completely written this winter.
- Kip Powers
 - Informs group of the 1045 acres in Dorchester Co. south of Rt. 50 being acquired by the State
- Joan Maloof
 - Asks how we can get more of the general public out on state forestlands. Maybe get some recreational funding, update website, and add maps for trails for hiking, bird watching. Says general public does not know where they can go. Maybe apply for GIS funding at University to do maps online.
- Joe Fehrer
 - Asked about regeneration/restoration of cypress/white cedar in wetlands
- Joan Maloof
 - Can we have access to the Heritage – ID Teams comments? Answer was, we adjust and correct the AWP according to their recommendations prior to the CAC receiving the plan.
- Larry Beauchamp
 - Asked if hunt club revenues include an increase for FY2011. Informed us that many people expressing concern about that due to the economy

- Joan Maloof
 - Asked if she could go hiking on leased property. She told not during hunting season and not without the Land Managers permission. The hunt clubs would also have to be notified.
 - She believes we should have more exclusive (no hunting) areas for recreation.

Joan Maloof
4701 Whitehaven Rd
Quantico, MD 21856
jemaloof@salisbury.edu
December 26, 2009

Comments on the Proposed 2011 Annual Work Plan for the **Chesapeake Forest**

As I take the time, once again, to prepare comments on the Chesapeake Forest Annual Work Plan I notice that I am making very similar comments every year. Unfortunately, I feel that very few changes are made in response to my comments. To emphasize this point I am including 2010 Work Plan comments in gray and adding 2011 Work Plan comments in black.

The document was very well prepared. Thank you for producing such a clear and easy to reference work plan. The color maps were especially useful. As I mentioned last year, page numbers would make the document even easier to use. I appreciate getting the plan in plenty of time to review before the meeting.

Once again a very nice document with helpful color maps was produced. A minor point, perhaps, but page numbers would make it even more useful. Although the Advisory Committee was told in 2006 that we would have 30 days to review the plan prior to any meetings, the actual time was closer to 20 days.

The plan seems ecologically reasonable. Given the young age of the majority of the forest it is good that the acreage planned for final harvest is low. With the exception of the comments made below about thinning and herbicide sprays, the plan seems very reasonable.

Once again, a reasonable plan. Forest manager M. Schofield is doing a good job.

The meeting to review the plan was not well attended. I appreciate being able to help select the meeting time and date so I was able to attend. Unfortunately there were only two other citizens in attendance. Perhaps more of an effort should be made to encourage

advisory committee members to attend, or inactive members should be replaced with those who will be more active.

Once again, I appreciated the opportunity to help select the meeting date, and once again there were only a few advisory committee members in attendance. For the first time we had a student representative. After many years we have still not had a person to represent native people. Where were the tourism and recreation representatives? Perhaps more of an effort should be made to encourage advisory committee members to attend, or inactive members should be replaced with those who will be more active.

Continue research and monitoring. Thinning is the principal activity on the forest this year. Almost two thousand acres are scheduled to be thinned. Are we sufficiently monitoring the effects of thinning activities? How are the thinning activities affecting invasive species, bird species, and soil characteristics? (To name just a few components.) I encourage increased research and monitoring to be sure thinning activities are having the intended results. As I mentioned at the meeting, it may be useful to leave a small percentage of the acreage planned for thinning as control plots for monitoring studies.

Once again thinning is the principal activity on the forest, with over a thousand acres planned for thinning. When you fly in a plane over this area the stripes of thinning are prevalent everywhere. Are we sufficiently monitoring the effects of thinning activities? How are the thinning activities affecting invasive species, bird species, and soil characteristics? (To name just a few components.) I encourage increased research and monitoring to be sure we know the full ecological effects of thinning. To my knowledge no monitoring of the ecological effects of thinning is being done here.

Increase recreational opportunities. As I have mentioned continuously, I would like to see more trails and better advertising of where the Chesapeake Forest lands are located. I was pleased to see that a National Recreation Trails Grant was awarded for "trail enhancement," but this enhancement will not benefit the average citizen unless maps are available to show the location of the trail. Other than hunters, and trail riders, few citizens seem to know of any Chesapeake Forests Lands that they can visit and enjoy. The signage does not encourage recreation. I also urge you to consider making a few locations

hunter-free so they may be enjoyed seven days a week in the fall instead of just on Sundays.

