POCOMOKE STATE FOREST

PROPOSED ANNUAL PROGRAM OF WORK

FISCAL YEAR 2011

Prepared by:
Samuel J. Bennett, Forest Manager

A. Forest Overview

Pocomoke State Forest (15,163) is located in Worcester County Maryland, generally between Snow Hill and Pocomoke City. The State Forest is noted for the native loblolly pine stands and cypress swamps that border the Pocomoke River.

The State Forest is managed for a variety of resources including recreation; water; wildlife; timber; and natural beauty. Of the forests 15,163 acres, 53% (7,997 acres) is reserved for multiple use management with an emphasis on forest management; 35% (5,286 acres) is for preservation and protection of special habitat, historical areas, research areas and threatened or endangered species; 12.0% (1,880 acres) for the protection of water quality.

There are several important features of this forest that affect the management of its natural resources:

- When the majority of the State Forest was acquired (1930s & 1940s) much of it was in a cutover condition and abandoned farmland.

- Soils associations are level or nearly level, well drained to poorly drained, and have subsoil dominantly of sandy clay loam or silty clay loam.

- More than 50% of the forest is dominated by loblolly pine. Loblolly pine is a very fast growing southern pine; therefore, it is fully mature at 50 – 60 years of age. It is well adapted to moist, sandy soils and will invade abandoned fields and cutover areas.

- As a southern pine, it is very susceptible to the southern pine bark beetle (especially once it reaches maturity.) This insect thrives in the warm climate of the Lower Eastern Shore. Cyclic infestations explode into full-scale epidemics every six to eight years. These (epidemics) have a significant effect on normal harvesting schedules.

B. AWP Summary

Pocomoke State Forest will harvest 417.2 acres within seventeen different sales. The regeneration harvest method will be used on one site totaling 23.0 acres. The seed tree method will be used on three sites totaling 89.0 acres. Thinning will be performed on thirteen sites totaling 305.2 acres. Volume estimates for these sales totals 1,550,000 board-feet of pine sawtimber and 8,000 tons of pine pulpwood.

Standard Harvest Requirements:
The following requirements are pertinent to all timber sales. In effect, these are "Best Management Practices" (BMP) and are accounted for when preparing the sale, supervising the logging operation, closing the sale or otherwise embodied within the contract itself. These requirements were applied to each sale area when the DNR Interdisciplinary Team conducted on-site reviews.

- Continue to drain, regenerate and stabilize all haul roads, skid trails and landings where appropriate.
- Provide scenic "buffers" along main travel roads and trails as deemed appropriate.
- Provide sediment control buffers adjacent to streams and wetlands.
- Provide buffers adjacent to rare and endangered natural communities.
- Prohibit cutting within "buffers" where appropriate.
- Provide timbered wildlife corridors between sale areas.
- Feature and retain pine within the sale area.
- Retain wildlife trees (mast and den trees,) when available.
- Provide "retention areas" within the sale area. These "retention areas" may include wildlife corridors/islands, visual buffers and legacy trees.

C. Maintenance Projects

*Visitor parking areas will be monitored monthly and kept free of debris and vegetation.

* Gates and bulletin boards throughout the forest will be repaired as needed.

*Woods road maintenance will involve mowing, grading, filling holes, cleaning culverts and removal of sapling and pole size trees. Herbicides may also be utilized to control invasive plants and improve access.

*Artificial nesting boxes (wood duck, bluebird, and osprey) will be checked for needed repairs and if necessary removed or replaced.

*Boundary lines are maintained on a 6-8 year cycle. This involves removal of brush and small trees, and marking boundary lines with yellow paint. Signs will also be placed along the boundary lines designating the public land boundary.

D. Recreation Projects

*General trail maintenance work is proposed for the Pusey Branch Hiking Trail, Milburn Landing Hiking Trail, Tarr Tract Bike Trail, Chandler Tract Off Road Vehicle Trail and the Disabled Hunter Access Trails. The Pusey Branch Hiking Trail (1/2) mile and Milburn Landing Hiking Trail (4.5 miles) are foot trails along woods roads that require routine maintenance to provide users with a quality outdoor experience. The Tarr Tract Bike Trail is 4.5 miles in length and consists of three trails (Yellow Trail, Green Trail and Blue Trail) which require occasional maintenance to improve trail conditions. The ORV Trail consists of three main trails (Blue Trail, Red Trail and Yellow Trail). The entire ORV Trail System is 6.5 miles in length and requires annual maintenance to keep trail degradation to a minimum. The Disabled Hunter access trails consists of three trails totaling 4.0 miles that require maintenance to allow for disabled hunter access. Maintenance work will involve mowing and removal of overhanging/encroaching vegetation. Trail markers and signs will also be posted. Stone and fill material will be used to maintain the ORV trail.

*Funds from a National Recreational Trails Grant were applied for to improve existing trail/road system in the Dividing Creek Tract, Whitesburg Tract and Milburn Landing Tract. These tracts total 2,726 acres and contains approximately 12 miles of roads/trails. The road/trail system is utilized by various user groups including hikers, hunters and bird watchers. Maintenance work would involve mowing, brush removal, sign posting, gate construction and eradication of invasive plants.

*Off Road Vehicle Trail Improvement Project will be assessed by DNR staff. Due to significant environmental impacts along the trail and the criteria of both the Forest Steward Council and the Sustainable Forest Initiative destructive activities occurring along the trail will be addressed. Specifically, activities within the High Value Conservation Forest and the riparian corridor along Corkers Creek will be evaluated. Final recommendations of the DNR Off Road Vehicle report will be implemented upon approval.

E. Special Projects

* Maintain forest certification from the Forest Stewardship Council (FSC) and the Sustainable Forest Initiative (SFI).

* Provide and assist with local and regional tours and environmental programs.

*Provided assistance to the State Tree Nursery with maintenance of Seed Orchards.

* Continue to create and update a GIS database to maintain forest information.

* Protect the integrity of historic and archaeological areas. Consult with experts regarding the potential location of additional sites and features of special cultural significance.

F. Silvicultural Projects

Timber Sales

1. Dividing Creek Tract 13 – Stand 16
   A regeneration harvest is proposed for this 23.0-acre pine/hardwood stand located in the General Management Zone of the Dividing Creek Tract. Access is off Whiteburg Road. No new roads will be established. Approximately 3.0 acres of the sale area is classified as Palustrine Forested Needle Leaved Evergreen Temporarily Flooded wetland. No streams have been identified in the sale area. Soils present include the poorly drained Fallsington sandy loam and Kentuck silt loam, and the moderately well drained Hammerton loamy sand and Rosedale loamy sand. Site index is 78. Average age of the stand is 73 year old. Last 10-year radial growth is 0.5 inches. Current basal area is 75 for pine and 40 for hardwoods. The stand will be allowed to seed in naturally and supplemented by hand planting, if necessary. Dominant and co-dominant oaks within the stand will be retained. As recommended by the DNR Interdisciplinary Team, seed trees will be left along the eastern boundary of the sale area and green tree retention areas (groups of oaks and other hardwoods) will be left on the northern end of the stand.

2. Milburn Landing Tract 16 – Stand 10
   A regeneration harvest is proposed for this 35.0-acre pine stand located

in the General Management Zone of the Milburn Landing Tract. As suggested by the DNR Interdisciplinary Team the harvest will be a seed tree harvest. A combination of loblolly and pond pine seed trees, approximately 8 to 15 per acre, will be retained as a seed source to promote natural regeneration. A High Conservation Value Forest north-east of the stand will be preserved. Access will be off Camp Road. No new roads will be established. Stream present will be protected with a 300 foot buffer and thinned to a basal area of 60 sq. ft. No wetlands have been identified in the sale area. Soils include the moderately well drained Hammonton loamy sand and Hambrook sandy loam, and the poorly drained Othello silt loam and Fallsington sandy loam. Average age of the stand is 50 year old. Site index is 85. Last 10-year radial growth is 0.8 inches. Current basal area is 80 for pine and 30 for hardwoods. The stand will be allowed to seed in naturally and supplemented by hand planting if necessary. Dominant and co-dominant oaks within the stand will be retained to benefit wildlife and maintain diversity. A prescribed burn is also proposed for the stand either pre or post harvest. Additional input on this sale was provided from both the Citizen Advisory Committee and during the public comment period. Concerns expressed were on the proximity of this sale area to the Corbin Branch stream. Taking these comments into consideration at this time this sale will be withdrawn until further evaluation on the site is completed.

3. Nazareth Church Tract 6 – Stand 8
   A regeneration harvest is proposed for this 22.0 acre pine stand located in the General Management Zone of the Nazareth Church Tract. Access will be off Old Beech Road. No new roads will be established. No streams or wetlands have been identified in the sale area. Soils present include the moderately well drained Klej loamy sand. Average age of the stand is 80 years old. Site index is 78. Last 10-year radial growth averages 0.5 inches. Current basal area is 80 for pine and 35 for hardwoods. The stand will be regenerated naturally. Dominant and co-dominant oaks within the stand will be retained. As a result of the DNR Interdisciplinary Team review this stand will be harvested using the seed tree method and a pre harvest winter burn will be performed to prepare the area for Pond Pine regeneration. Pond Pine seed trees (8 to 15 per acre) will be retained along with mature oaks. The High Conservation Value Forest located along the south-east edge of the stand will not be harvested, but will be part of the understory burn area. Several research plots will be established with the harvest area to determine the success of utilizing prescribed fire to regenerate the Pond Pine forest type.

4. Nazareth Church Tract 7 - Stand 2
   A regeneration harvest is proposed for this 32.0-acre pine stand located in the General Management Zone of the Nazareth Church Tract. Access will be off Old Furnace Road. No new roads will be established.

Stream located along the eastern boundary will be protected with a 300 foot buffer and thinned to a basal area of 60 sq. ft. No wetlands have been identified in the sale area. Soils present include the poorly drained Hurlock loamy sand and the very poorly drained Berryland loamy sand. Average age of the stand is 78 years old. Site index is 75. Last 10-year radial growth averages 0.5 inches. Current basal area is 75 for pine and 30 for hardwoods. The stand will be regenerated naturally and supplemented by hand planting if necessary. Dominant and co-dominant oaks within the stand will be retained. As recommended by the DNR Interdisciplinary Team this stand will be harvested using the seed tree method. Pond and Loblolly Pine seed trees (8 to 15 per acre) will be retained to provide a seed source to regenerate the stand naturally. When selecting seed trees Pond Pine will be favored over Loblolly Pine. Prior to the stand being harvested a winter burn will be performed to aid in Pond Pine regeneration. A 5.4 acre pine/hardwood retention area will be preserved within the sale area along with a High Conservation Value Forest located on the north-east edge of the stand. Both would be included in the understory burn area. Several research plots will be established within the harvest area to determine the success of utilizing prescribed fire to regenerate the Pond Pine forest type.

5. Nazareth Church Tract 10 – Stand 20
   A seed tree harvest is proposed for this 19.0 acre pine/hardwood stand located in the General Management Zone of the Nazareth Church Tract. Access will be off Forest Road. No new roads will be established. No streams have been identified. Approximately 1.0 acre of the sale area is classified as Palustrine Forested Broad Leaved Deciduous Temporarily Flooded wetland. Soils present include the poorly drained Askecksey loamy sand, the very poorly drained Mullica-Berryland complex and the moderately well drained Klej loamy sand. Average age of the stand is 81 years old. Site index is 70. Last 10 years radial growth averages 0.5 inches. Current basal area is 70 for pine and 40 for hardwoods. The stand will be allowed to seed in naturally and supplemented by hand planting if necessary. Dominant and co-dominant oaks within the stand will be retained. This sale has been removed from the Annual Work Plan at the request of the DNR Interdisciplinary Team. The sale area is dominated by Pond Pine, which is an uncommon forest type, and the ID Team was concerned about the ability of the stand to regenerate back to an acceptable level of Pond Pine. The use of prescribed fire pre harvest may provide satisfactory conditions to allow Pond Pine to adequately regenerate these stands. This will be evaluated at the two previous sites.

6. Milburn Landing Tract 15 –Stand 2 and 3
   A first thinning is proposed for this site which includes two loblolly pine stands. Stand 3 is 8.7 acres and stand 2 is 4.4 acres. Both stands were site prepared in 1981 and were regenerated naturally. Approximately 2.5 acres of stand 2 is part of a HCVF (stream buffer).

7. Milburn Landing Tract 18 – Stand 2
   A first thinning is proposed for this 22.7 acre pine plantation which was site prepared and planted in 1982. Approximately 2.0 acres of the loblolly pine plantation is part of a HCVF (inland sand dune).

8. Nazareth Church Tract 4 – Stand 8
   A first thinning is proposed for this 14.8 acre pine stand which was established in 1984 and regenerated naturally. Approximately 2.0 acres of the stand is part of a HCVF (stream buffer).

9. Chandler Tract 22 – Stand 1
   A first thinning is proposed for this 17.4 acre pine plantation which was site prepared and planted in 1986. Approximately 1.0 acre of the stand is part of a HCVF (stream buffer).

10. Nazareth Church Tract 5 – Stand 6
    A first thinning is proposed for this 20.7 acre pine stand which was site prepared in 1986 and regenerated naturally. Approximately 3.5 acres of the stand is part of a HCVF (inland sand dune and stream buffer)

11. Dividing Creek Tract 13 – Stand 20 and Tract 14 – Stand 1
    A first thinning is proposed for stand 20 (11.8 acres) and stand 1 (7.4 acres) which were established in 1986 and regenerated naturally.

12. Tarr Tract 19 – Stand 1
    A first thinning is proposed for this 41.5 acre pine plantation which was site prepared and planted in 1987. Approximately 19.0 acres of the stand is part of a HCVF (stream buffer)

13. Nazareth Church Tract 9 – Stand 8
    A first thinning is proposed for this 33.7 acre pine stand which was established in 1987 and regenerated naturally.

14. Milburn Landing Tract 18 – Stand 1
    A first thinning is proposed for this 19.6 acre pine plantation which was site prepared and planted in 1988. Approximately 1.0 acre of the stand is part of a HCVF (inland sand dune and stream buffer).

15. Nazareth Church Tract 7 – Stand 1
    A first thinning is proposed for this 26.6 acre pine plantation which was site prepared and planted in 1988. Approximately 12.5 acres of the stand is part of a HCVF (stream buffer).

16. Nazareth Church Tract 3 – Stand 6
    A first thinning is proposed for this 22.2 acre pine stand which was established in 1989 and regenerated naturally. Approximately 2.0 acres of the stand is part of a HCVF (inland sand dune).

17. Nazareth Church Tract 6 – Stand 5
    A first thinning is proposed for this 29.7 acre pine plantation which was site prepared and planted in 1990.

18. Nazareth Church Tract 10 – Stand 7
    A first thinning is proposed for this 24.0 acre pine plantation which was site prepared and planted in 1990. Approximately 2.0 acres of the stand is part of a HCVF (inland sand dune).

Reforestation

This work will involve planting recently cutover areas with loblolly pine seedlings. Planting will be done on 10' X 10' spacing. Natural regeneration will also be favored. In addition to pine, other plants and grasses will be allowed to regenerate the sites. Regeneration surveys will be performed two years post harvest to determine stocking levels prior to planting.

Salvage Cutting

In the event of trees being killed or damaged by various injurious agents (insects, fire, weather related damage, etc.) an emergency salvage timber sale procedure will be performed to utilize the injured trees while minimizing the loss. The severity of the cutting depends upon the proportion of the stand occupied by the damaged trees. While carrying out the process of timber evaluation, the DNR interdisciplinary team and the Pocomoke State Forest Advisory Committee will be notified of the event and given two weeks to review and comment on the sale. Upon completion of the timber evaluation and review of comments, the timber sale will be advertised and mailed to prospective bidders, and submitted for pre-approval if no adverse effects are acknowledged.

Pre-commercial Thinning

A pre-commercial thinning is proposed for the following stands:

1. Nazareth Church Tract 4 – Stand 11 -- This 18.4 acre stand was harvested in 2000 and regenerated naturally.

2. Nazareth Church Tract 5 - Stand 9 -- This 23.4 acre stand was harvested in 2000 and regenerated naturally.

3. Dividing Creek Tract 14 - Stand 12 -- This 17.1 acre stand was harvested in 2002 and regenerated naturally.

Thinning the stands at this time will reduce the stocking to an acceptable level, improve the growth rate of the remaining trees and shorten the time interval to the first commercial thinning. Hard mast producing trees will be retained for wildlife and species diversity. This project will be contracted out and residual trees will be left on a 10'X10' spacing.

Review Process

The annual work plan is reviewed by the DNR interdisciplinary team and the Pocomoke State Forest Citizens Advisory Committee. The general public is also provided a thirty day comment period. Members of the DNR interdisciplinary team include representatives from the Forest Service, Land Acquisition and Planning, Fisheries Service, Wildlife & Heritage Service, & Park Service.

Members of the Citizens Advisory Committee represent the following disciplines: Recreational User; Forestry Professional; Wildlife Professional; Economic Interest; Conservation Interest; Recreation Professional; Ecologist; Student Representative; Timber Industry; Recreational Hunter; Recreational Fisherman; Indigenous Peoples.

G. Monitoring Projects

*Forest personnel will make routine ground and aerial surveys to observe the presence of damaging insects throughout the Forest. Once an outbreak area is observed, it will be assigned a control priority and the Maryland Department of Agriculture (MDA) would be notified.

*Visitor surveys will periodically be performed to determine types of forest users and numbers.

*Logging site inspections will be performed to ensure forest products operator is in compliance with contract and best management practices.

*Wildlife and Heritage service will be looking at the impacts of patch size, landscape connectivity and land-use history on invertebrate and plant species richness on inland sand dunes.

*The Forest will continue to provide areas for research. Current and past projects include seed source study, reptile and amphibian abundance and distribution, gypsy moth impacts in mixed pine / hardwood stands, songbird population and breeding success in loblolly pine ecosystems, sediment and nutrient deposition in forested floodplain's, hydric soils and associated vegetation, summer roost selection of forest bats, survey of land snails and slugs, lichen survey, old growth inventory, beetle collection and survey, investigation of the northern pine snake and other faunal communities within sand ridge complexes, collection and study of ticks, genetic study of yellow –throated Warblers, dung beetle ecological studies and moth database.

