EASTERN REGION

STATE FOREST LANDS

ANNUAL WORK PLAN

FISCAL YEAR 2017

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Approved:	(Environmental Specialist)	5.09.16 Date

Prepared By:

Michael G. Schofield, MFS – Chesapeake Forest Manager

Alexander Clark, MFS – GIS Forester

Contributors:

Skip Jones, Parker Forestry Services Inc.

DNR Interdisciplinary Team

Citizens Advisory Committee

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A. FOREST OVERVIEW

CHESAPEAKE FOREST AND POCOMOKE STATE FOREST

The Chesapeake Forest which is owned by the State of Maryland and managed by the Maryland Forest Service through the Department of Natural Resources originally consisted of 58,000 acres of forest land. These lands were part of a 1999 divestment by the Chesapeake Forest Products Corporation. At that time, a partnership between the State of Maryland, The Conservation Fund, and Hancock Timber Resources Group moved to purchase the forests. The original 1999 plan was prepared by a 10-person technical team assembled by The Sampson Group, Inc. Oversight and decision making for the technical team was provided by a Steering Committee composed of representatives from Maryland Department of Natural Resources, The Conservation Fund, the Chesapeake Bay Foundation, and the local forest industry.

The Chesapeake Forest currently consists of 67,731 acres divided into 185 Management Units distributed across six counties. Chesapeake Forest also includes the Seth Demonstration Forest in Talbot County, Wicomico Demonstration Forest in Wicomico County, and Fred W. Besley Demonstration Forest in Dorchester County. In spite of this scattered character, the forests include some of the last large segments of unbroken forest in a region that is largely agricultural in nature. Chesapeake Forest Lands include more than 6,000 acres of wetlands or swamps and comprise portions of 23 separate watersheds, many of which have been given a high priority for conservation action under the Maryland Clean Water Action Plan. They contain established populations of threatened and endangered species, including the Delmarva fox squirrel (*Sciurus niger cinereus*), bald eagle, and some 150 other species that have been identified as rare, threatened, or endangered in the region. Abundant populations of deer, turkey, and waterfowl create the basis for extensive hunting opportunities and other recreational activities on the land.

The 17,918-acre Pocomoke State Forest is almost entirely contained within Worcester County, except for 429 acres in Somerset County and 145 acres in Wicomico County. The Chesapeake Forest has 17,613 acres within Worcester County, and several tracts from both Chesapeake Forest and Pocomoke State Forest adjoin each other offering greater habitat and recreational management opportunities. In addition, since both forests contain similar forest types, many of the same management guidelines and principles are used. There are differences between the two forests, however. Pocomoke State Forest contains many older tracts of forestland still in their natural state, nearly 5,000 acres of cypress and hardwood forest that borders a state scenic river, and areas of state designated Wildlands.

For additional information about Chesapeake Forest and Pocomoke State Forest please visit their respective web pages located at: http://www.dnr.state.md.us/forests/mdforests.asp.

HISTORIC FOREST CONDITIONS AND THE ROLE OF FIRE

The average pre-European-settlement fire frequency was on the order of 7-12 years for forests of the Eastern Shore of Maryland, with higher frequencies of 4-6 years in the southeastern Maryland counties of Wicomico, Worcester, Somerset, and Dorchester (Frost, 1998). These frequencies are high compared to most areas of the Northeast. Since it is unlikely that lightning was a significant contributor to these fires, Native American populations must have been. A conclusion is that fire in the Northeast was predominantly a phenomenon associated with human activity (Pyne, 1982).

The forest that covered the Eastern Shore in Indian times was primarily a hardwood one, though increasingly mixed with pine to the southward (Rountree & Davidson, 1997). The large patches of pine-dominated woods today are largely second growth, the result of extensive clearing in historic times. In aboriginal times, the woods of the Eastern Shore were likely to be oak-hickory, oak-gum, or oak-pine types, all of which still exist in second-growth form.

Captain John Smith said in the early seventeenth century, "A man may gallop a horse amongst these woods any waie, but where the creekes or Rivers shall hinder". Father Andrew White wrote that the woods around St. Mary's were so free of underbrush that a "coach and fower horses" could be driven through them (Rountree & Davidson, 1997). The open conditions could be partly attributed to the closed canopies of these mature forests, which shaded out undergrowth, but it is also likely that periodic fire helped to maintain the park-like conditions.

It is reasonable to assume that Eastern Shore tribes also used fire to periodically burn the marshes that were important sources of mollusks, fish, furbearers, waterfowl, edible tubers, and reeds for housing. Fire would have been useful for herding game, enhancing visibility or access, or retarding invasion of woody growth. More often than not, these fires would have spread into adjacent woodlands and, if of sufficient intensity, created the open seedbed conditions conducive to establishment of loblolly pine. Even today the pattern of loblolly pine "islands" and "stringers" in and adjacent to marshes of the lower Eastern Shore is common.