Once again, as I have mentioned continuously, I would like to see more trails and better advertising of where the Chesapeake Forest lands are located. I was pleased to see that a National Recreation Trails Grant was awarded for "trail enhancement," but this enhancement will not benefit the average citizen unless maps are available to show the location of the trail. Other than hunters, and trail riders, few citizens seem to know of any Chesapeake Forests Lands that they can visit and enjoy. The signage does not encourage recreation. I also urge you to consider making a few locations hunter-free so they may be enjoyed seven days a week in the fall instead of just on Sundays. Recreation includes more than just hunting.

Stop spraying herbicides on public forest land. Since 2002 I have been commenting that we should not be spraying herbicides on the Chesapeake Forest Lands. Herbicides are currently used in the forest to promote the growth of pine by killing competing vegetation or what managers call "undesirable hardwoods." Sweet gum and maple are native trees and they are only considered undesirable hardwoods because they have a low value in the marketplace. The herbicide sprays kill many other plants in addition to the sweet gums and maples. Many of the plant species that are killed would have produced nuts and berries and other important food for all types of wildlife from birds to butterflies.

Once again this plan calls for herbicide use, but at least the acreage to be sprayed is small, and the concentration of the chemicals has been reduced. The work plan does not specify which herbicides will be used, a detail that has been requested previously. Although we are spraying these chemicals over the landscape there is incomplete information on how long they persist in the environment and what effects they might have. Some of the herbicides commonly used in forests persist for a long time in the ground (over three months). There is some evidence that one herbicide, Imazapyr, easily contaminates groundwater, yet it is difficult to test for, so we are not sure if our past spraying has already affected our groundwater. There is also some question about how the use of this herbicide affects the soil bacteria that are critical to nutrient cycling.

Once again the current Work Plan only mentions "herbicides" with no specifics regarding the active ingredients. At the Work Plan meeting we discussed my request to know which herbicides were being used, and it was explained that sometimes the decision is made at the last minute. Perhaps the solution here is to report which herbicides were used, over what total acreage, in the previous year. At present this information is not available to the public.

This work plan does not include any fertilization. I am very pleased to see that this plan does not include any fertilization of the forest. The Chesapeake Bay Foundation calls excess nutrients the number one problem in the Chesapeake Bay. The State is setting a positive example of environmental management that is good for the bay by not fertilizing the public forest lands.

Once again, kudos for not adding to nutrient pollution.

Better advertising of public comment period. Please encourage public comments by improving the advertising of the public comment period. The dates currently listed on the website (<http://www.dnr.state.md.us/forests/chesapeakeforestlands.asp>) are incorrect. Ideally the public comment period should be held the same time each year. (At the meeting we determined that the comment date would be Jan 1 – Feb. 1 this year.) The DNR website says that there are public meetings about the forest, but to my knowledge it has been quite a few years since a publicly announced meeting was held.

For the 2008 work plan no public comments at all were posted. For the 2009 work plan there was only one comment from the public posted (and this was from a colleague that I notified about the comment period). This is a poor record of citizen involvement with their forest.

Once again there are major shortfalls regarding public comments. When I checked the DNR website in late November there was no notification of when the Chesapeake Forest public comment period would be, and only a few comments are ever made. This points to a lack of advertising for comments, lack of ease in making comments, and no real interest by the DNR in obtaining public comments. Why aren't all the state forests on the same schedule?

At this year's meeting it was announced that the public comment period would start be Jan. 14- Feb. 14. I hope to see better advertising and more comments this year.

Include budget information. In past work plans budget information was included, this plan contained no budget information.

Thank you for including the budget.

Closing. Thank you for inviting me to comment. It is exciting to see the Chesapeake Forest management improve little by little each year. Although some of my comments may seem critical I do believe we are working together toward the common goal of making this publicly owned forest an important resource for all. This year's plan was the most ecologically sensitive plan I have seen to date.