H. Budget

Cost of Management

Classified and Contractual Salaries ----------$200,000

Land Operation ----------$21,500

Sustainable Forest Certification----------$5,000

County Payment (25% of revenues) ----------$57,500

TOTAL COST----------$284,000

Operating Revenues

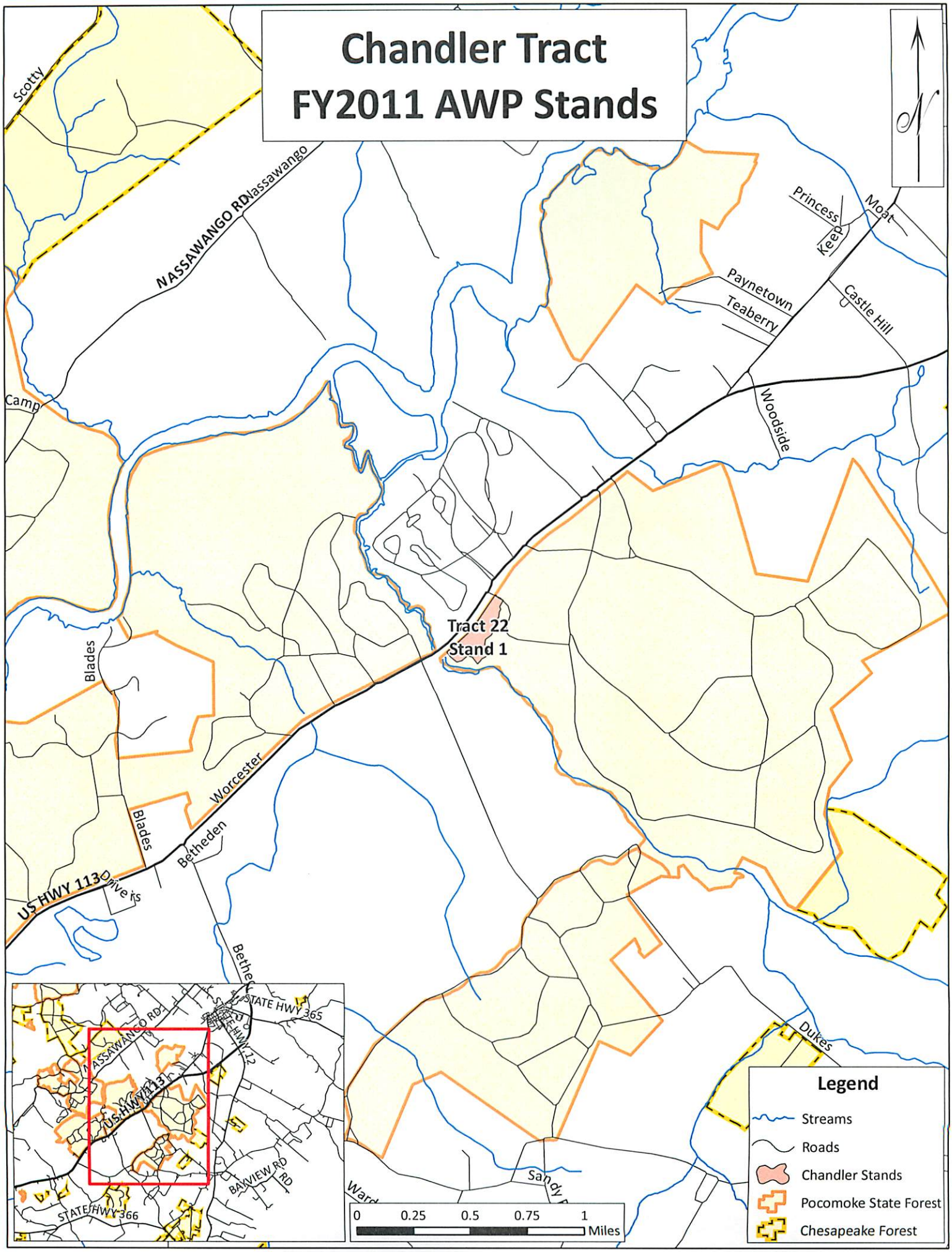
Forest Products Sale Revenues ----------$230,000

Off Road Vehicle Funds----------$14,500

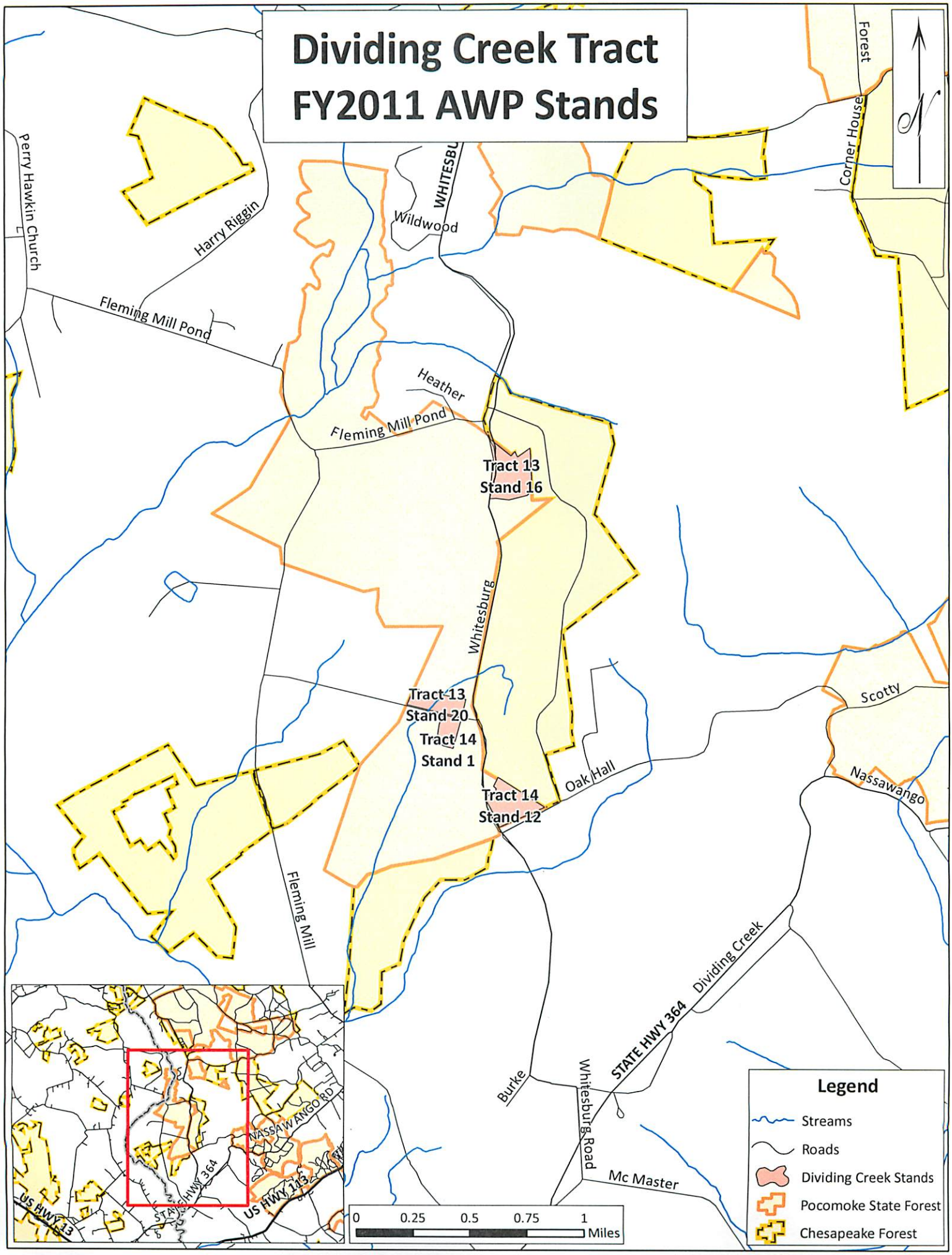
Recreational Trail Grants----------$24,000

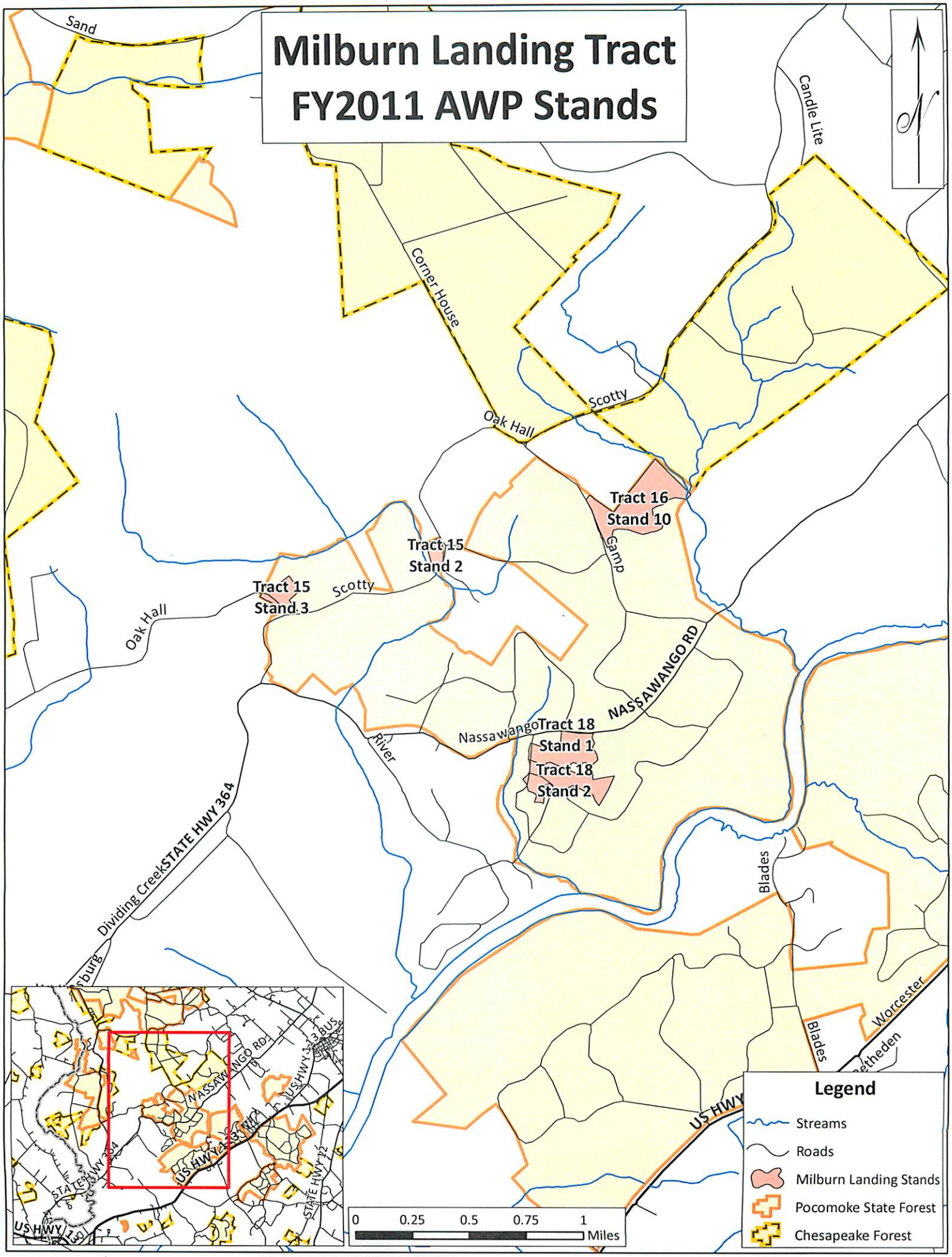
TOTAL REVENUES----------$268,500

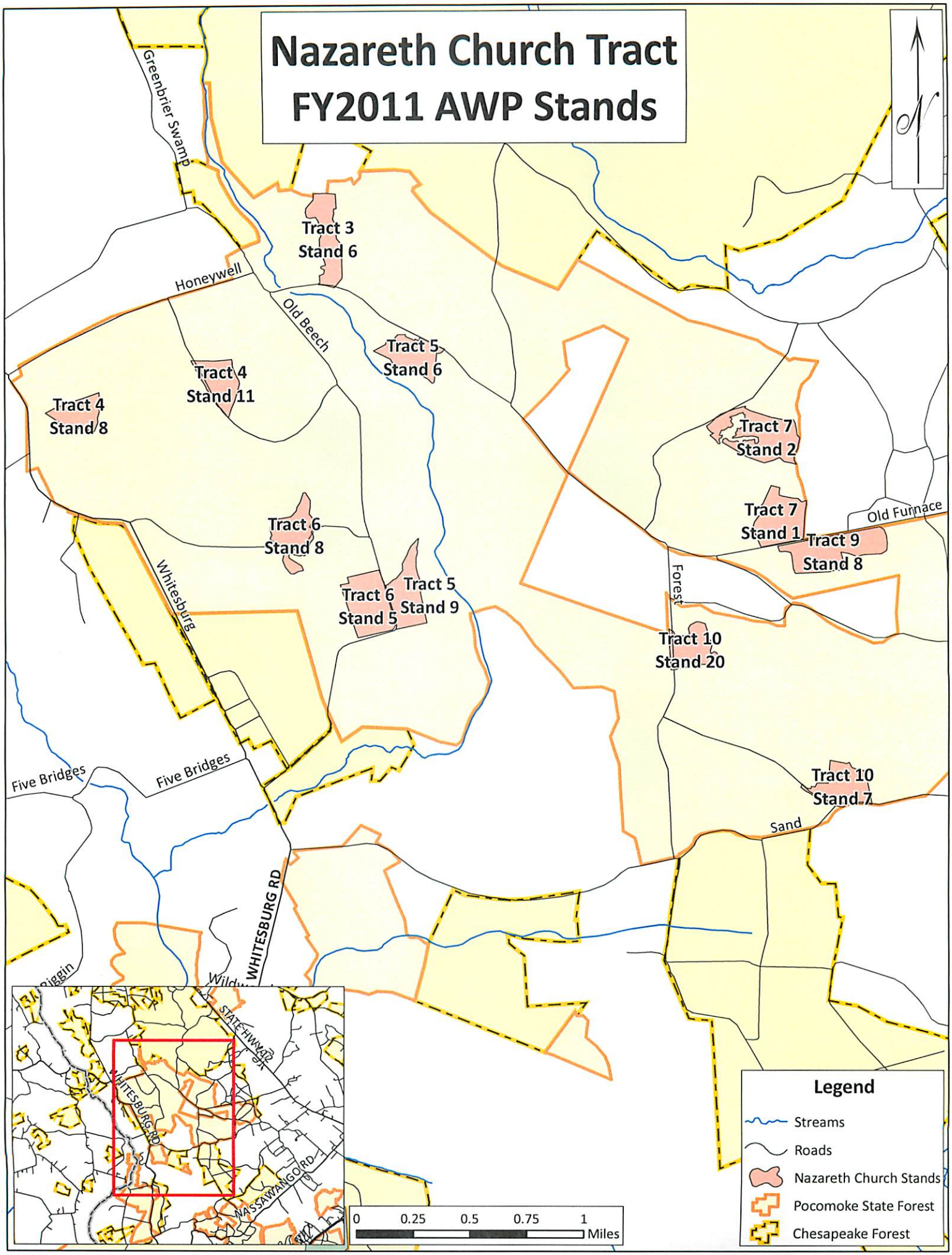
Chandler Tract
FY2011 AWP Stands



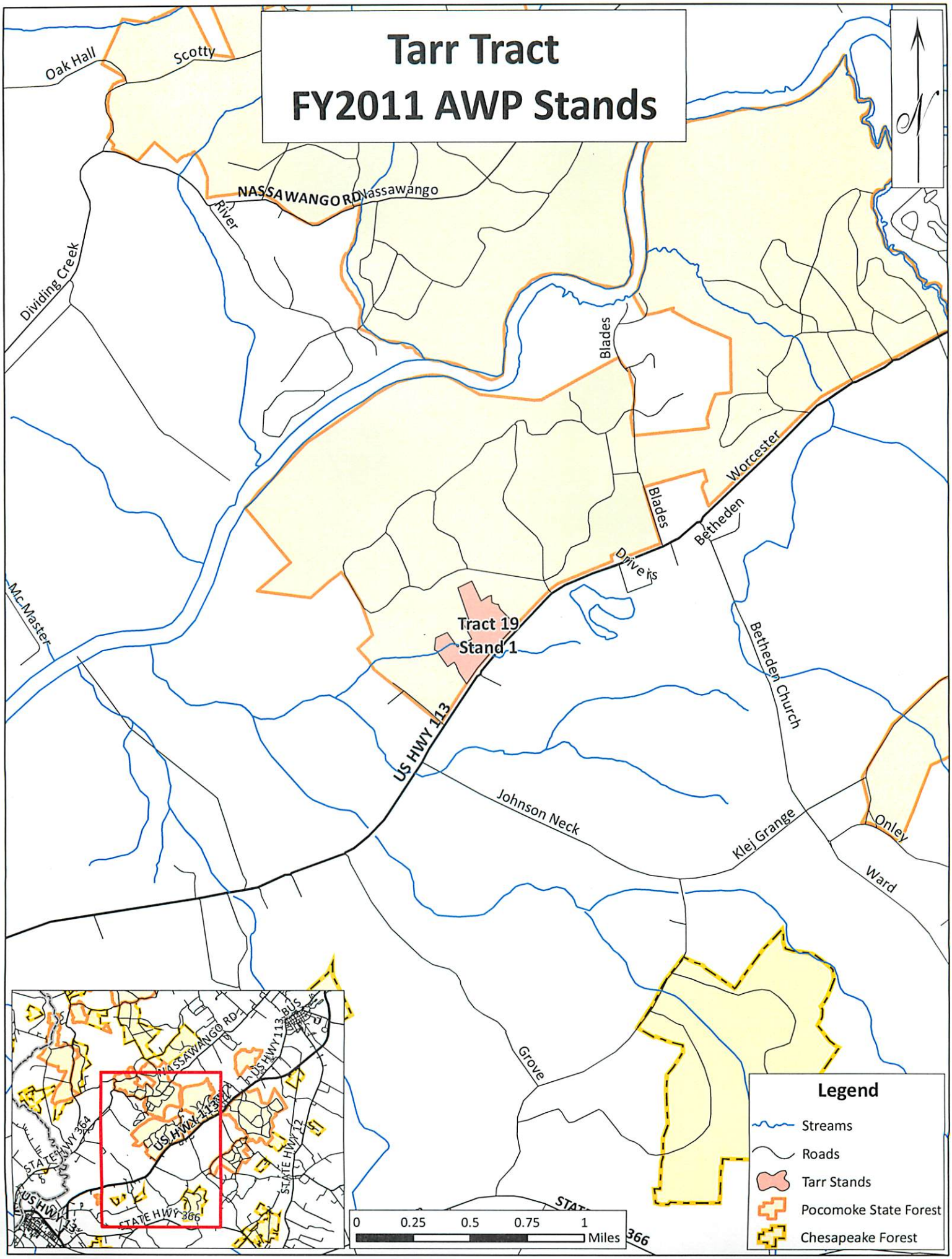
Dividing Creek Tract
FY2011 AWP Stands



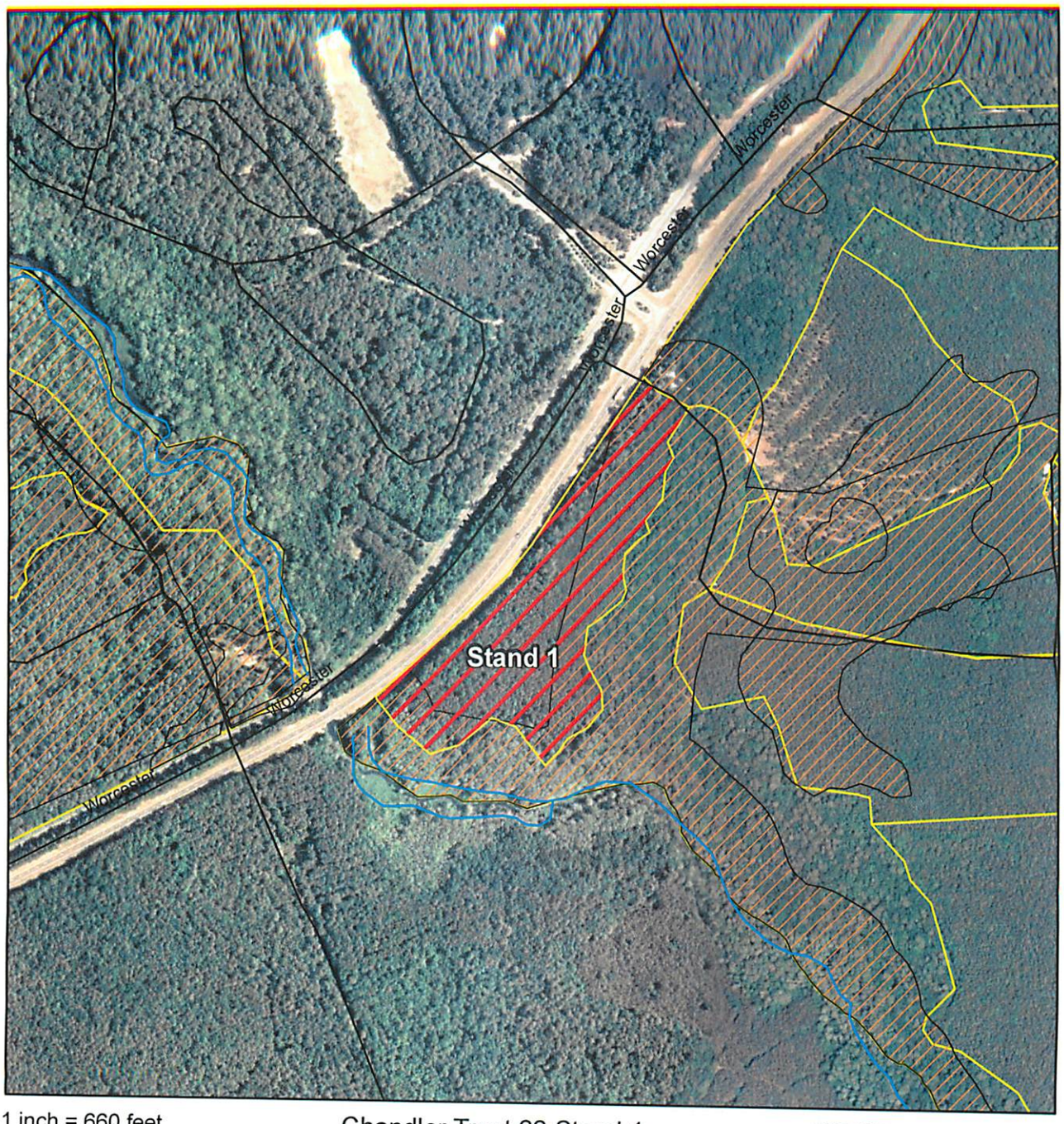

Milburn Landing Tract
FY2011 AWP Stands
Sand
Candle Lite
Corner House
Scotty
Oak Hall
Tract 16
Stand 10
Tract 15
Stand 2
Tract 15
Stand 3
Scotty
Oak Hall
Gamp
NASSAWANGO RD
Nassawango
Tract 18
Stand 1
Tract 18
Stand 2
River
Dividing Creek
STATE HWY 364
Blades
Blades
Worcester
US HWY
0
0.25
0.5
0.75
1
Miles
Legend
Streams
Roads
Milburn Landing Stands
Pocomoke State Forest
Chesapeake Forest
NASSAWANGO RD
US HWY 13 BUS
US HWY 13 BYP
STATE HWY 364
STATE HWY 12
US HWY 13