If, as Rountree and Davidson suggest, oaks were the most prevalent species in pre-settlement times, then the possible role of fire in maintaining these forest types must also be considered. Frost stated, "Light, understory fires may have been the norm for millions of hectares of eastern hardwood forest..." (Frost, 1998). Oak species range from slightly tolerant to intolerant of shade, indicating that disturbance is desirable to promote regeneration and growth. Furthermore, acorn germination and initial seedling establishment are most successful where light understory burns have scarified the seedbed and reduced competition (Burns & Honkala, 1990). The extensive presence of oaks on the Shore was an indicator that low-intensity understory fires were common, either intentionally set by Indians to create "open woods" or drive game, or the incidental result of land-clearing.

Natural stands of loblolly pine (*Pinus taeda*) became much more widespread around the turn of the 20th Century, particularly in the counties south of the Choptank River, largely due to the influence of economic factors. First was the abandonment of agricultural fields as farmers moved to more lucrative jobs in the towns and cities. Loblolly pine is an opportunistic species, which found the recently abandoned fields prime sites for reproduction by natural seeding. The second factor was the rise of large-scale commercial lumbering. Steam locomotives, often used to haul logs from the woods, were notorious for throwing sparks along the tracks and starting fires. Both the clearing of the forests by large-scale logging and the subsequent fires resulted in large areas of open, scarified land suitable for pine regeneration. By the middle of the twentieth century, loblolly pine had become the predominant forest cover type in the lower counties of the Eastern Shore.

FOREST TYPES AND SIZE CLASSES

Young loblolly pine forests mostly established since the early 1980's are what characterize a high proportion of the Chesapeake Forest. Mixed pine and hardwood forests still occupy some of the lands, and many riparian areas and flood plains contain stands of mixed hardwoods. In general, the mixed pine-hardwood and hardwood stands are older, mature forests.

Mature mixed pine-hardwood, bottomland hardwood, and bald-cypress forests comprise the majority of the Pocomoke State Forest. In general, the mixed pine-hardwood, hardwood, and bald cypress stands are older, mature forests, while loblolly pine stands are more evenly distributed across all age classes.

Table 1 provides a habitat diversity matrix of both Eastern Region State Forests that provides a current baseline from which future changes in age structure or forest type diversity can be assessed for potential habitat or biodiversity effects.

Table 1. Forest Diversity Analysis

Acres of forest type and forest structure by structural groups, with percent of total area in each forest type/structure group combination.

Forest type	Structure stage							Total Area
	Open 0 - 5 yrs	Sapling 5 - 15 yrs	Growing 15 - 25 yrs	Maturing 25 - 35 yrs	Mature 35 - 50 yrs	Big Trees 50 - 75+ yrs	Uneven Aged	
Atlantic White Cedar	4	3	0	0	0	0	0	**7**
(Percent)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.01%***
Loblolly Pine	1,185	9,557	21,016	12,644	7,312	1,617	407	**53,737**
(Percent)	*1.40%*	*11.28%*	*24.81%*	*14.93%*	*8.63%*	*1.91%*	*0.48%*	***63.44%***
Shortleaf Pine	0	0	0	0	0	255	0	**255**
(Percent)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.30%***
Mixed Pine/ Hardwood	721	886	933	717	1,563	7,568	22	**12,410**
(Percent)	*0.85%*	*1.05%*	*1.10%*	*0.85%*	*1.85%*	*8.94%*	*0.03%*	***14.65%***
Mixed Hardwoods	439	296	237	101	200	9,188	12	**10,471**
(Percent)	*0.52%*	*0.35%*	*0.28%*	*0.12%*	*0.24%*	*10.85%*	*0.01%*	***12.36%***
Bottomland Hardwoods/ Bald Cypress	0	0	0	0	20	3,855	0	**3,875**
(Percent)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.02%*	*4.55%*	*0.00%*	***4.57%***
Marsh/Field/ Power lines	3,946	0	0	0	0	0	0	**3,946**
(Percent)	*4.66%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.66%***
Total	**6,295**	**10,741**	**22,186**	**13,462**	**9,095**	**22,483**	**441**	**85,533**
(Percent)	***7.43%***	***12.68%***	***26.19%***	***15.89%***	***10.74%***	***26.54%***	***0.52%***	***100.00%***

UNIQUE COMMUNITY TYPES

Xeric or inland sand dunes are found primarily in the lower Eastern Shore counties. They are located on very well drained sand ridges formed by winds blowing off receding glaciers. These sand ridges support a variety of rare and threatened insect and plant species. The primary species in this community are shortleaf pine (*Pinus echinata*), Virginia pine (*Pinus virginiana*), and various oak species (*Quercus spp.*), with an understory comprised of lowbush blueberry (*Vaccinium pallidum*) and an assortment of ericaceous plants. Xeric sand dunes have been identified and mapped either as an Ecologically Significant Area (ESA) or as a Globally Rare (G3) Community.