Congratulations on the new acquisitions. The Chesapeake Forest is getting larger every year. The emphasis so far seems to be on sustainable timber production and hunting. I hope as we move forward that there will be more attention given to general biodiversity and additional types of recreation.

Joan Maloof, Ph.D.

January 8, 2010

Comments regarding the Chesapeake and Pocomoke Forest 2011 Annual Work Plan/s.

Chesapeake Forest Lands:

Overall I see no issues regarding the tracts proposed for silvicultural activities in this plan, as presented. Working with DNR Heritage will provide protection for those ESA's embedded within the larger forest area/s scheduled for thinning/harvest activities.

It will remain incumbent on the forest manager/s to fully delineate wetland buffers, and ensure strict compliance from their contractors to protect all wetlands, streams, creeks and watercourses from sediment and other forms of runoff.

It should also be a priority to ensure that all logging and maintenance equipment entering onto these properties is thoroughly clean and free of invasive seed and plant material.

With regard to public access of the Chesapeake Forest Lands; and effort should be undertaken to identify and enhance those properties that may allow for small boat (canoe and kayak) launching and retrieval, as time and funding permits.

Pocomoke State Forest:

In general this plan presents no immediate concerns, that said however I do have several recommendations.

On several of the tracts being proposed for harvest there occurs "old growth" pine (age class 73 to 80 years) on relatively limited acreages. These tracts are shown as Dividing Creek Tract 13-Stand 16, Nazareth Church Tract 6-Stand 8, and Nazareth Church Tract 7-Stand 2.

Given the limited amount of this age class forest type in the immediate area I would respectively suggest that these areas be removed from consideration and left to mature undisturbed. Doing so will provide for those species that are dependant on older growth forest types, including those that depend on mature diseased and standing dead wood. While I'm mindful of the fact that the southern pine bark beetle has and will likely remain a threat, retaining [and monitoring] these relatively small areas [as shown above] would provide an "old growth" component, now largely missing in our local forest/s.

As was mentioned at the meeting held in December to review these plans; the overlay of color on the stands under consideration in this plan should be changed to cross hatching or outlining, so as not to diminish interpolation of the forest cover.

The wetland delineation/s and the prevention of invasive species, as mentioned under "Chesapeake Forest Lands" should also be stringently applied to the Pocomoke State Forest Lands.

Page 2

As a general comment for both plans:

Maintaining scenic buffers along roads and water bodies is to be commended and encouraged. The restoration of hydrological function (ditch plugging etc) to the extent possible on the Chesapeake and Pocomoke Forest Lands should be encouraged, as should the continued use of controlled burns. Both are proven methods to improve plant and animal biodiversity and restore ecological function.

And finally, using natural regeneration should be the preferred alternative to re-establish pine and mixed hardwood stands, and the *limited use* of aerial spraying to control undesirable species is encouraged.

Submitted by;

Joseph W. Fehrer
P.O. Box 68
Snow Hill, MD
21863

Schofield, Mike

From: Bill_Giese@fws.gov
Sent: Monday, December 14, 2009 1:52 PM
To: Schofield, Mike
Subject: 2011 annual Work Plan Chesapeake Forest Lands.

Mike

In reviewing the 2011 work plan I would like to offer the following general comments:

I was pleased to see that under Maintenance that additional roads are being opened and reclaimed. These roads provide an important access into the areas for hunters, management staff and emergency response such as fire suppression equipment. These roads can be opened in a way to minimize the effect of establishing edge which is negative to forest interior bird species, but still provide access. These roads were developed at great cost to Chesapeake Co, and I feel they can be better utilized.

The Forest can be commended for continuing the excellent effort on boundary marking of their properties, this is a never ending effort but it is extremely important to protect the integrity of the property.

I continue to support the dual Forest Certification process. This oversight by an outside source is very important to the validity of the program.

There are no comments on the proposed silvicultural activities proposed except that the recommendations follow what I perceive to be the overall vision for the Chesapeake Forest Lands and management activities support the management of Delmarva Fox Squirrels and Forest Interior Dwelling bird species which are high priority initiatives.