Nazareth Church Tract
FY2011 AWP Stands
Greenbrier Swamp
Honeywell
Old Beech
Tract 3
Stand 6
Tract 5
Stand 6
Tract 4
Stand 11
Tract 4
Stand 8
Tract 7
Stand 2
Tract 7
Stand 1
Old Furnace
Tract 9
Stand 8
Tract 6
Stand 8
Whitesburg
Tract 6
Stand 5
Tract 5
Stand 9
Forest
Tract 10
Stand 20
Five Bridges
Five Bridges
Tract 10
Stand 7
Sand
WHITESBURG RD
Legend
Streams
Roads
Nazareth Church Stands
Pocomoke State Forest
Chesapeake Forest
0
0.25
0.5
0.75
1
Miles
STATE HWY 12
WHITESBURG RD
NASSAWANGO RD

Tarr Tract
FY2011 AWP Stands



FY11 Annual Work Plan



1 inch = 660 feet

Chandler Tract 22 Stand 1

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

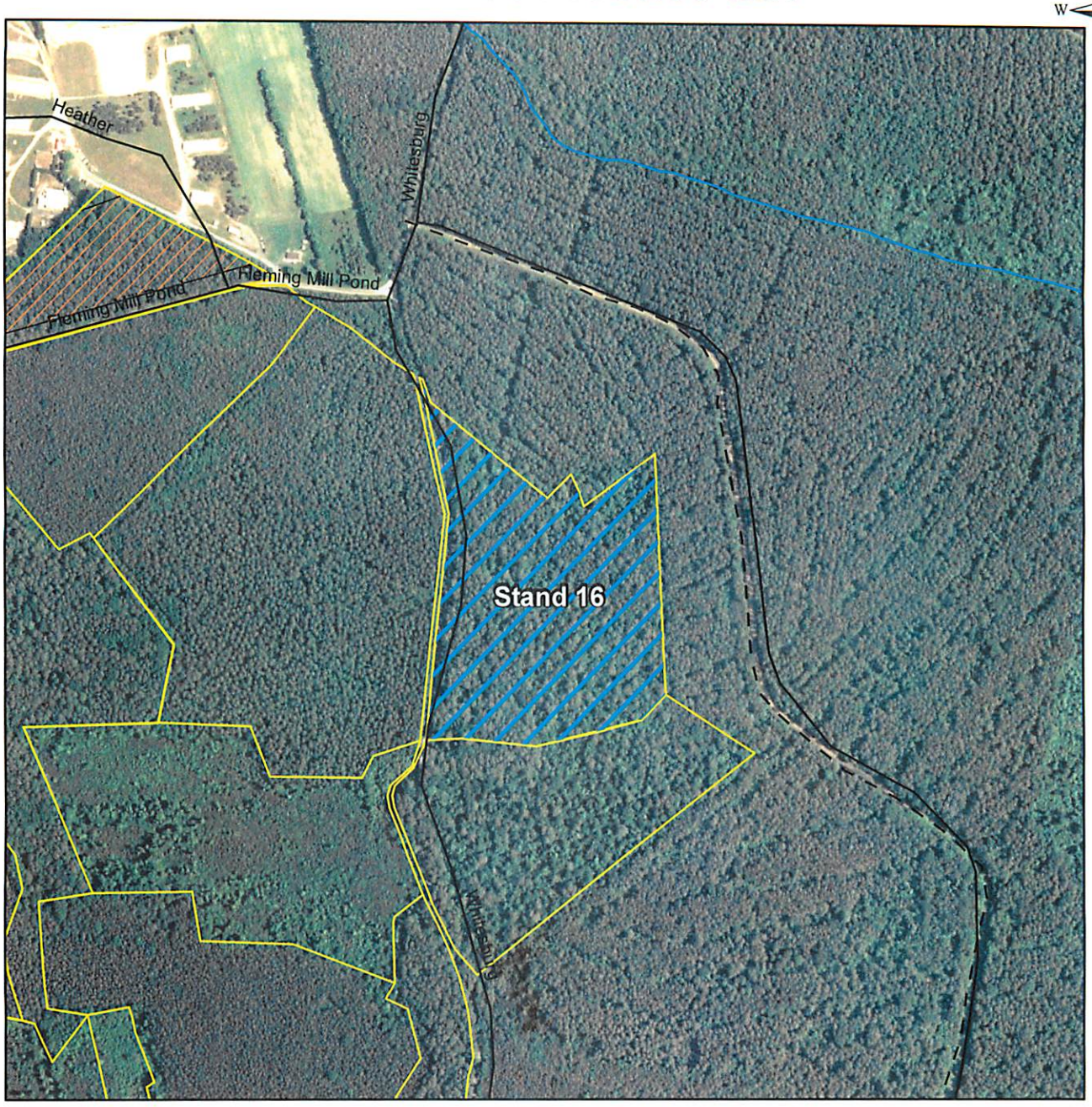
A first thinning is proposed for Stand 1 in Tract 22 of the Chandler Tract displayed in red. Stand 1 is 17.4 acres and was site prepared and planted in 1986.

Approximately 1 acre of stand 1 is part of an HCVF.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Dividing Creek Tract 13 Stand 16

ASC-DNR Forest Service 07/31/2009

Silviculture Prescription:

A regeneration harvest is proposed for Stand 16 in Tract 13 of the Dividing Creek Tract displayed in blue. Stand 16 is a 73 year old, 23-acre pine/hardwood stand.

This stand will be allowed to seed in naturally and will be supplemented by hand planting where necessary.

Seed trees will be left along the eastern boundary and green tree retention areas (hardwoods) will be left on the northern end of the stand. Dominant and co-dominant oaks will be retained.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan

1 inch = 660 feet Dividing Creek Tract 13 Stand 20 and Tract 14 Stand 1 ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

A first thinning is proposed for Stand 20 in Tract 13 and Stand 1 in Tract 14 of the Dividing Creek Tract displayed in red. Stands 20 and 1 total 19.2 acres were established in 1986 and were regenerated naturally.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan

1 inch = 660 feet

Dividing Creek Tract 14 Stand 12

ASC-DNR Forest Service 08/07/2009

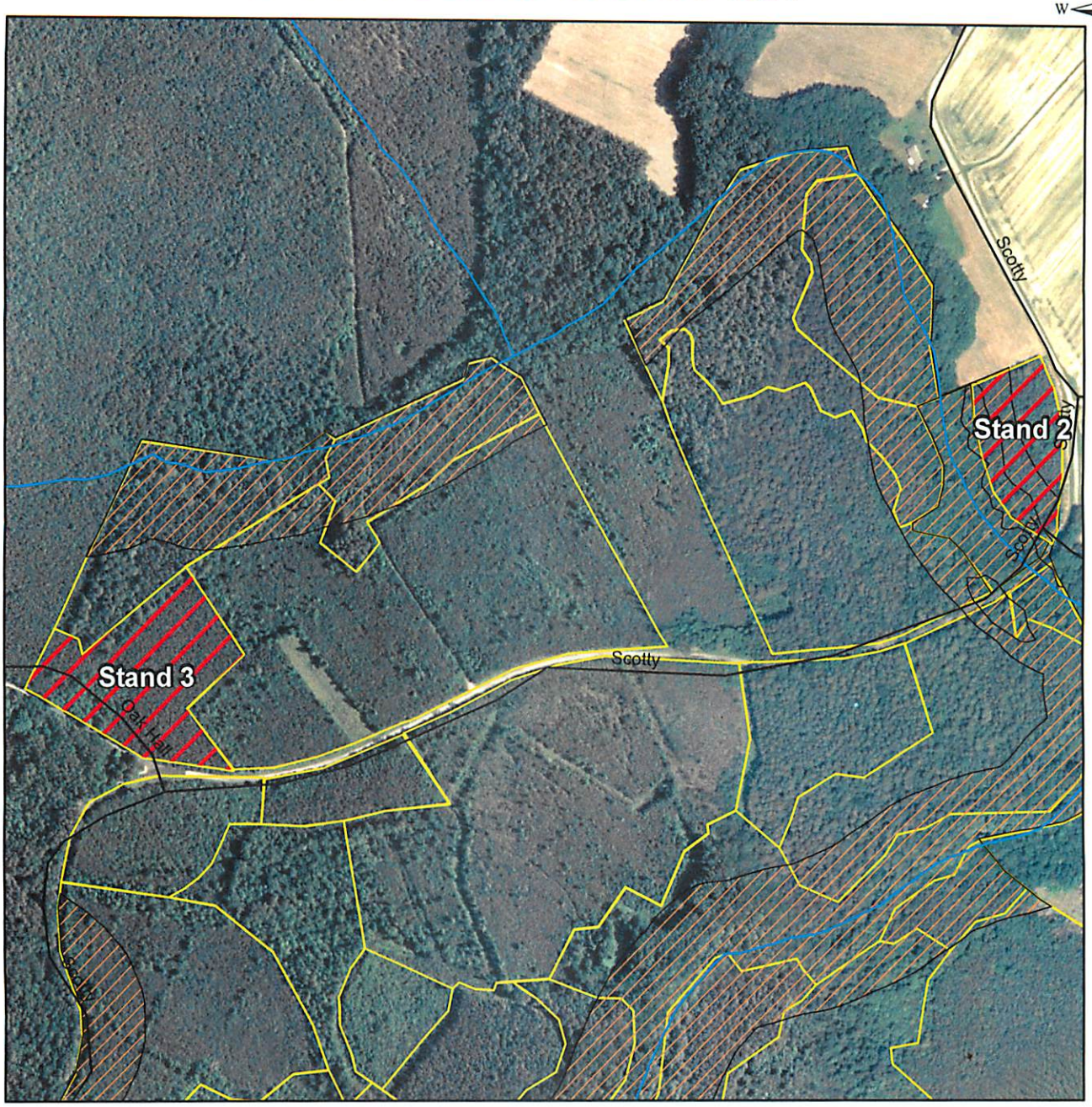
Silviculture Prescription:

A pre-commercial thinning is proposed for Stand 12 in Tract 14 of the Dividing Creek Tract displayed in purple. Stand 12 is 17.1 acres and was harvested in 2002 and regenerated naturally.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Milburn Landing Tract 15 Stands 2 and 3

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

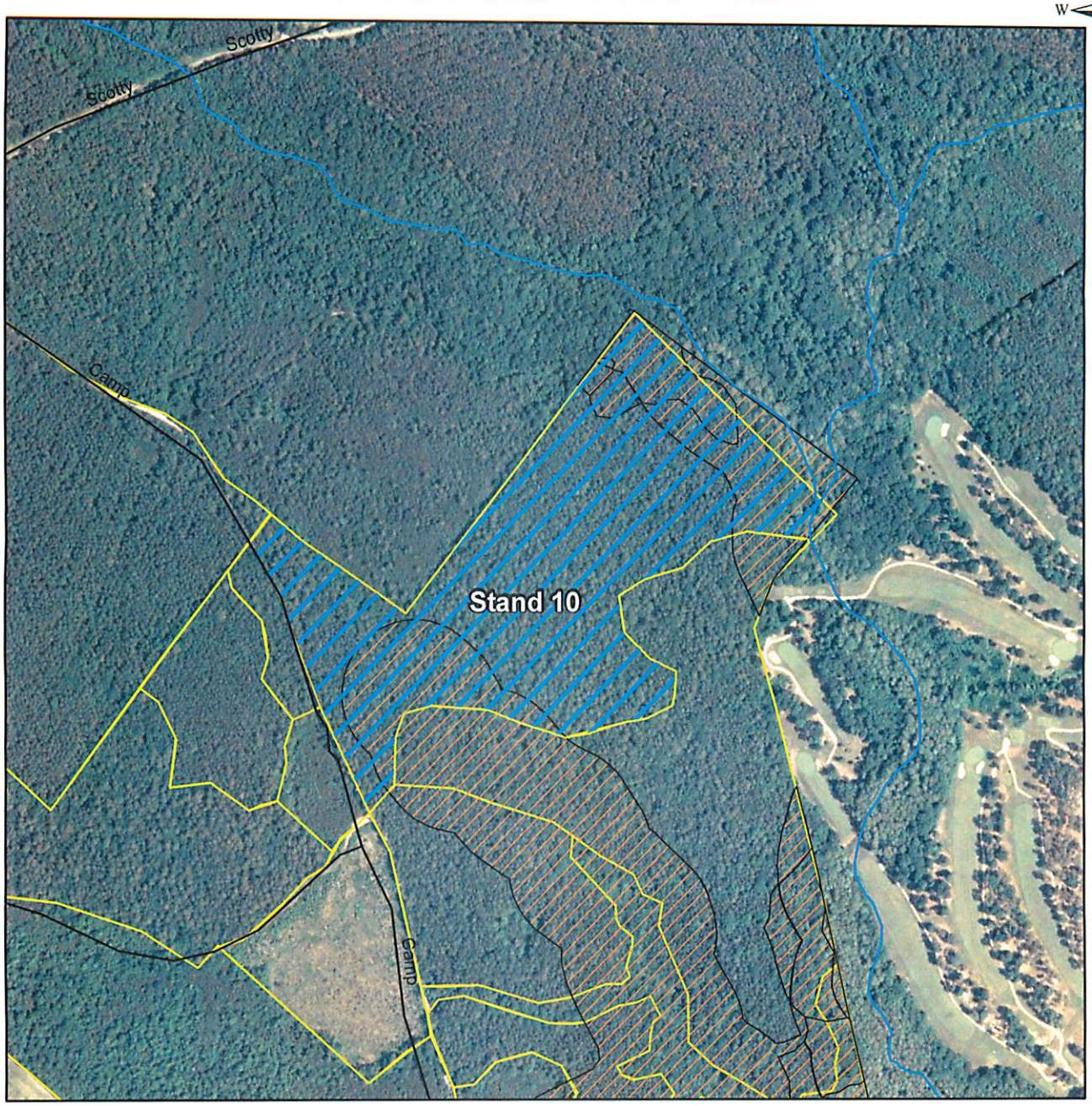
A first thinning is proposed for Stands 2 and 3 in Tract 15 of the Milburn Landing Tract displayed in red. Both stands were site prepared in 1981 and were regenerated naturally.

Approximately 2.5 acres of stand 2 is part of an HCVF.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Milburn Landing Tract 16 Stand 10

ASC-DNR Forest Service 07/31/2009

Silviculture Prescription:

A seed tree harvest is proposed for Stand 10 in Tract 16 of the Milburn Landing Tract displayed in blue. Stand 10 is a 50 year old, 35-acre pine stand. The sale area does not include HCVF areas shown in orange hatching.

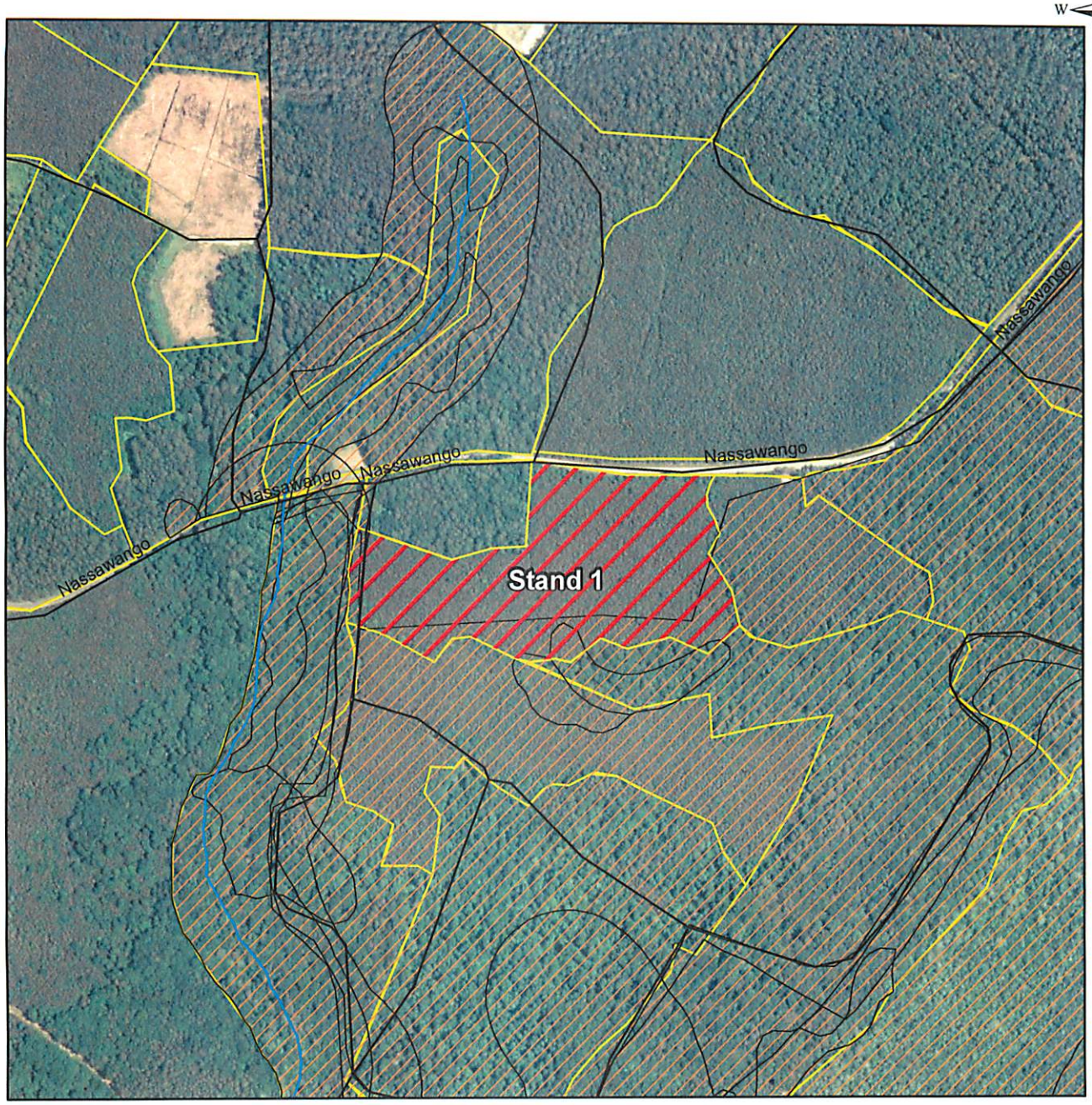
This stand will be allowed to seed in naturally and will be supplemented by hand planting where necessary.