Pond pine (Pinus serotina) forests are typically found in swamps and other poorly drained areas. Pond pine can be found along with pitch and loblolly pine, and it can hybridize with those species. During periods of drought, these forests can be subject to intense fires. Pond pine needs fire to open the serotinous cones and release the seeds to facilitate natural regeneration.

Delmarva bays and associated life zones are isolated depressional wetlands that serve the needs of wetland breeding animals and support several species of rare plants. Delmarva bays can vary in their ecological quality,

primarily due to past management practices. The hydrology of many bays was altered for agriculture or to attempt to increase forest production. Therefore, many of these bays may require restoration to get the bay back to a more natural state. Delmarva bays and the associated life zone have their own ESA designations identified and mapped.

Riparian swamps

Atlantic white cedar (*Chamaecyparis thyoides*) swamps are nontidal forests that border on rivers or headwaters of streams.

Bald cypress (*Taxodium distichum*) swamps and forests can be tidal or nontidal. These forests are known for their pronounced microtopography of hollows and hummocks.

Vernal pools and seasonal wetlands are temporary wetlands present in late winter and spring that support amphibian reproduction. These can be found throughout the eastern shore region.

B. ANNUAL WORK PLAN SUMMARY

INTRODUCTION

This section summarizes the proposed activities that will occur on all public forest lands (84,762 acres) managed by the Maryland Forest Service within the Eastern Region during the 2017 fiscal year. These lands include the Chesapeake Forest, Pocomoke State Forest, Wicomico Demonstration Forest, Seth Demonstration Forest, and Fred W. Besley Demonstration Forest. The fiscal year runs from July 1, 2016 to June 30, 2017. The following proposed activities are the results of a multi-agency effort. The multi-agency approach has ensured that all aspects of these lands have been addressed within the development of this plan.

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

- **Forest Economy** - management activities with a purpose to maintain an economically sustainable forest and contribute to the local economy through providing forest-related employment and products.
- **Forest Conservation** - management activities with a purpose to protect significant or unique natural communities and elements of biological diversity, including Ecologically Significant Areas, High Conservation Value Forests and old growth Forests. Old growth forest management serves to restore and/or enhance old growth forest structure and function.
- **Water Quality** - management activities designed to protect or improve ecological functions in protecting or enhancing water quality.
- **Wildlife Habitat** - management activities with a purpose to maintain and enhance the ecological needs of the diversity of wildlife species and habitat types.
- **Recreation and Cultural Heritage** - management activities with a purpose to maintain and enhance areas that serve as visual, public camping, designated trails, and other high public use areas.

NETWORKING WITH DNR AND OTHER AGENCIES

MARYLAND DNR AGENCIES:

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

OTHER AGENCIES:

- DNR Contract Manager – Assists the Forest Manager in the designs and implementation of management activities on the donated portion of the forest. Also participates on the ID Team.
- Third party forest certification via annual audits
  - Sustainable Forestry Initiative (SFI)
  - Forest Stewardship Council (FSC)
- The Chesapeake Bay Foundation – Identifies sites for future water quality improvement projects and assists in the implementation by providing volunteers for reforestation.
- National Wild Turkey Federation – Establishes and maintains handicap-hunting opportunities within the forest and provides funding for habitat protection and restoration.
- US Fish & Wildlife Service – Assists in prescribed burns for Delmarva Fox Squirrel (DFS) habitat. Also assists in maintaining open forest road conditions as fire breaks.
- Maryland Forest Association - Master Loggers Program provides training in Advanced Best Management Practices for Forest Product Operators (i.e. Foresters & Loggers) workshops on the forest.
- Network with Universities and Colleges
  - Maryland Environmental Lab, Horn Point – Conducts water quality monitoring on a first order stream not influenced by agriculture. These samples will serve as a local base line for other samples taken on other Delmarva streams.
  - Allegany College – Conduct annual field tour for forestry school student's showcasing Sustainable Forest Management practices on the forest under dual third party certification.

C. MAINTENANCE PROJECTS

Forest roads will undergo general maintenance to maintain access for forest management activities (i.e. logging, prescribed burning, and wildfire control). Interior roads within each complex will be brush hogged where possible by the MFS & the WHS. Many of the roads have grown shut and require special heavy equipment to remove the larger trees. Brushing of these roads will improve access for the public and help maintain firebreaks for communities at risk from wildfire. Recreational trails will be mowed and cleared to meet the requirements of the specific user group(s).