Outside of the realm of the 2011 Annual Work Plan, I would like to offer the following comments regarding several issues relating to generally management of the several new agricultural properties that Chesapeake Forest is now managing. I will address my comments to the Egypt Road Restoration parcel but my comments should reflect on other properties as well. A number of folks worked very hard on the restoration efforts on the Egypt Road lands. We felt it was very important to preserve an agricultural base of land that was actively farmed. I strongly believe that the State lands must set the example for agricultural best management practices. I have brought several of these items to your attention earlier but want to repeat them in this format. While I remain a supporter of the use of chicken manure as a nutrient supplement by the lease farmer, I believe it must be mandated to incorporate the manure into the soils if it is to be used. The use of manure over spread on the fields and not incorporated in a year such as the past year simply sets the stage for loss of nutrients from rainfall into the waters of the river and Bay. In addition, the lease farmers must be reminded that the practice of leaving chemical containers in plain view to the public in a pile in the fields for long periods of time sends the perception to the public of chemical spills. While I am confident that the farmer triple rinsed all containers as required, these containers piled in locations devoid of vegetation from either manure storage or straw pile locations sends the wrong message to the general public driving by. This reflects badly on not only the farmer but the State management as well at a time when neither can afford the perception. This is the second year that this has occurred on the Egypt Rd. property .

As Acting Fire Manager of Blackwater NWR, the Blackwater Fire Program will continue to support any prescribed fire assistance needed by the Forest in the future. With the new MOU between the FWS and the State Land Management Divisions, that cooperation is cemented for the next 5 years. As last years burns on Nature Conservancy Lands (Johnson Tract - Wicomico /Worchester Counties.) demonstrated, the use of prescribed fire on even the pine plantation type forests released a host of rare and unique plant species. Fire use continues to be a great tool in the restoration program toolbox. Feel free to ask to ask for assistance. In this time of budget shortfalls, it is only with partnership efforts that projects can be completed.

On the positive side of the management of the property, as a neighboring landowner, I am pleased to see the restoration effort complete and expect to see this area develop into a premier wildlife and natural area in the future.

Sorry for the late response and Thank you for the opportunity to comment on the 2011 plan.

12/15/2009

Schofield, Mike

From: Adrienne Witkowski [aw96940@students.salisbury.edu]
Sent: Monday, January 25, 2010 3:49 PM
To: Schofield, Mike
Subject: student comments

My main concern would be regarding the harvest of trees that are 80+ years old. After completing a semester of research and summer of field work with Dr. Maloof (studying compositions of pine plantations and old growth) I'm aware that old growth is few and far between on the Eastern Shore.

The trees may be bigger and worth more to cut, but there is no amount of money that can produce a tree and a forest that is going on 100 years. If we leave those stands alone, by 2050, they will be old growth and people will have something rare to marvel at and enjoy. I think of it as those trees were around to see the Great Depression, WWII, Vietnam, survived Reagan and Bush, and have seen the first black president of the United States.

There is also the ecological importance to natural cycles and wildlife to consider. I won't elaborate because I'm sure DNR knows about those details.

So we could leave them alone, let them soak up more history and allow people to bask in their... awesome-ness... (or grandeur, if you prefer a more advanced vocabulary word haha) or we can cut them down and turn them into the frame of a cookie-cutter suburban sprawl 15 bedroom house.

If you need me to rephrase any of my comments or elaborate, please let me know => I feel passionately about certain issues. Sorry for the delay!

-Adrienne Witkowski

Calvin D. Lubben
Licensed Professional Forester #286
3227 Aydelotte Road, Pocomoke City, Maryland 21851
410 957-4058

January 11, 2010

Mr. Sam Bennett, Pocomoke State Forest Manager,
Mr. Mike Schofield, Chesapeake Forest Manager,

As a member of the Citizens Advisory Committee I have the following comments regarding the proposed 2011 Annual Work Plans for the Pocomoke State Forest and the Chesapeake Forest.

The work plans again have a variety of silvicultural harvests and stand management techniques on the agenda. This is very good, and I encourage additional harvests and techniques to be engaged as a means of improved management, demonstration, and learning. Forest management is as much an art as a science and there is much to be gained by the application of additional techniques.