A prescribed burn is also proposed for the stand either pre or post harvest. Dominant and co-dominant oaks will be retained.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Milburn Landing Tract 18 Stand 1

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

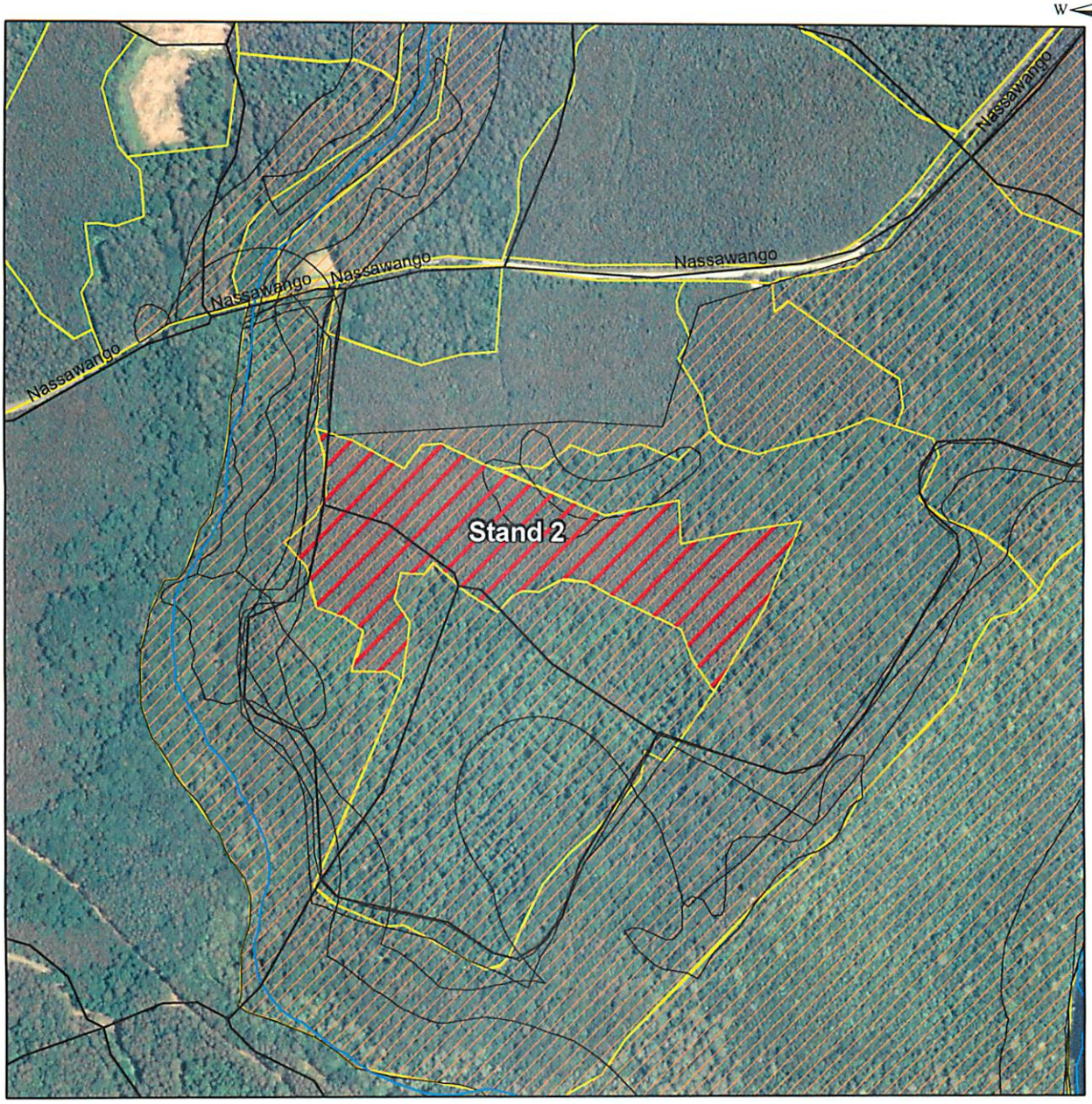
A first thinning is proposed for Stand 1 in Tract 18 of the Milburn Landing Tract displayed in red. Stand 1 is 19.6 acres and was site prepared and planted in 1988.

Approximately 1 acre of stand 1 is part of an HCVF.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Milburn Landing Tract 18 Stand 2

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

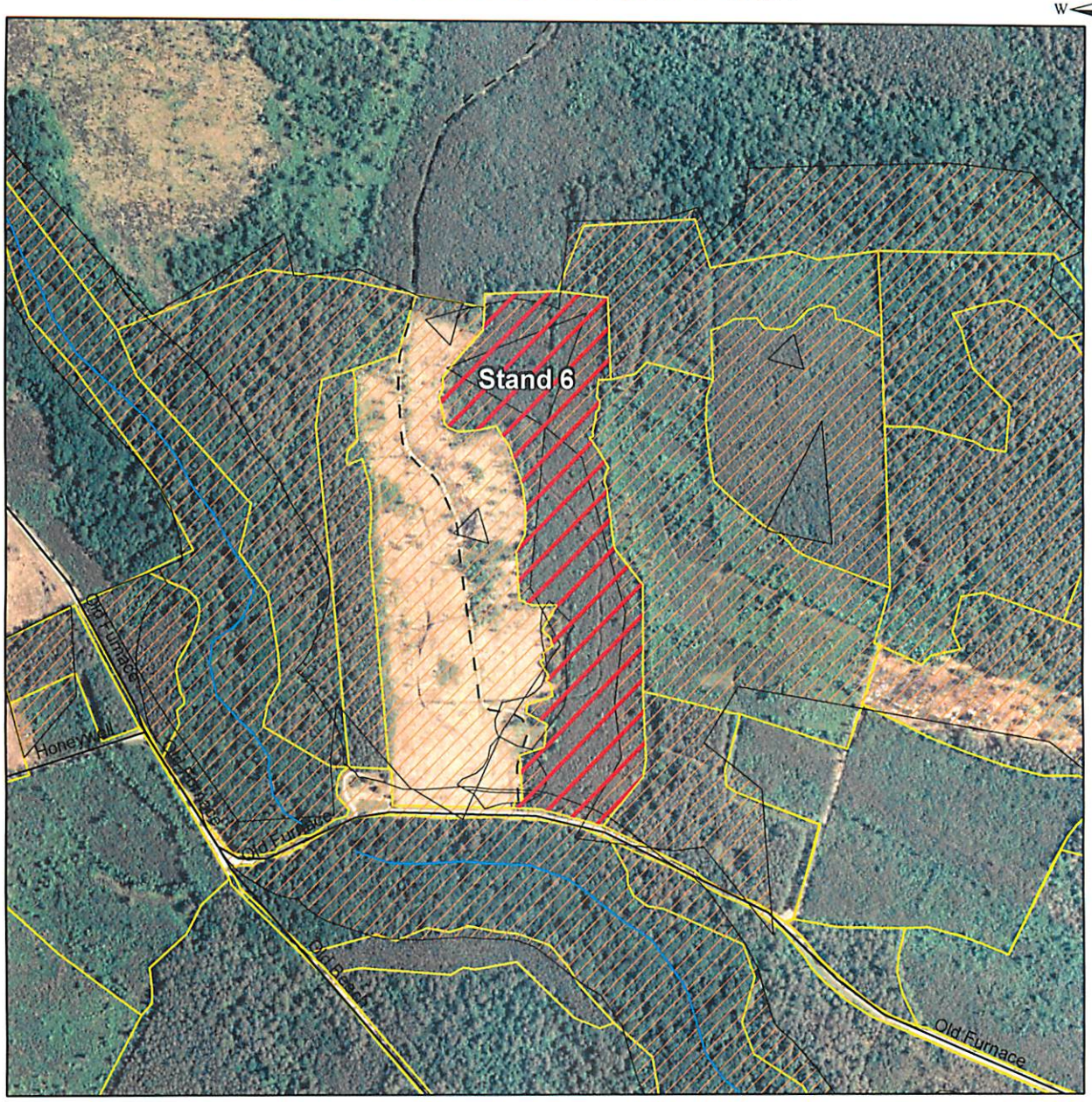
A first thinning is proposed for Stand 2 in Tract 18 of the Milburn Landing Tract displayed in red. Stand 2 is 22.7 acres and was site prepared and planted in 1982.

Approximately 2 acres of stand 2 is part of an HCVF.

This stand is in a Core FIDS Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 3 Stand 6

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

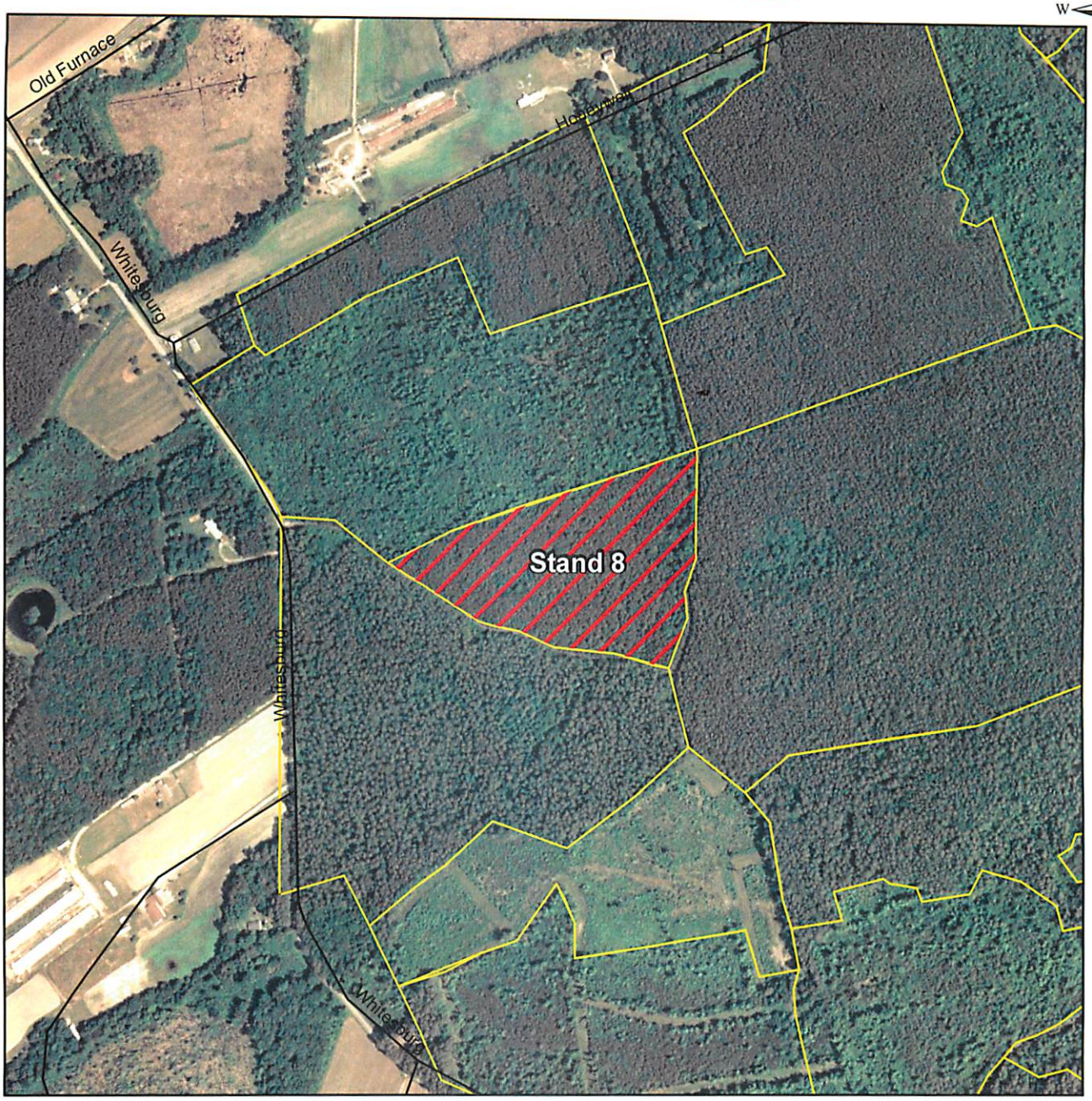
A first thinning is proposed for Stand 6 in Tract 3 of the Nazareth Church Tract displayed in red. Stand 6 is 22.2 acres and was established in 1989 and regenerated naturally.

Approximately 2 acres of stand 6 is part of an HCVF.

This stand is in General Management and Core FIDS areas.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 4 Stand 8

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

A first thinning is proposed for Stand 8 in Tract 4 of the Nazareth Church Tract displayed in red. Stand 8 is 14.8 acres and was established in 1984 and regenerated naturally.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan

1 inch = 660 feet

Nazareth Church Tract 4 Stand 11

ASC-DNR Forest Service 08/07/2009

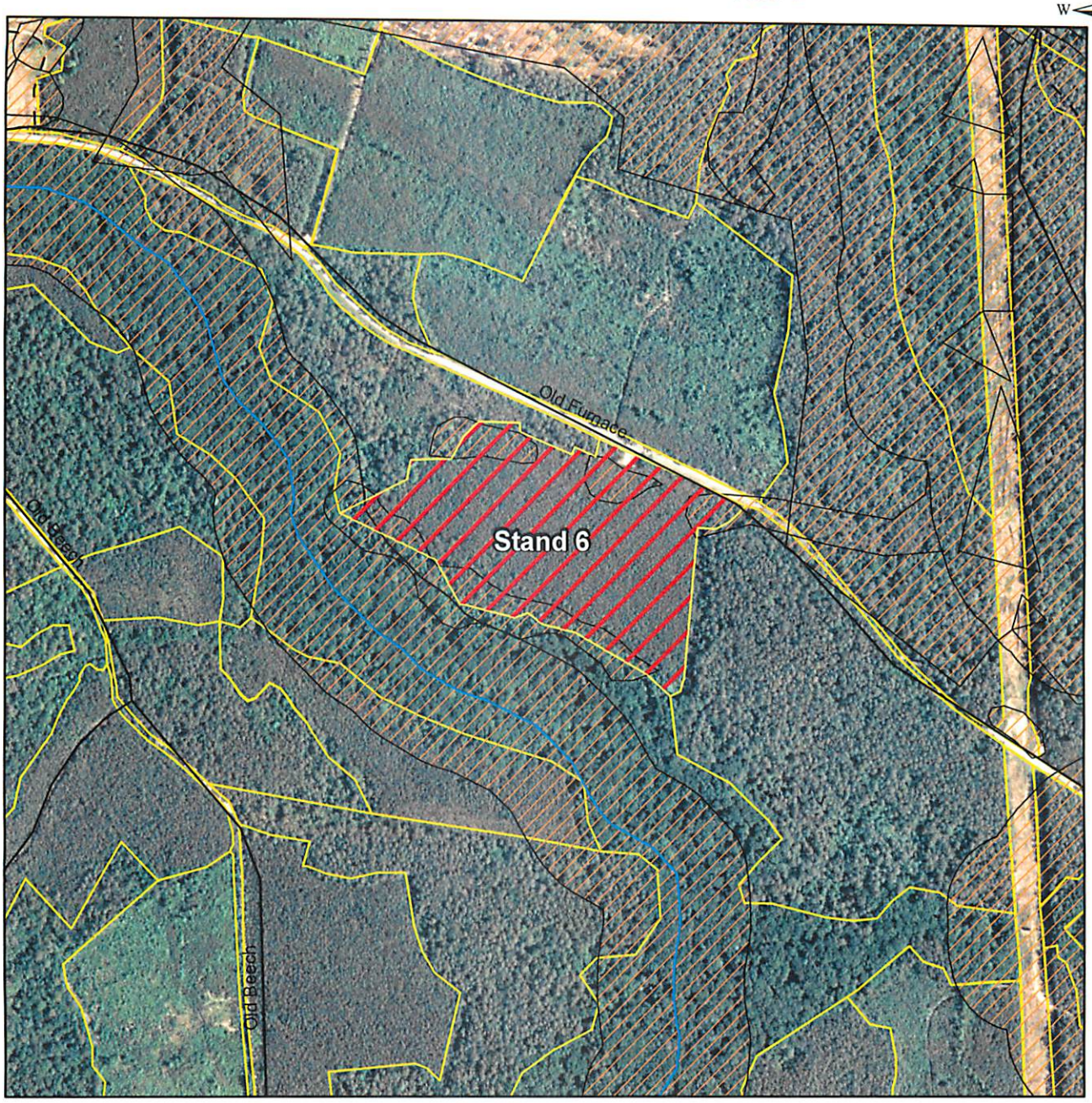
Silviculture Prescription:

A pre-commercial thinning is proposed for Stand 11 in Tract 4 of the Nazareth Church Tract displayed in purple. Stand 11 is 18.4 acres and was harvested in 2000 and regenerated naturally.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 5 Stand 6

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

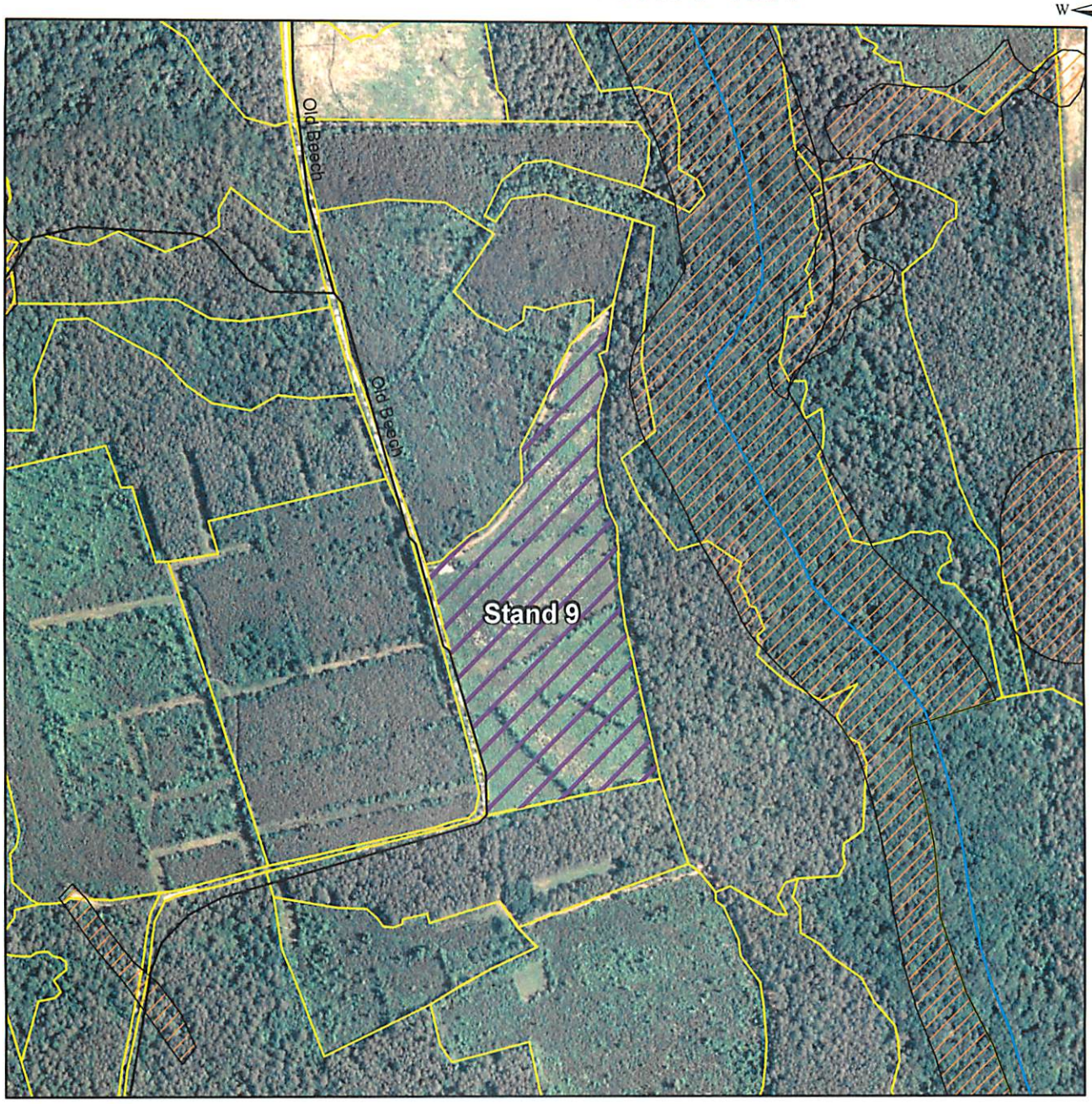
A first thinning is proposed for Stand 6 in Tract 5 of the Nazareth Church Tract displayed in red. Stand 6 is 20.7 acres and was site prepared in 1986 and regenerated naturally.

Approximately 3.5 acres of stand 6 is part of an HCVF.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 5 Stand 9

ASC-DNR Forest Service 08/07/2009

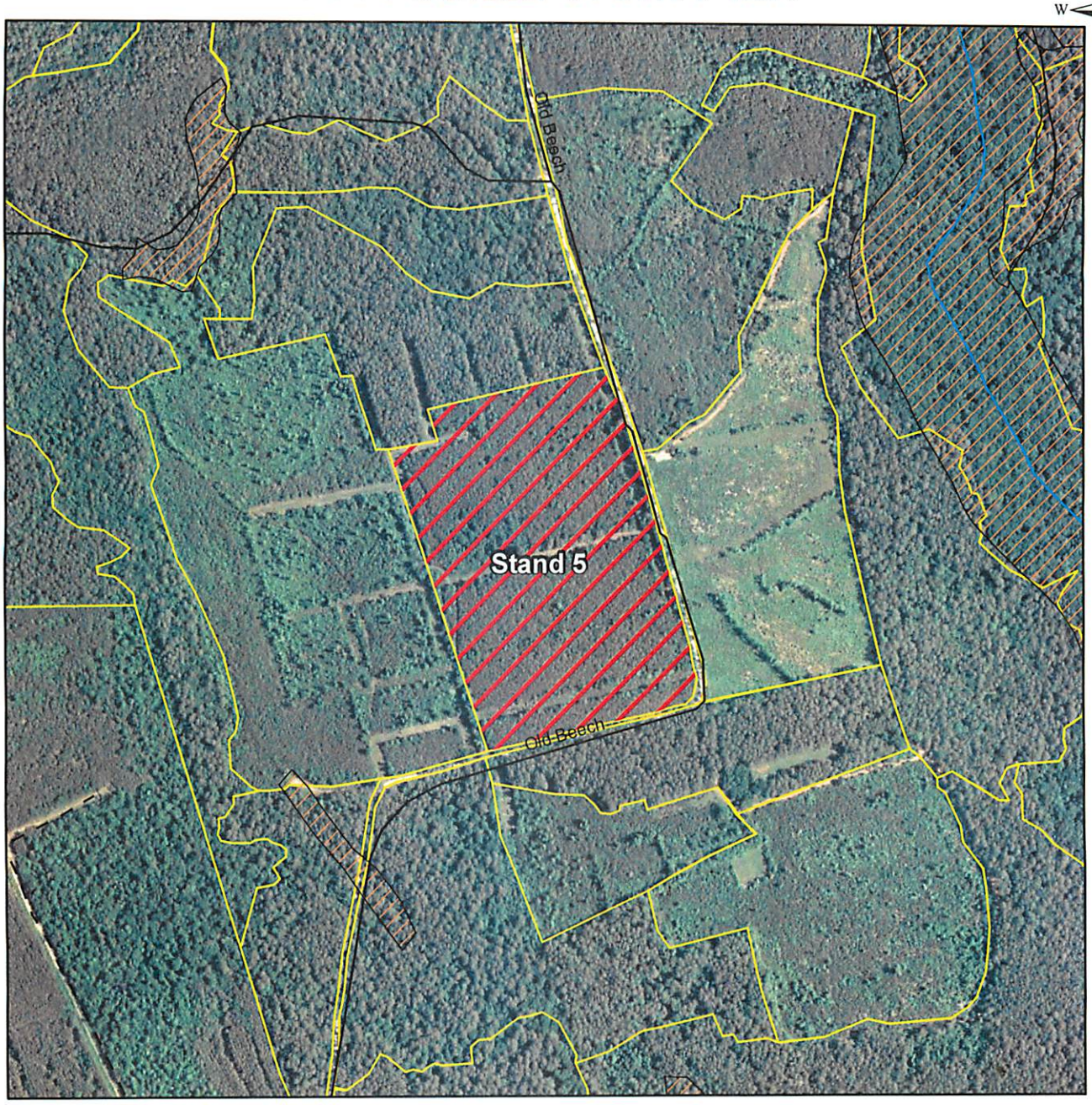
Silviculture Prescription:

A pre-commercial thinning is proposed for Stand 9 in Tract 5 of the Nazareth Church Tract displayed in purple. Stand 9 is 23.4 acres and was harvested in 2000 and regenerated naturally.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 6 Stand 5

ASC-DNR Forest Service 08/07/2009

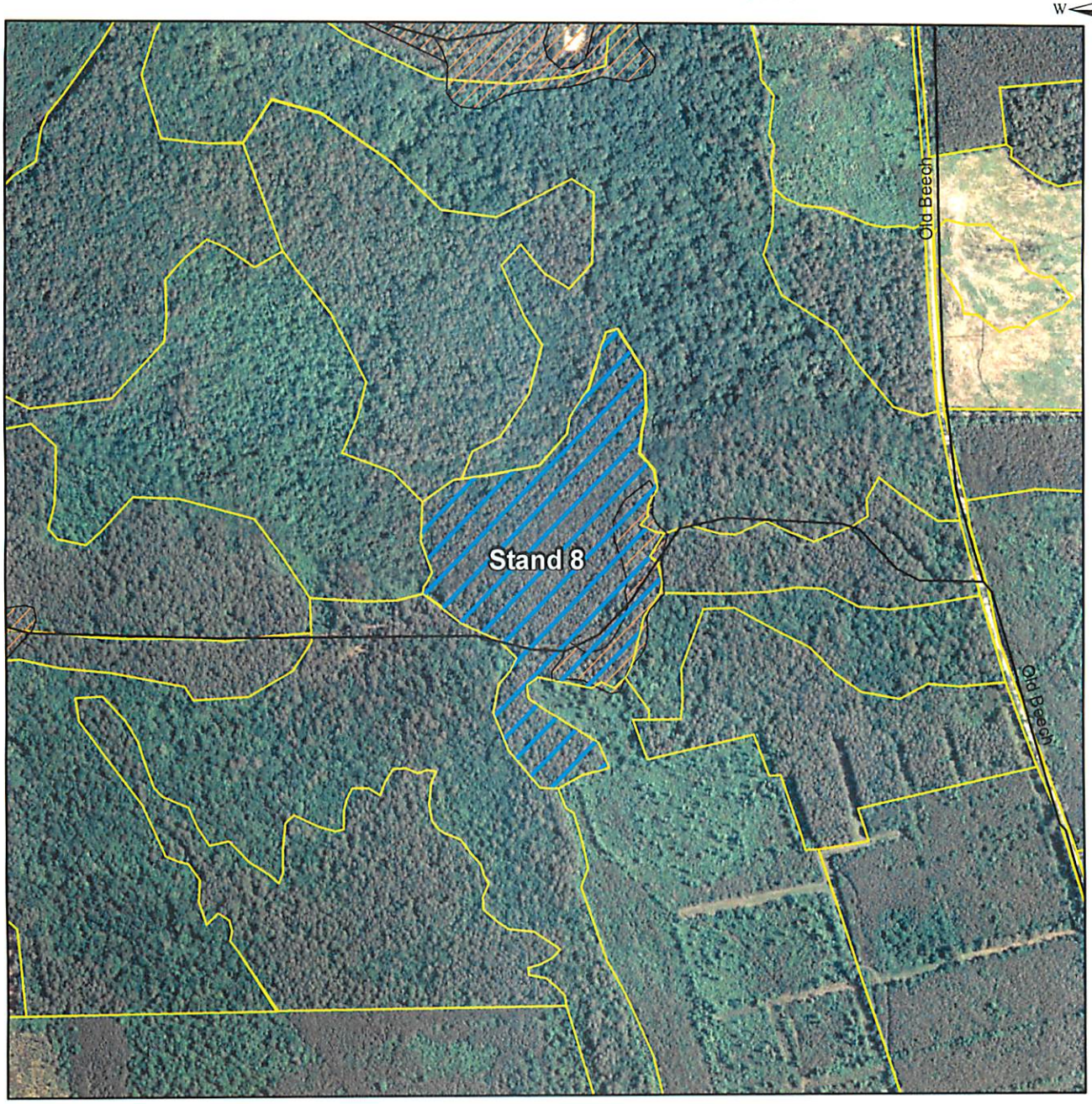
Silviculture Prescription:

A first thinning is proposed for Stand 5 in Tract 6 of the Nazareth Church Tract displayed in red. Stand 5 is 29.7 acres and was site prepared and planted in 1990.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 6 Stand 8

ASC-DNR Forest Service 07/31/2009

Silviculture Prescription:

A seed tree harvest is proposed for Stand 8 in Tract 6 of the Nazareth Church Tract displayed in blue. Stand 8 is a 80 year old, 22-acre loblolly pine stand. The sale area does not include the HCVF areas shown in orange hatching.

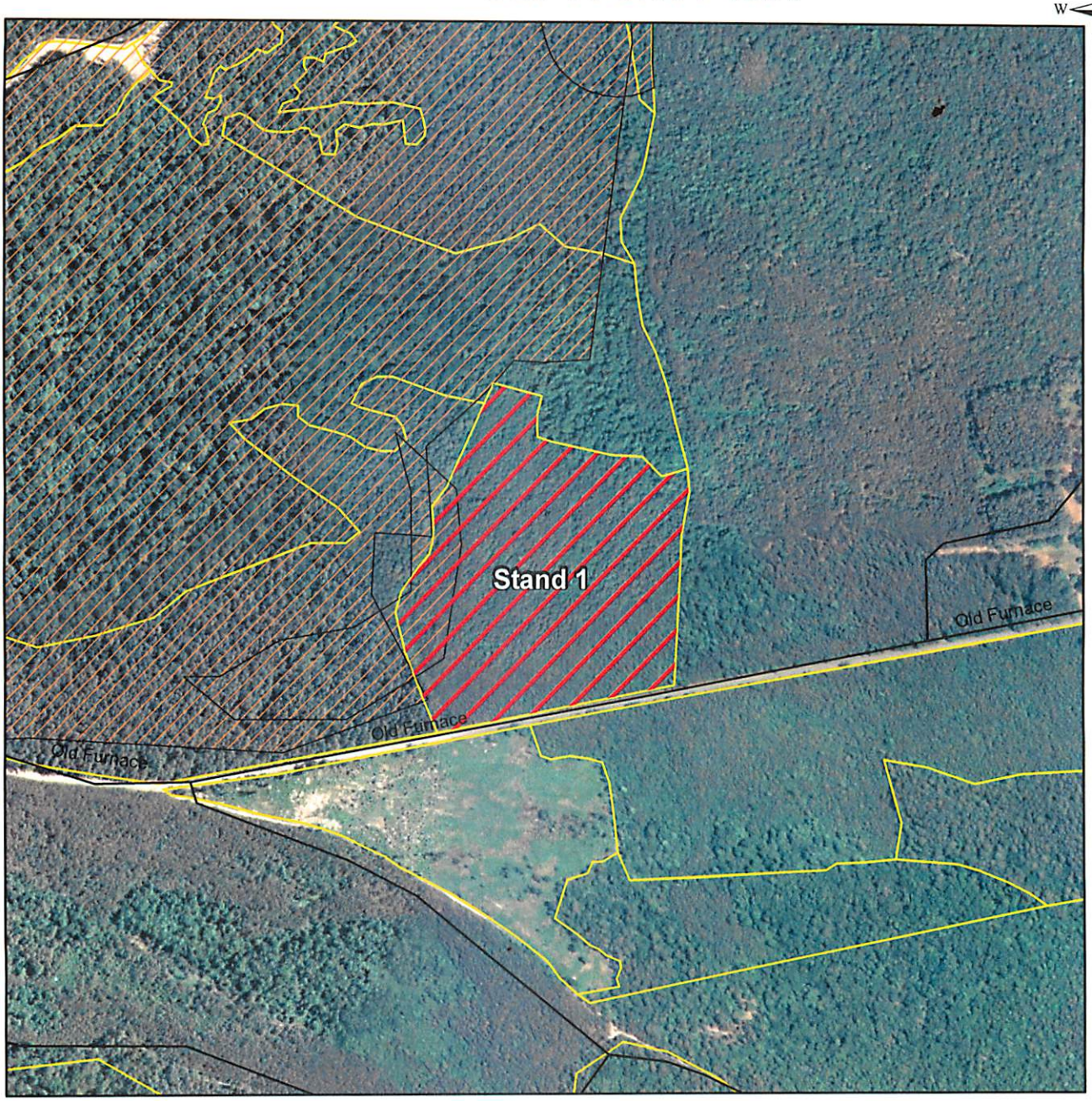
Dominant and co-dominant oaks will be retained.

A preharvest winter burn is also proposed. Research plots will be established to determine the success of utilizing prescribed fire to regenerate the pond pine forest type.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 7 Stand 1

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

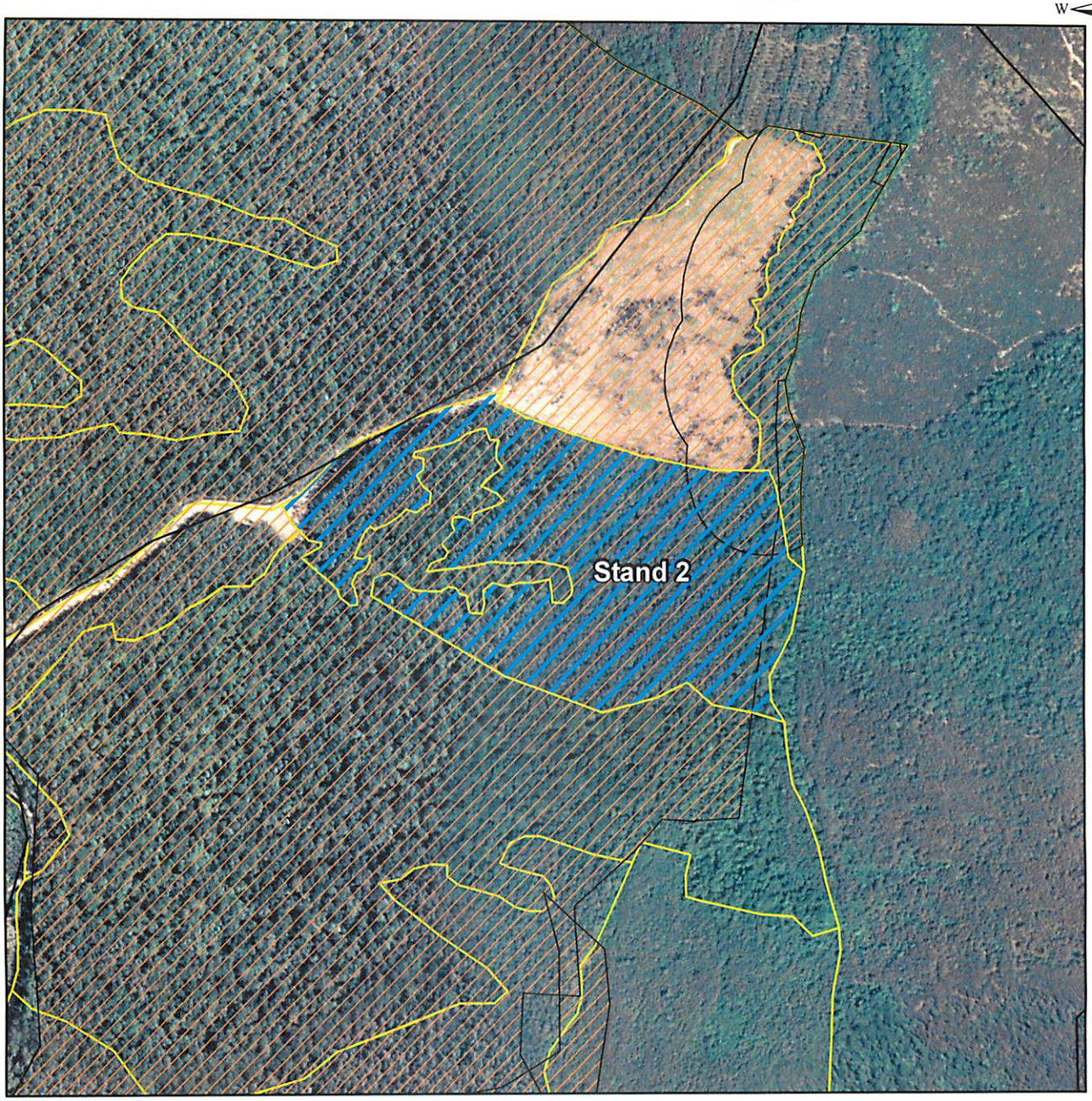
A first thinning is proposed for Stand 1 in Tract 7 of the Nazareth Church Tract displayed in red. Stand 1 is 26.6 acres and was site prepared and planted in 1988.

Approximately 12.5 acres of stand 1 is part of an HCVF.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 7 Stand 2

ASC-DNR Forest Service 07/31/2009

Silviculture Prescription:

A seed tree harvest is proposed for Stand 2 in Tract 7 of the Nazareth Church Tract displayed in blue. Stand 2 is a 78 year old, 32-acre loblolly pine stand. The sale area does not include the wetland buffer HCVF area.