This is particularly true when significant forestland acreage finds its way into the state's ownership, even during the recent tough economic times, and the resource basis for local wood products is reduced because of eliminated harvests, longer rotations, land reserved for nontimber and wildlife values, expanded buffers, etc. Each state acquisition heightens the state's responsibility and impact on the threshold of viability of forest products businesses and jobs, and therefore the ability of private forest land owners to keep their land as working forests.

A proposed harvest on the Pocomoke State Forest Milburn Landing Tract 16, Stand 10 has been called into question. Proposed harvests go through an interdisciplinary review through the ID team. The ID team did not have any issues with the proposed harvest. Also, internationally respected certification programs in which state has enrolled its State Forests provide a framework in which the managers operate daily. To date, I believe the certification audits have found things in order. The sum of all this study is evidence that appropriate care has been taken in reviewing the proposed harvest in this stand.

Indeed, concern over the harvest focuses on the beauty of the stand and the slope by the streams rather than any biological, economic, or environmental issues. It is very beautiful, as are most mature stands, but there are many mature stands in the Forest. The slope in an area of the stand is not a "canyon" as it has been called, but a gentle slope associated with the stream.

Proposing to remove this reviewed General Management Zone harvest in a dually certified State Forest because it is beautiful, is similar to declaring that a stand of timber in an HCVF area outside the General Management Zone should be added to the work plan because the timber's quality would make exceptionally attractive lumber.

I think a good solution to the divergent opinions is to 1) approve the proposed Work Plan harvest as written and 2) in the remaining area (east of Camp Road, west of the golf course, south of the 2011 Work Plan harvest area) commit to a harvest prescription other than clearcutting, eg crop tree selection, seed tree, etc, when the area comes up for harvest in a subsequent work plan.

Sincerely,

Calvin D. Lubben

Arthur Egolf
Egolf Forest Harvesting, Inc
36642 Horsey Church Road
Delmar, Delaware 19940

January 16, 2010

Dear Mike Schofield:

I regret that I was unable to attend the field review on Monday, January 11, 2010 but I would like to have my input recorded. I know that every timber harvest on the Pocomoke State Forest and on the Chesapeake Forest has undergone scrutiny by many different groups before it becomes part of the annual work plan. The forest industry is currently facing very difficult times and every workable timber harvest is crucial for long term survival. I along with others in the forest industry, feel that not enough of the State lands are being managed for timber. Many different tracts are beautiful in their own way, but this alone should not be a criteria for removing them from timber production. With proper harvesting techniques and buffers, unique topography and geological formations can be preserved during logging operations.

Although potential timber revenues alone should not be a reason to cut a particular tract, the financial conditions of the forest industry and the state of Maryland should not be overlooked. It is supposed to be one goal of the state lands to generate income from timber production.

Please keep me posted on the progress of the work plan. I try to attend as many of the citizens advisory board meetings as I can, but I simply cannot afford to make them all when they are held during the work week.

Sincerely,

Arthur Egolf
Egolf Forest Harvesting, Inc

Schofield, Mike

From: Snyder, Denise L
Sent: Tuesday, January 19, 2010 11:47 AM
To: Schofield, Mike
Subject: FW: CAC suggestions for enhancing recreational use

Mike, See below, I don't know if she sent this to you or not.

-----Original Message-----

From: hoofprintsinsand@aol.com [mailto:hoofprintsinsand@aol.com]
Sent: Monday, January 18, 2010 7:09 AM
To: Snyder, Denise L
Subject: CAC suggestions for enhancing recreational use

Thanks for the invitation to attend the CAC meeting in December. I was unable to attend because it conflicted with my work schedule. However, I would like to comment on the opportunities for recreational activities in the forest. The are as follows:

Increasing awareness of existing infrastructure and recreational opportunities for horseback riding in the Wicomico/Chesapeake Forest.

😊 Hoof Prints Trail Riding Center has been operating since 2002 and advertises at local chamber of commerces (Wicomico and Worcester). Hoof Prints has a land use agreement with the DNR for recreational riding and awareness of this activity could be increased on the DNR website. The horseback riding infrastructure of trails exists for those people who own horses. For those people who do not own horses and would like to rent horses to ride through the forest, online access for Hoof Prints would increase the awareness of public access to forest trails by riding at Hoof Prints.