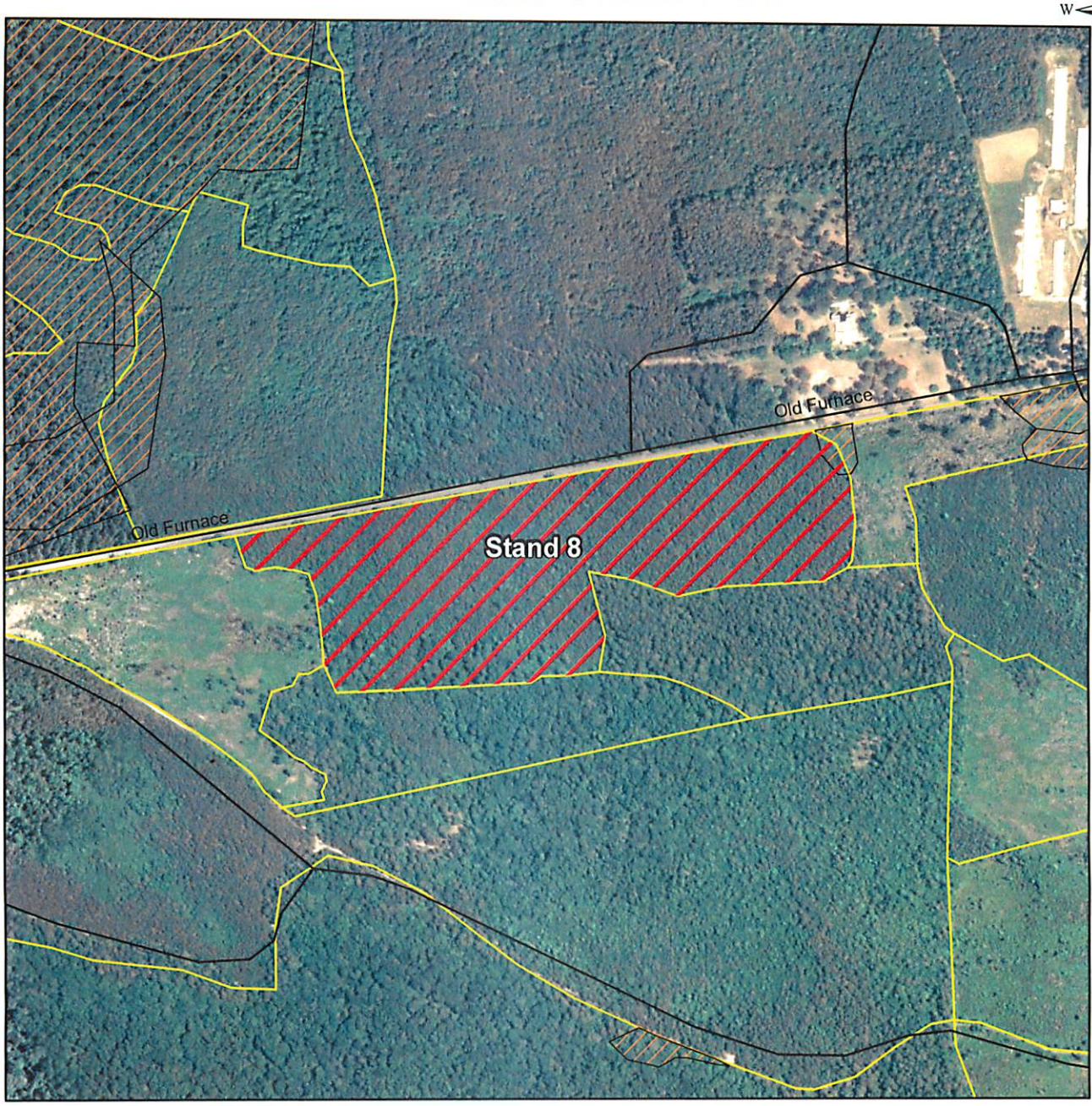
Dominant and co-dominant oaks will be retained along with green tree retention areas.

Pond and loblolly pine seed trees will be retained to provide a seed source to regenerate the stand naturally. A post harvest winter burn is also proposed. Research plots will be established within the harvest area to determine the success of utilized fire to regenerate the pond pine forest type.

This stand is in a Core FIDS Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 9 Stand 8

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

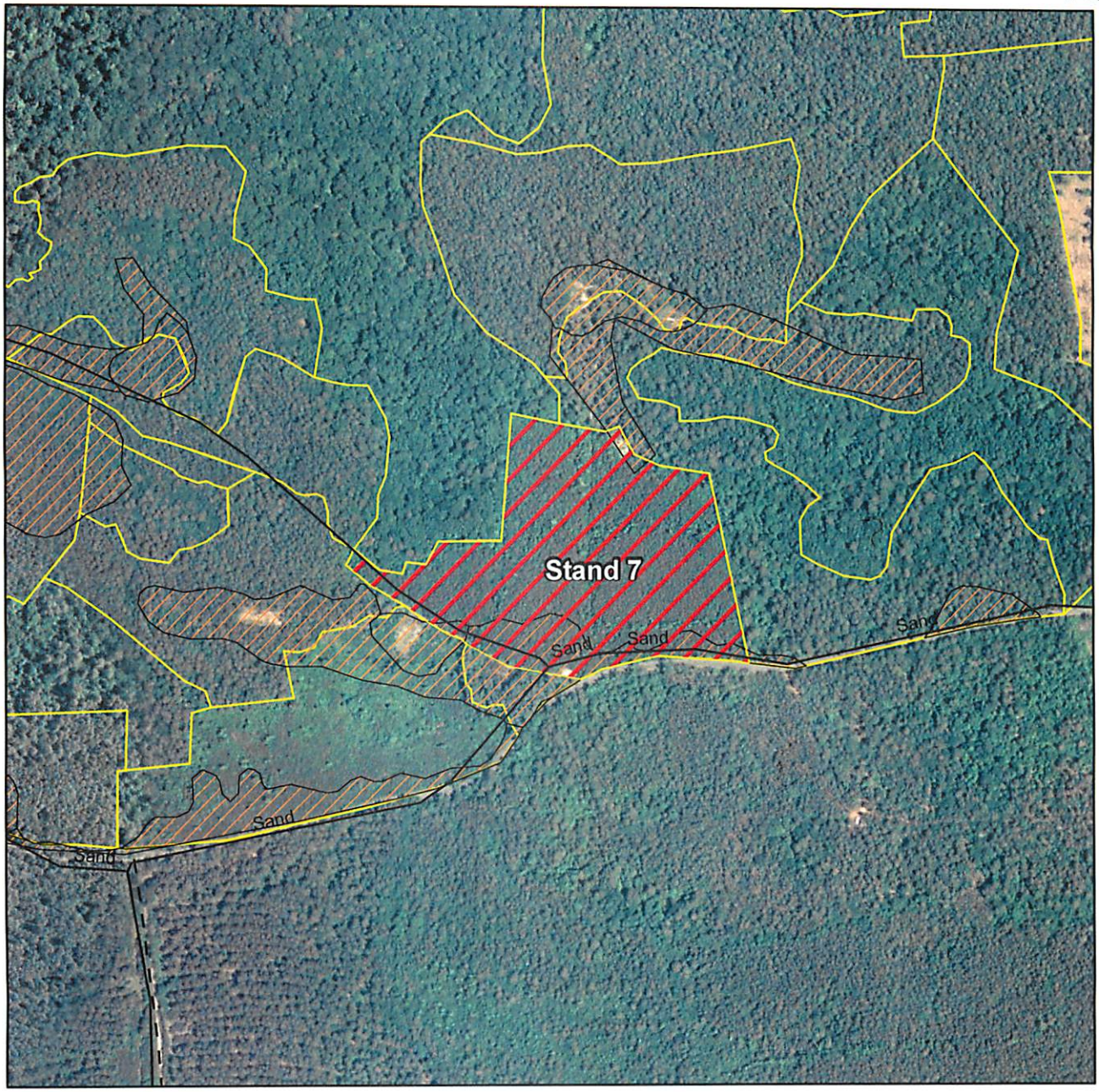
A first thinning is proposed for Stand 8 in Tract 9 of the Nazareth Church Tract displayed in red. Stand 8 is 33.7 acres and was established in 1987 and regenerated naturally.

Approximately 0.5 acres of stand 8 is part of an HCVF.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 10 Stand 7

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

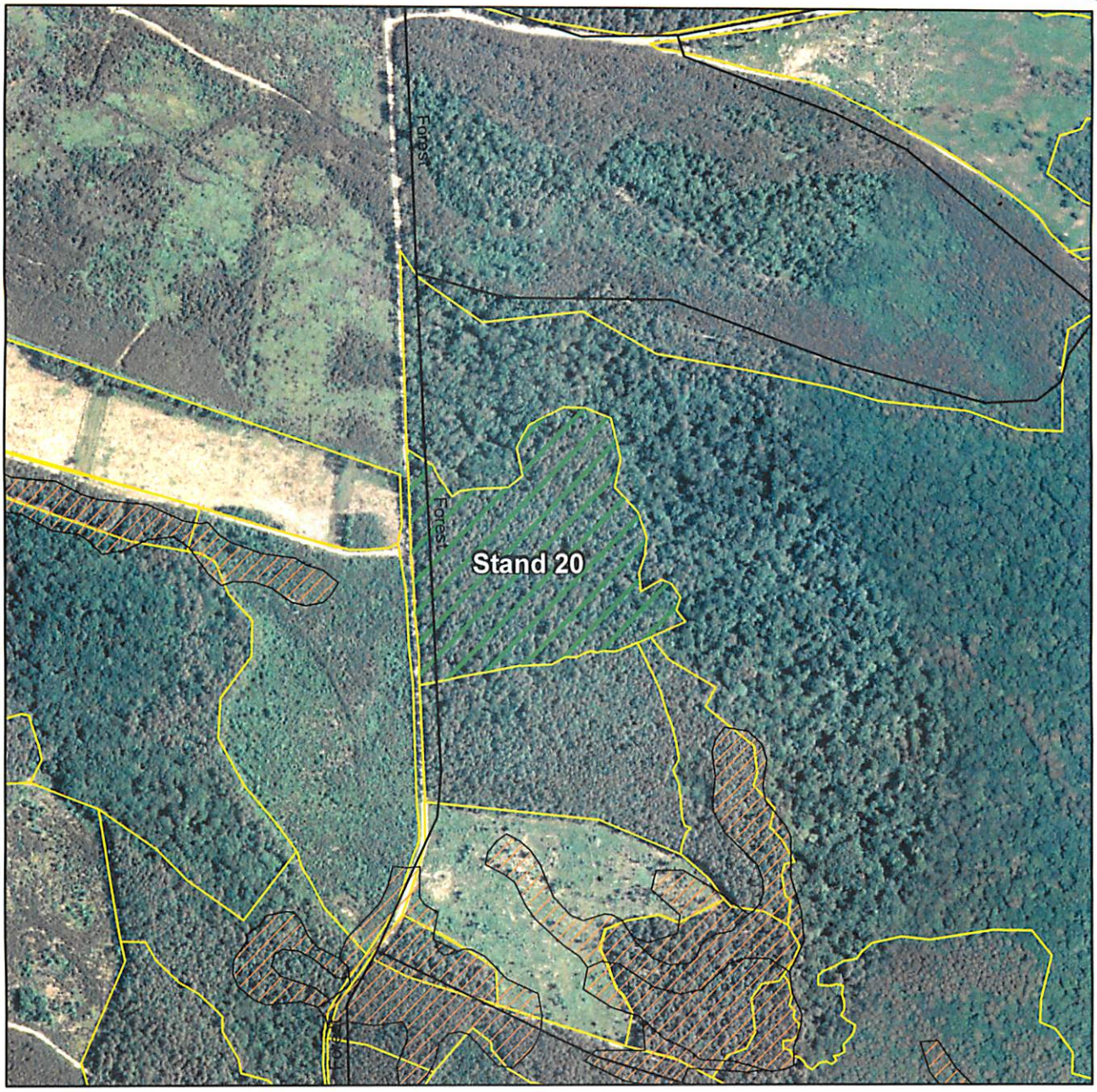
A first thinning is proposed for Stand 7 in Tract 10 of the Nazareth Church Tract displayed in red. Stand 7 is 24.0 acres and was site prepared and planted in 1990.

Approximately 2 acres of stand 7 is part of an HCVF.

This stand is in a General Management Area.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Nazareth Church Tract 10 Stand 20

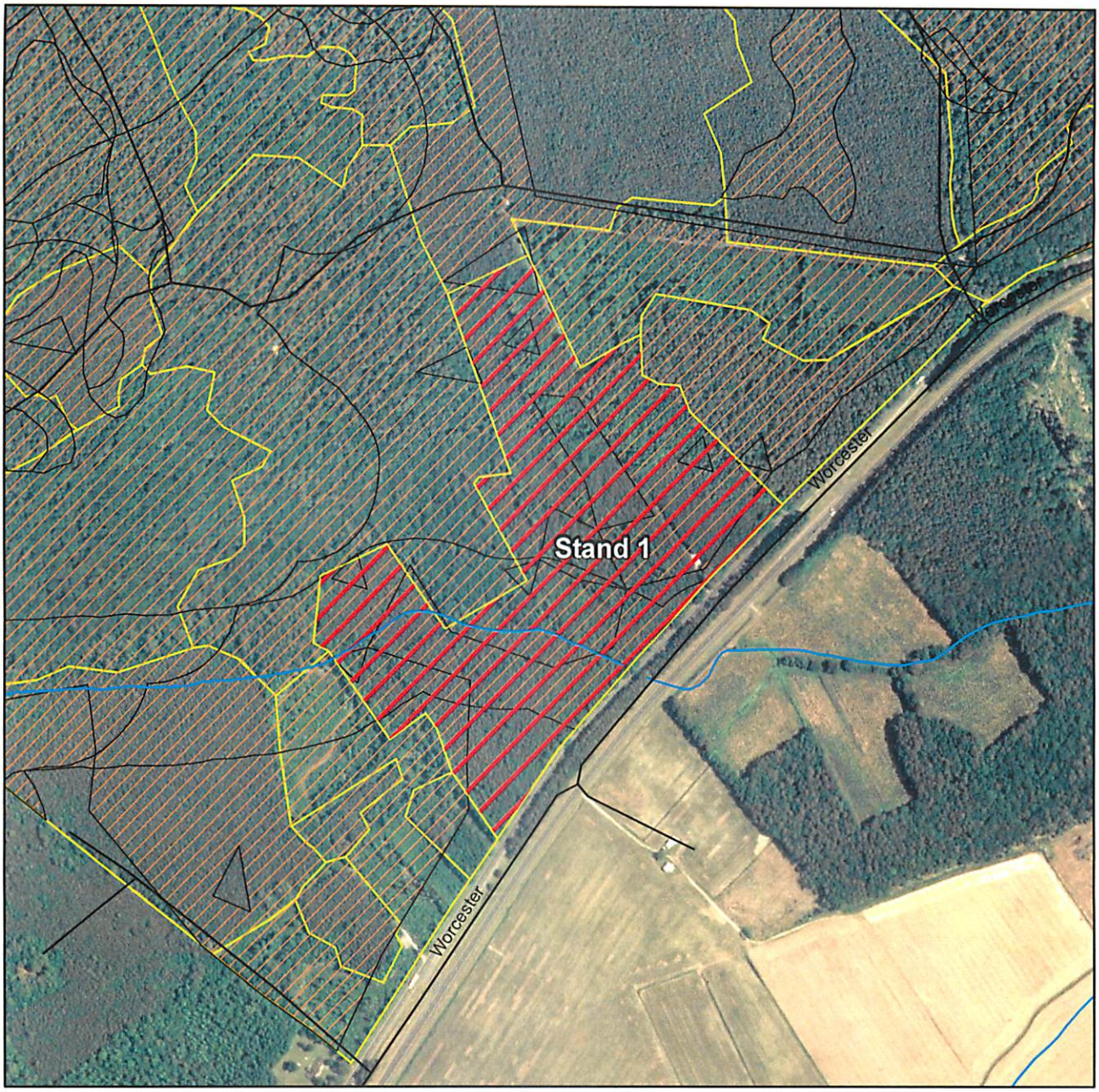
ASC-DNR Forest Service 07/31/2009

Silviculture Prescription:

This sale has been removed from the annual work plan as a result of the DNR interdisciplinary team field review, The DNR ID Team was concerned about the ability of the stand to regenerate back to an acceptable level of pond pine.

Guidelines:

FY11 Annual Work Plan



1 inch = 660 feet

Tarr Tract 19 Stand 1

ASC-DNR Forest Service 08/07/2009

Silviculture Prescription:

A first thinning is proposed for Stand 1 in Tract 19 of the Tarr Tract displayed in red. Stand 1 is 41.5 acres and was site prepared and planted in 1987.

Approximately 19 acres of stand 1 is part of an HCVF.

This stand is in a Core FIDS Area.

Guidelines:

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

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Eric Schwaab, Deputy Secretary

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

Attendees: Joan Maloof, Ecologist, Salisbury University – CAC member
Adrianne 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 Pocomoke Forest AWP:

- Sam Bennett
  - Page 4 – Silviculture projects begin – ID Team comments included into plan page 6 #5 one sale eliminated (per DNR ID team review)

- Kip Powers
  - Talked about shortleaf pine and re-establishment of stands.

- Sam Bennett
  - #3 & #4 changed harvest method as a result of DNR ID Team comments.

- Larry Beauchamp
  - If you burn before harvest of loblolly, does it affect the price? Burning was discussed by Sam and Kip.

- Joe Fehrer
  - Nazarene Church Tract – Are you going to leave any standing dead? Makes excellent habitat for redheaded woodpecker.

- Kip Powers
  - Answer to Joe's question was yes we usually mark some types of trees for habitat – part of our certification is to leave green tree retention (HRA)

- Joan Maloof
  - Expressed concern that we are not retaining enough old forest
  - Asked to have a tour of stand 10 – harvested 50 years ago

- Joe Fehrer
  - Asked what is status of the southern pine bark beetle now?
  - Answer – none here recently but some see in lower eastern shore VA (Ken Pusey)
  - It is State policy to go in and remove trees that are affected? Sam discussed the sates response to bark beetle outbreaks.

- Joan Maloof
  - Why not plan to cut less and then just cut in reaction to beetle outbreak
  - Maps: would be helpful if there wasn't another color layer on map – just outline would be helpful

- Sam Bennett
  - Proposed pre-commercial thinning area were reviewed
  - ORV trail – hiking trail – bike trail projects discussed
  - As a result of certification – high conservation value forest areas in Chandler Tract ORV area has raised concerns – G3 community concerns with ORV going through them

- Joe Fehrer
  - Do we have any area to monitor wood ducks etc. and are they maintained? Sam responded yes.

- Joan Maloof
  - Does the AWP ever change in response to CAC comments? Sam responded that we consider them and they are all included in the plan sent to Annapolis for final approval. Mike responded saying that yes they have been taken into consideration and has made a difference in chemical use.

- Joan Maloof
    - Asked when the public comment period is (answer 30 days/Jan 14)
    - She also made the comment that there was no public comment online last year (said she thought something was broken). Sam responded that yes there was.

- Joe Fehrer
    - Mentioned herbicide use and asked us to give him a call if we have a problem locally with invasive species

- Sam Bennett
    - Said we are getting ready to do the sustainable forestry plan for certification

- Set up walk scheduled for January 11 @ 9:00 am at the request of Joan Maloof – Meeting adjourned

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Eric Schwaab, Deputy Secretary

Citizens Advisory Committee
Milburn Landing Tract - Pocomoke State Forest
2011 Annual Work Plan - Field Tour
January 11, 2010

Attendee Name: (Please Print)	Unit: Email address:
Paul Spitzer 31672 Old Orchard Rd. Trappe, MD 21673	Unit: Ecologist Email address: spitzer_paul@hotmail.com
Tom Horton	Unit: Email address: tuh@intercom.net
Joan Maloof	Unit: Email address: jemaloof@salisbury.edu
Cal Lubben	Unit: Email address: cdlubben@yahoo.com
Tony DiPaolo	Unit: Email address: tonydo2@comcast.net
Alexander Clark	Unit: Forest Service Email address: aclark@dnr.state.md.us
Kip Powers	Unit: Forest Service
Mike Schofield	Email address: MFS
Samuel Bennett	MD Forest Service - Pocomoke State Forest

Chesapeake and Pocomoke State Forests - 6572 Snow Hill Road, Snow Hill, Maryland 21863
Telephone (410) 632-3732 Fax (410) 632-3730 • www.dnr.maryland.gov • TTY users call via Maryland Relay

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: Citizen's Advisory Committee Email address: jsma[illegible]@salisbury.edu
Adrianne Wakowski	Unit: Citizen's Advisory Committee Email address: aw96940@salisbury.edu
[illegible]	Unit: [illegible] Email address: [illegible]
Larry Beauchamp	Unit: CAC - Hunting Rep. Email address: llbeauchamp@hotmail.com
Kip Powers	Unit: MD Forest Service Email address:
Alexander Clark	Unit: MD Forest Service Email address:
Samuel J. Bennett	Unit: MD - Forest Service Email address:
Michael G. Schofield	Unit: MFS - Chesapeake Forest Mgr Email address:
Denise L. Snyder	Unit: Chesapeake State Forest Email address:
	Unit: Email address:
	Unit: Email address:

RE: comment period for work plans

Joan Maloof [jemaloof@salisbury.edu]

Sent: Tuesday, February 16, 2010 4:04 PM

To: Bennett, Sam

Thanks Sam!

>>> "Bennett, Sam" <SBennett@dnr.state.md.us> 2/16/2010 3:39 PM >>>
Hi Joan,

We will go ahead and extend the comment period to March 1.

Sam

Samuel J. Bennett, Forest Manager
Pocomoke State Forest
6572 Snow Hill Road
Snow Hill, MD 21863

(Work) 410-632-3732
(Mobil) 443-783-9149
(Fax) 410-632-3730
(email) sbennett@dnr.state.md.us

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www.trees.maryland.gov

From: Joan Maloof [jemaloof@salisbury.edu]
Sent: Sunday, February 14, 2010 5:14 PM
To: Bennett, Sam
Subject: comment period for work plans

Hi Sam,
A number of people have told me that they wanted to comment on the forests where management was planned for 2011, but because of the weather they haven't been able to visit the forests. Is there any possibility that the comment period can be extended in light of the unusual snowfall?

Joan E. Maloof, Ph.D.
Department of Biological Sciences
HS 224
Salisbury University
Salisbury, MD 21801 (410) 548-5788
http://www.salisbury.edu/biology/faculty/Maloof.html

Pocomoke State Forest 2011 Annual Work Plan

Bill_Giese@fws.gov [Bill_Giese@fws.gov]

Sent: Monday, December 14, 2009 2:40 PM

To: Bennett, Sam

Sam

After discovering the Chesapeake Forest Plan and the Pocomoke State Forest work plans at the bottom of my pile on my desk last week and observing the due date for comments, I talked to Mike Schofield and he advised to send my comments regardless. I appoligize for the lateness, but I offer the following very general comments:

Road and boundary line maintenance while never ending continue to be a priority and I am pleased to see that the plan addresses these items. From my experience at Blackwater, it is so easy to postpone these items and develop a backlog very quickly. I am glad to see them prominently featured.

Off Road Vehicle Trail Improvement Project review by the DNR staff will provide some third party oversight of the proposals which is good.

I really do not have any comments on the silvicultural projects proposed except that they seem to reflect the vision and purpose of the over Forest Management plan. I believe that the proposals protect important resources. I would address to you if continued wet conditions prevents the planned 2010 recommendations to be implemented - What prioritization do you envision?

Otherwise the plan is written very well with a reasonable workload projected as usual. Sorry for the lateness of my comments.

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

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

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

Comments on the Proposed 2011 Annual Work Plan for the **Pocomoke State Forest**

As the ecology representative of the Pocomoke State Forest citizen's advisory committee I have been asked to comment on the 2011 Work Plan. Many of the suggestions will look familiar, as I have been making similar suggestions for the past few years. Unfortunately, my comments do not seem to be taken seriously and the work plans are never altered per my suggestions. I am including last year's comment in gray and adding this year's comments in black.

The work plan. This year the work plan was not available for reviewing before the advisory committee meeting, therefore I could not visit the forests planned for cutting prior to the meeting. There were only three people present at the advisory committee meeting. I suggest finding members who are more serious about their duties, or finding some other way to encourage participation.

The maps with outlines of areas planned for harvest were very useful. Ideally these maps would also indicate the best route for access.

2011 WP: A nicely prepared work plan was sent at the same time as the Chesapeake Forest Work Plan, a few weeks before the December 3rd meeting. The stand maps were very helpful, but I had to request overview maps so I could find the stands. My request was promptly fulfilled. Please include overview maps in the future. As a minor stylistic suggestion please do not use colored layers over the stands; the colored layers make it difficult to determine stand characteristics. Also, please use the most recent background layers. In a number of cases the stands appeared to be surrounded by intact forest, but a ground inspection revealed that neighboring stands had been cut in recent years. It would also be helpful to have contact information on the plan – a phone number or e-mail address.

Stop harvesting of older mixed forests. The majority of the Chesapeake Forest and the Pocomoke State Forest (General Management Zone) is composed of young, early succession pines -- a result of past cutting practices. These pine plantations lack the natural biodiversity (species of plants and animals) that

should be present in our forests. This situation is so serious that Chesapeake Forest lands are being aggressively thinned and managed to try to return some of their former biodiversity. In place of a monoculture of pines the management plans for the Chesapeake Forest encourage other hardwood species. In the Pocomoke State Forest, however, there are pockets of forest that still contain a rich diversity of plant and animal life. These forests are between sixty and ninety years old. Large oaks of many different species, hickories, and mature pines of different species tower over an understory of magnolias, dogwoods, hollies, azaleas, blueberries, mountain laurel, and many more species. In the spring these forests are a sea of bloom, in the fall they are filled with the color from the leaves of many species. The Pocomoke State Forest 2010 work plan proposes that a number of these mixed species, older, forests be logged. I objected to this practice last year and the year before that, and the year before that, and I object again this year. The logging plan calls for retaining dominant and co-dominant oaks, but the understory species; including the ancient mountain laurel, the beech, and the dogwoods, will be destroyed. The oaks that are not removed will be subject to windthrow and root damage as a result of the harvest. Even though these older, species rich, forests are in the multiple General Management Zone they should not be logged. They are an important reservoir of genetic material, they provide food for birds and other animals – and they provide a beautiful serene refuge for humans. This year the work plan again proposes harvesting of over 100 acres of this sort of forest.

If logging must occur in the Pocomoke State Forest it should be done in the areas which have already been converted to pine plantation. Now, in 2008, we know enough about forest ecology to understand that we should preserve the structure and diversity of the precious older mixed forests that remain, especially in publically owned forests such as the Pocomoke State Forest.

Comments on specific tracts planned for harvest:

Dividing Creek Tract, Compartment #24(10 acres): I did not have an opportunity to visit this tract.

Milburn Landing Tract, Compartment #27 (21 acres): Directions – From Rt 12 near Snow Hill, turn onto Nassawango Road. Tract is past Camp Road, where Nassawango Rd curves left and then right just across from Milburn Landing State Park.

This nice forest, over 70 years old, has a multi-storied canopy structure and contains many different species. The understory includes mountain laurel, holly, young beech, and magnolia; while the overstory is a nice mix of oaks and pine. As an ecologist I think it would be a mistake to harvest this forest which is bordered by pine plantation on one side and the park on the other.

Nazareth Church Tract, Compartment #19 (15 acres): Directions – From Furnace Town, continue west on Old Furnace Road about a mile to the parking area on the left where there is a trail which leads to the proposed cut area.

This forest is of a very rare type. It is one of the best examples of a sand ridge Eastern Shore pine forest not dominated by loblolly pine. In adjacent areas that have been cut more recently loblolly pine dominates. There are numerous types of pine here (including short-leaf, Virginia, pitch) and most likely hybrid pines as well. The oaks are interesting also (s. red oak, white oak, post oak), and it appears that there are hybrid oak species too. This forest contains important genetic diversity and it should not be logged. These unusual pines should be allowed to mature further. In another 40-50 years this forest will become a mixed oak-pine forest of the type preferred by the Delmarva Fox Squirrel. From the parking area at Furnace Town there is a trail that leads to this tract making it convenient for horseback riding and hiking. This State Forest would be better left as a place of recreation, habitat, and genetic diversity.

Nazareth Church Tract, Compartment #14 (25 acres): Directions – Take Millville Road south from Furnace Town. Make the first right onto Sand Road and continue for some miles until you see Forest Road on your right. Turn right onto Forest Road. Very soon (under one mile) you will see a mature forest on your left.

This forest, over 80 years old, is well on its way to becoming a fine example of one of our original pine/ hardwood forests. It is unfortunate that the State wants to harvest it, but at least the harvest area has species of the same type surrounding it.

Hudson Tract, Compartment #38 (28 acres): Directions- Take Rt 113 southwest past Snow Hill. Just after passing the entrance to Shad Landing State Park cross the bridge over Corker's Creek and the forest will be immediately on your right.

Once again, one of the finest, oldest, forests has been identified for cutting. This 85 year old mixed hardwood/ pine forest is located along a major tributary leading into the Pocomoke River. Numerous rare species have been found in the Corker's Creek watershed. Mountain laurel and cross-vine are found in the understory.

2011 WP: It is heartbreaking to see additional older mixed native forests of the Pocomoke State Forest being logged year after year. Irreparable ecological damage is being done. It should not matter if these forests are in the General Management Area – they should not be logged. In the past these mixed forests were converted to pine plantations. Now, with just a bit more ecological sensitivity, they are being

converted to pine-oak plantations. Retention areas and buffers are nice additions to plantation style management, but the logging of our beautiful, diverse, older forests should not be justified on the basis of leaving buffers and wildlife trees ("when available"). It is telling that all sale areas "feature and retain pine" and many will be replanted with pine (after herbicide sprays when necessary).

Comments on specific tracts planned for harvest:

Milburn Landing Tract 16 Stand 10 Directions: Snow Hill Road to Nassawango Rd to Camp Road. Stand is across the road from the recreational trail parking. This forest should absolutely not be cut. It is a disabled hunter access area that contains beech, mountain laurel, Virginia pine, loblolly pine, large white oaks, hollies, and wild orchids. The varied topography, created by small stream channels, makes this one of the most unusual and beautiful forests on the Eastern Shore. These are headwaters of the Pocomoke River. The small streams lead to a lovely bald cypress forest. This stand is a part of the ecologically important "Corbin Canyon" area. I have requested a tour of this area on January 11 and I will make every effort to prevent this tract from being logged.

Nazareth Church Tract 7 Stand 2 This is a 78 year old mixed pine-oak forest. It is an interior stand and many birds were evident the day I visited.

Dividing Creek Tract 13 Stand 16 This 73 year old forest is one of the last older, diverse forests in a sea of thinned and more recently cut pine forests. It should be allowed to mature as an ecological refuge from the more intensively managed forests.

Nazareth Church Tract 6 Stand 8 An 80 year old mixed forest containing unusual pines.

Better advertising of public comment period and better website management. Please keep past work plans and comments posted on the website. As of this writing the DNR website (http://www.dnr.state.md.us/forests/workplans/) states that: "The comments will be available for viewing online and updated on a weekly basis" yet there were no comments posted. Does this mean that there were no comments? (indicating poor advertising or public apathy). Or that the comments were not kept posted? Last year's work plan, which is posted on the website, does not include the comments from the Citizen's Advisory Committee members. Should we bother to keep writing comments when our comments seem to fall into a black hole?

Please improve advertisement of the public comment period and make the comment period the same time each year. Currently there is no way for the average citizen to know when the next comment period will begin and end. This information is not posted on the website (as of this writing), and to

complicate matters further the comment period is a different date each year. This is a recurring problem that I have commented on before.

2011 WP: Once again there are major shortfalls regarding public comments. When I checked the DNR website in late November there were no public comments listed, no link for comments, and no notification of when the public comment period would be. All of 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. Not a single public comment was made on the 2010 Work Plan!

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.

No spraying of herbicides or applications of fertilizer. The 2010 work plan for the Pocomoke Forest does not describe any spraying of herbicides (beyond road and trail maintenance) or applications of fertilizer. This is excellent. If any spraying or fertilization is to take place in the forest it should be included in the work plan and the public should be notified.

2011 WP: Herbicides are being used and not being adequately reported.

Recreation. It is good that Recreational Trail funding was applied for, but information about trails (including basic trail maps) should be available free online. No one can get a trail map for the Pocomoke State Forest without paying. Do funding applications cover the cost of making maps? What good are trails that no one knows about? When I see clearcuts right up to the recreational trails it indicates to me that (with the exception of the park area) non-hunter recreation is not a priority in the Pocomoke State Forest.

Regarding the ATV dilemma I encourage more expansive thinking, perhaps a day-long summit where all interests are included. Most ecologists would be satisfied to see ATVs restricted even further, but I see them as a valid recreational group and a possible source of necessary income. I suggest moving the trails out of the ecologically sensitive areas, but allowing for expanded ATV use in other areas. For example, we have many dirt roads for cars through the forest. Why not restrict some of those roads to ATV use only? Or what about allowing the ATVs into areas that will be logged the following year? Certainly they cannot do more damage than the heavy logging equipment. Or perhaps we could make a very nice, long, permanent type trail system (with barriers where necessary) and then raise the license fees

Seeking dual certification from FSC and SFI is a positive step. Certification will provide a needed layer of oversight and could improve economic return as demand for sustainable timber and fiber increases.

2011 WP: Congratulations on your certification. I look forward to reading a copy of your sustainable forest management plan.

Thank you for letting me comment on the 2011 Annual Work Plan. Overall I am disappointed by the continued logging of ecologically important mixed-species forests.

Joan Maloof, Ph.D.

Department of Natural Resources
Wildlife & Heritage Services

MEMORANDUM

TO: Pocomoke State Forest ID Team

FROM: Wesley Knapp & Scott Smith – Maryland Natural Heritage Program

RE: FY11 Annual Work Plan

DATE: 14 September 2009

The following are the Natural Heritage Program's comments pertaining to the 2011 Annual Work Plan for Pocomoke State Forest. At this time we feel the collection of native genotype pond pine (*Pinus serotina*) should be conducted. Already the collection of native genotype short-leaf pine (*Pinus echinata*) is being conducted already on PSF for management practices. Pond pine should be being collected to aid future management objectives.

Some of the stands proposed for harvest are natural stands of pond pine (*Pinus serotina*), or mixtures with loblolly pine (*Pinus taeda*). These stands should either be removed from the AWP or subject to very select harvests. Stand 20 in the Nazareth Church Tract 10 is a prime example of a forest type dominated by pond pine that is being converted to loblolly pine in our landscape. The two stands to the south of stand 20 (stands 21 & 10) were dominated by pond pine and harvested within the past 5 years. Neither is regenerating into the forest type that it was before harvest and is now significantly altered. Stand 10 is dominated by loblolly pine due to planting and stand 21 has some natural pond pine regeneration, but is mostly gums and maples. This conversion of forest type on the Pocomoke State Forest seems counter to FSC Indicator 5.6 which states:

"Requires that harvest rates be sustainable, based on available data and harvest records. CFI data are available for the Pocomoke State Forest and managers strive to ensure that annual harvests do not exceed estimated annual growth rates."

At this time, we find it impossible to claim that the harvesting of these pond pine forest stands is sustainable. Until protocols and measures can be developed to ensure the harvesting of this forest type is sustainable we strongly recommend harvest of this forest type be halted.

In the PSF FY11 AWP, 22 tracts and 25 stands have been proposed for management. Of these a total of 435.2 acres of proposed harvests have been proposed, with regenerations harvests (clear-cuts) being proposed on 112 of these acres. This is approximately 5% of the total manageable forest acreage. This high rate of harvest could be in conflict with audit

recommendation 2009.5 and indicator 5.6 (cited above). Also, has the Maximum Sustainable Yield for Pocomoke State Forest been calculated? If so, is this total acreage of harvest within that number?

Given that the PSF has been certified we were surprised to see no change in management practice from years past, namely the continued practice of regeneration harvests (clear-cuts). Where are the variable retention harvests? In this landscape, regeneration harvests (clear-cuts) only act to convert forest types into that of the abundantly planted and very fast growing loblolly pine. We feel this is in conflict with the Audit recommendations listed above as well as REC 2009.10:

"We recommend that the description and justification of harvesting techniques and equipment to be used be documented in the harvest prescription."

If variable retention harvests were considered what justification is there using regeneration harvests instead? Has any consideration been given to creating variable thinning densities instead of the traditionally thinning rates? Also, what measures will be taken to ensure the stands being harvested return as a mixture of vegetation and are not dominated by loblolly pine or significantly altered?

I was also disappointed to see the following statements under the reforestation heading on page 7 of the AWP:

"This work will involve planting recently cutover areas with loblolly pine seedlings. Planting will be done on a 10' X 10' spacing."

The planting of loblolly pine in these forests is largely, if not entirely, artificial and should not be advocated. The striking dissimilarity in management between Chesapeake Forest and Pocomoke State Forest is evident by these management plans. Chesapeake Forest has been certified as a plantation moving toward a more natural forest. PSF has been certified as a natural forest, but we are moving ever increasingly toward artificial loblolly dominated stands.

Directly related to the conversion of forest stands is the pending work approved by previous AWP's. These work plans may need to be reevaluated and amended based upon our certification. At a minimum perhaps the areas of regeneration harvests in these previous work plans should be amended to be variable retention harvests.

In the AWP we noted "hits" in 23 stands for sensitive resources, including 4 tracts and 4 stands within Ecologically Significant Areas (ESAs). An Excel spreadsheet (CFAWP11.xls) containing all areas proposed for management, "hits", and abbreviated comments are attached.

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Given the size and diversity of the oaks in this stand good steps toward a diverse stand can be taken and a stand similar to this can be returned after harvest. Retention of the hardwoods will aid DFS conservation.

2) Milburn Landing Tract 16, Stand 10– 35.0 acre proposed clear-cut: This stand supports large loblolly pines and a good diversity of hardwood species. The AWP calls for a regeneration harvest. We would recommend a seed-tree harvest retaining pond pine or a variable retention harvest in place of the regeneration harvest. As many oaks as possible should be retained. Given the size and diversity of the oaks in this stand good steps toward a diverse stand can be taken and a stand similar to this can be returned after harvest. Retention of the hardwoods will aid DFS conservation. Occasional pond pine is found in this stand, but with infrequency. Planting local genotype pond pine is encouraged in this stand.

3) Nazareth Church Tract 6, Stand 8 – 22.0 acre proposed clear-cut: This stand is dominated by pond pine, not loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stand is known to be naturally regenerating.

4) Nazareth Tract 7, Stand 2 – 32.0 acre proposed clear-cut: This stand is dominated by pond pine and loblolly pine, not solely loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stands are known to be naturally regenerating.

5) Nazareth Tract 10, Stand 20 – 19.0 acre proposed clear-cut: This stand is dominated by pond pine, not loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stand is known to be naturally regenerating.

Within the following areas of proposed thinning the only comment we have is to retain hardwood species.