😊 4STEPS Therapeutic Riding Program (a 501c3 non profit organization ad a Premiere Accredited Center of NARHA) enhances the lives of individuals with disabilities by providing therapeutic horseback riding and animal partnership programs. Awareness of this activity would increase the number of handicapped individuals who have access to the forested trails.

Combined, Hoof Prints and 4STEPS provide over 1000 individuals annually (children and adults with or without disabilities) with access to the forest trails. It is a low impact and safe way to enjoy the Wicomico/Chesapeake Forest. My suggestion is to add both Hoof Prints and 4STEPS on the DNR website and support the infrastructure that exists.

😊 Field trips by local elementary, middle, high school, and college students would provide the opportunity for students to learn about forest education, including open spaces, silviculture and recreational products, environmental education, careers in forestry, and recreation opportunities.

Again, thank you for your considering my comments for review. Happy Trails, Sandy Winter

HOOF PRINTS TRAIL RIDING CENTER

Where children, families, and friends ride a trail that never ends...

Hoof Prints offers rugged adventure recreational sport trail riding experiences through 5000 acres of trails and roads in the Wicomico Forest and guarantees a unique Eastern Shore experience!

5367 Sixty Foot Road

Parsonsburg, Maryland 21849

410-835-8814

click [HOOF PRINTS](#) to visit our website



Robert L. Ehrlich, Jr., Governor

Michael S. Steele, Lt. Governor

C. Ronald Franks, Secretary

January 19, 2010

Re: Chesapeake Forest 2011 AWP Updates

Dear Chesapeake Forest CAC Member;

Thank you for taking the time to submit written comments on the Chesapeake Forest draft 2011 Annual Work Plan. The following is a list of actions/changes that have been taken as a result of your comments:

1. Page numbers have been added to the plan.
2. An advertisement soliciting comments from the public has been placed on the DNR home page, the Forest Service home page and the Chesapeake Forest home page.
3. I have begun the process of identifying and replacing inactive members of the Advisory Committee. I will be contacting you in the near future to formally announce the vacancies and ask for nominations.
4. I have added a Geocaching project under the recreation section of the Plan. This project will rely on local experts (and possibly students from Salisbury University majoring in recreation) to develop cache sites in the forest. The goal of this project is to help the public discover their public lands. Geocaching utilizes Google Maps, which now depicts all the Chesapeake Forest tracts. For more on this growing hobby, just do a web search on Geocaching.
5. The Chesapeake Forest Office will develop a map book of the forest and surrounding DNR properties open to the public. This book will be advertised for sale upon completion via the web.
6. A summary of herbicides used on the forest over the past three years has been placed on the forest web site. The summary includes: type of release prescribed, acres sprayed, herbicide name & rate, and comments pertaining to the rationale behind each application.

I appreciate each of you taking the time to formulate your comments and submitting them to me. An updated version of the Annual Work Plan has been posted on the web site for public comments. The public comment period began January 14th and will end February 14th. I value your insight into the management of this forest and strive to make the Annual Work Plan a truly collaborative effort.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael G. Schofield".

Michael G. Schofield
Forest Manager

**Public
Comments**

Schofield, Mike

From: Heather Burnham [heburnham@salisbury.edu]
Sent: Tuesday, February 02, 2010 10:25 AM
To: Schofield, Mike
Cc: lsit@intercom.net
Subject: Chesapeake Forests comments

Maryland should use these public lands, Chesapeake Forests, for recreational and educational purposes. There are no hiking or nature trails to speak of on the Lower Shore, few opportunities to educate the public about native species, wildlife habitat, and their critical need to the Eastern Shore and the Chesapeake Bay. There are many volunteer groups that would be happy to help the state build and maintain trails, and many more that would benefit from such trails. Here is an opportunity to contribute to the health, education, and welfare of Maryland citizens, contribute to the local and state economy through ecotourism, and teach generations of Maryland children to value our native habitats.

Thank you for your time.

Heather Burnham
P. O. Box 36
Bivalve, MD 21814