6) Milburn Landing Tract 15, Stand 2 – 4.4 acre proposed first thinning
6b) Milburn Landing Tract 15, Stand 3 – 8.7 acre proposed first thinning.
7) Milburn Landing Tract 18, Stand 2 – 22.7 acre proposed first thinning.
8) Nazareth Church Tract 4, Stand 8 – 8.7 acre proposed first thinning.
9) Chandler Tract 22, Stand 1 – 17.4 acre proposed first thinning
10) Nazareth Church Tract 5, Stand 6 – 20.7 acre proposed first thinning
11) Dividing Creek Tract 13, Stand 20 – 11.8 acre proposed first thinning
11b) Dividing Creek Tract 14, Stand 1 – 7.4 acre proposed first thinning
12) Tarr Tract 19, Stand 1 – 41.5 acre first thinning

13) Nazareth Church Tract 9, Stand – 33.7 acre first thinning
14) Milburn Landing Tract 18, Stand 1 – 19.6 acre first thinning
15) Nazareth Church Tract 7, Stand 1 – 26.6 acre first thinning
16) Nazareth Church Tract 3, Stand 6 – 22.2 acre first thinning
17) Nazareth Church Tract 6, Stand 5 – 29.7 acre first thinning
18) Nazareth Church Tract 10, Stand 7 – 24.0 acre first thinning

Maryland Department of Natural Resources

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Memorandum

To: Scott Smith & Wes Knapp
From: Kip Powers, Regional Forester
Subject: Pocomoke Forest FY11 AWP
Date: September 17, 2009

KVP

The following is my response to the comments provided by the Heritage Program on the Pocomoke Forest 2011 AWP. Today was the first day I had a chance to do an actual field review of the proposed sites listed for a regeneration harvest. I know Sam was hard pressed to get the work plan out this year so it was a bit difficult to do some early on evaluations prior to putting the AWP document into print. This is the first year that he was able to compile the information into a format similar to that sent out by Chesapeake Forest and as with any effort of this nature it will be a learning experience for Sam now that PSF is under dual certification. I understand some of the concerns pointed out by the Heritage Program, but it is because of the review process we have in place that we are afforded the time to look closely at each proposal weigh all comments and then build upon it. In future plans we will strive to provide a more detailed review of each site, such as giving the percentage of the various pine and hardwood species in each stand.

As for the previously reviewed AWP's all harvest that are now being cruised take into account areas that can be set aside for retention and or opportunities for leaving seed trees such as Short-leaf Pine. As you should know we do very little "artificial" reforestation on Pocomoke Forest, we rely almost entirely on natural regeneration. The reforestation statement that Heritage was so worked up about was a standard statement carried over from form other AWP's. The only time that "artificial" reforestation is used or will be used is if natural regeneration fails, and in the near future we will have to opportunity to "artificially" reforest with Short-leaf Pine and maybe even Pond Pine.

So my detailed comments on each of the five harvest sites are as follows:

1) **HERITAGE COMMENTS:** Dividing Creek Tract 13, Stand 16 – 23.0 acre proposed clear-cut: This stand supports large loblolly pines and a good diversity of hardwood species. The AWP calls for a regeneration harvest. We would recommend a seed-tree harvest or variable retention harvest in place of the regeneration harvest. As many oaks as possible should be retained. Given the size and diversity of the oaks in this stand good steps toward a diverse stand can be taken and a stand similar to this can be returned after harvest. Retention of the hardwoods will aid DFS conservation. **FOREST SERVICE COMMENTS:** We basically agree with the comments provided, all oaks and or groups\patches of oaks & other hardwoods will be retained. We may leave a few loblolly seed trees near the back of the stand, but this area will likely regenerate quit well with the existing seed source. Due to the age and size of the pines we would not leave any trees near the county road due to the risk of wind throw.

Kip V. Powers
Eastern Regional Forester

2) **HERITAGE COMMENTS:** Milburn Landing Tract 16, Stand 10– 35.0 acre proposed clear-cut: This stand supports large loblolly pines and a good diversity of hardwood species. The AWP calls for a regeneration harvest. We would recommend a seed-tree harvest retaining pond pine or a variable retention harvest in place of the regeneration harvest. As many oaks as possible should be retained. Given the size and diversity of the oaks in this stand good steps toward a diverse stand can be taken and a stand similar to this can be returned after harvest. Retention of the hardwoods will aid DFS conservation. Occasional pond pine is found in this stand, but with infrequency. Planting local genotype pond pine is encouraged in this stand.
FOREST SERVICE COMMENTS: We agree with the comments provided, as we are currently doing with our timber sales all oaks and groups of oaks\hardwood patches will be retained. In this site we would be willing to leave seed trees with a combination of Pond\Short-leaf if present and or Lob as a means to ensure adequate regeneration.

3) **HERITAGE COMMENTS:** Nazareth Church Tract 6, Stand 8 – 22.0 acre proposed clear-cut: This stand is dominated by pond pine, not loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stand is known to be naturally regenerating. **FOREST SERVICE COMMENTS:** After reviewing this site I offer the following proposal for this site. This is a mixed stand of Pond and Loblolly pine probably as indicated heavier on the Pond Pine side. The recommendation for this site is to carry out a winter burn prior to this site being cruised for a timber sale. The type of harvest would be strictly a Pond Pine seed tree harvest, where 8 to 15 sawtimber trees per acre would be retained. The range on number of seed trees per acre is dependent on the diameter of the seed tree. Should there not be sufficient seed trees above 14 inches DBH then a larger number of smaller sawtimber size Pond Pines would be retained. This site and one other that I will describe below are in perfectly suited locations for carrying out a winter burns. These burns are needed if we hope to get pond pine regeneration, per the studies hot fires are needed to open the pond pine cones and allow for seed fall. I have attached information on this species via the USFS Silvics manual see the highlighted sections for specific info on burning. Also next to the sale area is a sand ridge that shows as HCVF on the map this site could also be burned over during the winter burn if it is deemed beneficial for management of the site.

4) **HERITAGE COMMENTS:** Nazareth Tract 7, Stand 2 – 32.0 acre proposed clear-cut: This stand is dominated by pond pine and loblolly pine, not solely loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stands are known to be naturally regenerating. **FOREST SERVICE COMMENTS:** The recommendation for this site would be similar to the one provided above for Tract 6, stand 8. The main difference in this stand is that the percentage of Loblolly in this stand is much higher there seems to be pockets of Pond Pine followed by areas of Loblolly and mixed Lob\Pond pine. I would also mention that as with the previous sites any large oaks or pockets of oak would be retained for retention. This stand happens to have a large mixed

hardwood pine retention area. Concerning the burning of these stands, should it be deemed necessary following the seed tree harvest a follow-up burn would be conducted to open the site up for pine regeneration. Again to make it clear the sale procedures on these stands would not commence until the winter burn is carried out.

5) **HERITAGE COMMENTS:** Nazareth Tract 10, Stand 20 – 19.0 acre proposed clear-cut: This stand is dominated by pond pine, not loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stand is known to be naturally regenerating. **FOREST SERVICE COMMENTS:** After reviewing this site we are in agreement that it should be removed from the annual work plan. With the two previous sites we can take the opportunity to demonstrate that with the active use of fire prior to the harvest an acceptable Pond Pine stand can be regenerated.

PSF FY11 Annual Work Plan

Powers, Kip

Sent: Thursday, October 22, 2009 2:42 PM

To: Bennett, Sam; Perdue, Jack; Feldt, Rob; Clark, Alexander S

Attachments: Pocomoke Forest FY11 Work ~1.doc (35 KB)

Attached is the revised language agreed to by Heritage for the four harvest sites, the fifth harvest site Nazareth Church Tract 10, stand 20 has been dropped per agreement with Heritage. There were no issues with any of the thinning sites so they remain as prescribed. I will make additional modifications to the proposed ORV project with the note: "*Pending final recommendations of the Departments ORV report*". so we can at least put some form of it in the work plan, according to Russ Hill, Paul is now suppose to be coming out with a draft ORV report in early November.

If there are any additional changes or additions to the recommendations on these harvest sites let me know, otherwise they will be inserted into the final FY11 proposed work plan.

Kip Powers, Regional Forester
Maryland DNR Forest Service
201 Baptist Street, Suite 22
Salisbury, MD 21801
Work: 410-713-3862
Mobile: 443-235-0985
Fax: 410-713-3869

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Pocomoke Forest FY11 Work Plan Changes

Silvicultural Prescription: Dividing Creek – Tract 13, Stand 16

A regeneration harvest is proposed to be carried out in this 73 year old 23 acre pine\hardwood stand. Along the eastern boundary of the sale area, seed trees will be left and areas of green tree retention (groups of oaks & other hardwoods) will be left on the northern end of the stand.

This stand will be allowed to seed naturally, hand planting will only be used in areas lacking adequate pine regeneration. The need for supplemental planting is usually determined the second year after the harvest is completed.

This stand is in the General Management Area.

Silvicultural Prescription: Milburn Landing – Tract 16, Stand 10

A seed-tree regeneration harvest is proposed to be carried out in this 50 year old, 35 acre loblolly pine stand. A combination of loblolly and pond pine seed trees, approximately 8 to 15 per acre will be retained as a seed source to insure adequate regeneration. In addition groups of oak trees will be retained within the harvest area for wildlife benefits. On the northeastern end of the stand a High Conservation Value Forest (HCVF) area shown in the orange hatching will be retained. A prescribe burn is also proposed for this stand either prior to or just after harvesting. This stand is in the General Management Area.

Silvicultural Prescription: Nazareth Church – Tract 6, Stand 8

A regeneration harvest by the seed-tree method is proposed for this 80 year old, 22 acre mixed pond\loblolly pine stand. Prior to this site being harvested a winter burn will be carried out to prepare the area for pond pine regeneration. This harvest will be strictly a Pond Pine seed tree harvest, where 8 to 15 sawtimber size trees per acre would be retained. The range on the number of seed trees per acre is dependent on the diameter of the seed trees, i.e. smaller diameters more seed trees per acre. In addition mature oaks will be retained within the harvest area. On the eastern edge of this stand there is a HCVF area that would remain un-harvested, but would be part of the understory burn area.

Research: Several measurement plots will be established within the harvest area to determine the success of utilizing prescribe fire to reestablish the Pond Pine forest type.

Silvicultural Prescription: Nazareth Church – Tract 7, Stand 2

A regeneration harvest by the seed-tree method is proposed for this 78 year old, 32 acre mixed loblolly\pond pine stand. Prior to this site being harvested a winter burn will be carried out to prepare the area for pond pine regeneration. This harvest will be both a Pond Pine & loblolly pine seed tree harvest, where 8 to 15 sawtimber size trees per acre would be retained. The range on the number of seed trees per acre is dependent on the diameter of the seed trees, i.e. smaller diameters more seed trees per acre. However when there is a choice between leaving a Pond Pine or a Loblolly Pine, the Pond pines will be favored for retention. In the middle of the proposed harvest area is a 5.4 acre pine\hardwood retention site, in addition mature oaks will be retained across the harvest area. On the eastern edge of this stand there is a small HCVF area that would remain un-harvested, but would be part of the understory burn area. Also there is

Research: Several measurement plots will be established within the harvest area to determine the success of utilizing prescribe fire to reestablish the Pond Pine forest type.

Pocomoke State Forest

Inter-Disciplinary Team (ID Team) Annual Work Plan Field Review
September 22, 2009

Attendance: Rob Felt, Scott Smith, Alex Clark, Mike Schofield, Gerry Adelhardt, Sam Bennett, Kip Powers, John Wilson, Russ Hill, Brett Coakley, Anne Strang, Jack Perdue

Idlewild WMA Proposal
This proposed project has been entered into Project Review. The ID Team will meet at the proposal site and future date. Bob Long should re-issue the comments. October 7 has been set for the field tour.

Dividing Creek: Tract 13 - Stand 16
See Heritage's comment's and Kip Powers reply.
Kip suggested to accept the Heritage recommendations but to save the northern points as retention areas.

There was a discussion that Pocomoke State Forest is trending toward plantations as suggested by Wes Knapp. Kip Powers presented area and age distribution tables which indicate an actual movement toward natural stands.

Milburn Landing: Tract 16 - Stand 10
This proposal will be revised to accept Heritage comments and include a post-harvest burn. The proposal will retain oaks and pond pine. This will be seed tree harvest.

Nazareth Church: Tract 6 - Stand 8
It was suggested that the Heritage Program should begin a monitoring project of pond pine management. It should include pre-burn, harvest and post harvest monitoring components. Three pond pine sites were proposed, two will include burn and harvest activity, and the third proposal dropped. As stated, this site should be monitored for prevalence of pond pine regeneration for two years following treatment. The use of needle thickness and flexibility will be investigated to allow pond pine to be distinguished from loblolly pine.

Nazareth Church: Tract 10 - Stand 20
This proposal will be dropped from the annual work plan.

Chandler Tract: Off Road Vehicles
This year's activities will include fixing the worst of the waterholes on the ORV trail and will plan to close the ORV trail after deer hunting season. The managers will await for further action based on the Department's pending ORV study and report which is expected to be released by the end of the year.

Department of Natural Resources
Wildlife & Heritage Services

MEMORANDUM

TO: Pocomoke State Forest ID Team

FROM: Wesley Knapp & Scott Smith – Maryland Natural Heritage Program

RE: FY11 Annual Work Plan

DATE: 14 September 2009

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6) Milburn Landing Tract 15, Stand 2 – 4.4 acre proposed first thinning
6b) Milburn Landing Tract 15, Stand 3 – 8.7 acre proposed first thinning.
7) Milburn Landing Tract 18, Stand 2 – 22.7 acre proposed first thinning.
8) Nazareth Church Tract 4, Stand 8 – 8.7 acre proposed first thinning.

9) Chandler Tract 22, Stand 1 – 17.4 acre proposed first thinning
10) Nazareth Church Tract 5, Stand 6 – 20.7 acre proposed first thinning
11) Dividing Creek Tract 13, Stand 20 – 11.8 acre proposed first thinning
11b) Dividing Creek Tract 14, Stand 1 – 7.4 acre proposed first thinning
12) Tarr Tract 19, Stand 1 – 41.5 acre first thinning
13) Nazareth Church Tract 9, Stand – 33.7 acre first thinning
14) Milburn Landing Tract 18, Stand 1 – 19.6 acre first thinning
15) Nazareth Church Tract 7, Stand 1 – 26.6 acre first thinning
16) Nazareth Church Tract 3, Stand 6 – 22.2 acre first thinning
17) Nazareth Church Tract 6, Stand 5 – 29.7 acre first thinning
18) Nazareth Church Tract 10, Stand 7 – 24.0 acre first thinning

Memorandum

To: Scott Smith & Wes Knapp
From: Kip Powers, Regional Forester
Subject: Pocomoke Forest FY11 AWP
Date: September 17, 2009

The following is my response to the comments provided by the Heritage Program on the Pocomoke Forest 2011 AWP. Today was the first day I had a chance to do an actual field review of the proposed sites listed for a regeneration harvest. I know Sam was hard pressed to get the work plan out this year so it was a bit difficult to do some early on evaluations prior to putting the AWP document into print. This is the first year that he was able to compile the information into a format similar to that sent out by Chesapeake Forest and as with any effort of this nature it will be a learning experience for Sam now that PSF is under dual certification. I understand some of the concerns pointed out by the Heritage Program, but it is because of the review process we have in place that we are afforded the time to look closely at each proposal weigh all comments and then build upon it. In future plans we will strive to provide a more detailed review of each site, such as giving the percentage of the various pine and hardwood species in each stand.

As for the previously reviewed AWP's all harvest that are now being cruised take into account areas that can be set aside for retention and or opportunities for leaving seed trees such as Short-leaf Pine. As you should know we do very little "artificial" reforestation on Pocomoke Forest, we rely almost entirely on natural regeneration. The reforestation statement that Heritage was so worked up about was a standard statement carried over from form other AWP's. The only time that "artificial" reforestation is used or will be used is if natural regeneration fails, and in the near future we will have to opportunity to "artificially" reforest with Short-leaf Pine and maybe even Pond Pine.

So my detailed comments on each of the five harvest sites are as follows:

1) **HERITAGE COMMENTS:** Dividing Creek Tract 13, Stand 16 – 23.0 acre proposed clear-cut: This stand supports large loblolly pines and a good diversity of hardwood species. The AWP calls for a regeneration harvest. We would recommend a seed-tree harvest or variable retention harvest in place of the regeneration harvest. As many oaks as possible should be retained. Given the size and diversity of the oaks in this stand good steps toward a diverse stand can be taken and a stand similar to this can be returned after harvest. Retention of the hardwoods will aid DFS conservation. **FOREST SERVICE COMMENTS:** We basically agree with the comments provided, all oaks and or groups\patches of oaks & other hardwoods will be retained. We may leave a few loblolly seed trees near the back of the stand, but this area will likely regenerate quit well with the existing seed source. Due to the age and size of the pines we would not leave any trees near the county road due to the risk of wind throw.

2) **HERITAGE COMMENTS:** Milburn Landing Tract 16, Stand 10– 35.0 acre

proposed clear-cut: This stand supports large loblolly pines and a good diversity of hardwood species. The AWP calls for a regeneration harvest. We would recommend a seed-tree harvest retaining pond pine or a variable retention harvest in place of the regeneration harvest. As many oaks as possible should be retained. Given the size and diversity of the oaks in this stand good steps toward a diverse stand can be taken and a stand similar to this can be returned after harvest. Retention of the hardwoods will aid DFS conservation. Occasional pond pine is found in this stand, but with infrequency. Planting local genotype pond pine is encouraged in this stand. **FOREST SERVICE COMMENTS:** We agree with the comments provided, as we are currently doing with our timber sales all oaks and groups of oaks\hardwood patches will be retained. In this site we would be willing to leave seed trees with a combination of Pond\Short-leaf if present and or Lob as a means to ensure adequate regeneration.

3) **HERITAGE COMMENTS:** Nazareth Church Tract 6, Stand 8 – 22.0 acre proposed clear-cut: This stand is dominated by pond pine, not loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stand is known to be naturally regenerating. **FOREST SERVICE COMMENTS:** After reviewing this site I offer the following proposal for this site. This is a mixed stand of Pond and Loblolly pine probably as indicated heavier on the Pond Pine side. The recommendation for this site is to carry out a winter burn prior to this site being cruised for a timber sale. The type of harvest would be strictly a Pond Pine seed tree harvest, where 8 to 15 sawtimber trees per acre would be retained. The range on number of seed trees per acre is dependent on the diameter of the seed tree. Should there not be sufficient seed trees above 14 inches DBH then a larger number of smaller sawtimber size Pond Pines would be retained. This site and one other that I will describe below are in perfectly suited locations for carrying out a winter burns. These burns are needed if we hope to get pond pine regeneration, per the studies hot fires are needed to open the pond pine cones and allow for seed fall. I have attached information on this species via the USFS Silvics manual see the highlighted sections for specific info on burning. Also next to the sale area is a sand ridge that shows as HCVF on the map this site could also be burned over during the winter burn if it is deemed beneficial for management of the site.

4) **HERITAGE COMMENTS:** Nazareth Tract 7, Stand 2 – 32.0 acre proposed clear-cut: This stand is dominated by pond pine and loblolly pine, not solely loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stands are known to be naturally regenerating. **FOREST SERVICE COMMENTS:** The recommendation for this site would be similar to the one provided above for Tract 6, stand 8. The main difference in this stand is that the percentage of Loblolly in this stand is much higher there seems to be

pockets of Pond Pine followed by areas of Loblolly and mixed Lob\Pond pine. I would also mention that as with the previous sites any large oaks or pockets of oak would be retained for retention. This stand happens to have a large mixed hardwood pine retention area. Concerning the burning of these stands, should it be deemed necessary following the seed tree harvest a follow-up burn would be conducted to open the site up for pine regeneration. Again to make it clear the sale procedures on these stands would not commence until the winter burn is carried out.

5) **HERITAGE COMMENTS:** Nazareth Tract 10, Stand 20 – 19.0 acre proposed clear-cut: This stand is dominated by pond pine, not loblolly as the stand description states. This forest type is becoming increasingly rare due to harvesting and forest conversion to loblolly pine. **We recommend that this stand be removed from the AWP**. Currently, no example of a recently cutover pond pine stand is known to be naturally regenerating. **FOREST SERVICE COMMENTS:** After reviewing this site we are in agreement that it should be removed from the annual work plan. With the two previous sites we can take the opportunity to demonstrate that with the active use of fire prior to the harvest an acceptable Pond Pine stand can be regenerated.