Forest boundary lines will be maintained using the DNR yellow band markings. Signs will be placed along the boundary lines designating the type of public access to the property. New acquisitions will be converted from their previous ownership markings to the DNR yellow band markings.

Illegal trash dumps will continue to be removed off the forest as they are discovered. The average amount of trash removed from the forest each year has been 36 tons. In our efforts to control and eradicate this issue, we will continue to coordinate with Natural Resources Police (NRP), local sheriff departments, the State Highway Administration, and County Roads departments.

D. RECREATION PROJECTS

- Host the annual Chesapeake Forest lottery for vacant tracts designated for hunt club access only. Vacant tracts are those that existing clubs opted not to continue to lease or land that has recently become available due to acquisition or right-of-ways being opened.
- Continue to explore additional Resource Based Recreational (RBR) opportunities on the forest. This may include hunting, horseback riding; water trails, hiking trails, bird watching opportunities, geocaching, etc.

- Continue work on active Recreational Trails Grants
  - Chesapeake Forest – D03 – Little Blackwater Soft Launch
  - Chesapeake Forest – D26 – Lewis/Island Pond Soft Launch
  - Pocomoke State Forest – P06 – Hudson/Tarr Handicapped Hunting Trail
  - Chesapeake Forest – W02 – Aughty Naughty Handicapped Hunting Trail
- Perform general maintenance on the existing trail system

Submit and execute Recreational Trails Grants. Appendix A contains copies of the following grant applications for Calendar Year 2015-16:

- E. Mace Smith trail marking
- Greenhill trail marking
- Furnace Town Loops

E. SPECIAL PROJECTS

- Maintain dual forest certification from the Forest Stewardship Council (FSC) and the Sustainable Forest Initiative (SFI).
- Conduct information and educational opportunities on the forest.
- Update and maintain forest information in a GIS database, which will result in a new updated forest wide field map.
- Continue the effort to inventory and protect historic sites (i.e. cemeteries, old home sites, Native American Indian sites) using GPS and GIS technology.
- Collect native genotype pond pine (*Pinus serotina*) and short-leaf pine (*Pinus echinata*) on the forest in an effort to aid future management objectives on the Pocomoke and Chesapeake Forests.
- Provide assistance to the State Tree Nursery with maintenance of Seed Orchards on the Pocomoke State Forest.

F. WATERSHED IMPROVEMENT PROJECTS

None proposed for this work plan.

G. SPECIAL WILDLIFE HABITAT PROJECTS

[CF-17-P-1]

<u>Early-successional habitat management at Foster Tract</u>

The existing areas along the main access road and surrounding the pond are currently comprised of predominately herbaceous vegetation. Hardwood and pine trees were planted a few years ago in some areas, but survival appears to be exceptionally low, likely due to the dry, sandy soils. Other trees species have volunteered, mainly loblolly and sweetgum, to varying extents throughout the site. These volunteer species are generally not favored by wildlife and are quite common in the surrounding forests. Therefore the WHS feels that managing these areas as early-successional habitat, in the form of herbaceous openings or pine/oak "savannas", would provide much greater benefit to wildlife than allowing them to revert to loblolly/sweetgum forests over time. This vegetation

community is not common in MD due to fire exclusion and other factors, but it provides excellent habitat for both game and non-game species.

We recommend using a combination of mechanical methods and, ideally, prescribed fire to control the woody species encroachment. Initially, many of the young loblollies and sweetgums could be removed with a skid-steer with forestry mulcher and tree shear attachments. Any desirable trees, such as oaks, hickories, or other mast-producing species, would be preserved. We estimate that this initial work could be completed in several days with the WHS's machine and labor.

Future maintenance of the early-successional habitat in these areas could be accomplished via periodic mowing or prescribed fire with WHS's equipment and labor. Prescribed fire would be preferred and provide the greatest benefit. Although the site has not been surveyed intensively, it is likely that some fire-dependent plants either currently occur or would be released on these sandy soils. Most areas have an existing trail that could easily be converted into a firebreak. However mowing every 2-3 years could also be used to control woody species if fire wasn't feasible.

H. ECOSYSTEM RESORATION PROJECTS

None proposed for this work plan.

I. MONITORING PROJECTS

The Continuous Forest Inventory (CFI) for Chesapeake Forest and Pocomoke State Forest was started in the summer of (calendar year) 2014. The CFI concluded in the winter of 2016. A summary of the results is forthcoming.

J. REVIEW PROCESS

INTERDISCIPLINARY TEAM COMMENTS

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Mark J. Belton, Secretary
Mark L. Hoffman, Acting Deputy Secretary

October 14, 2015
FY2017 Annual Work Plan ID Team Review Sign-in (Eastern Region)

	Name	Organization	Contact Info
1	Wesley Knapp	MD-DNR LHS	(410)984-6928
2	Jack Perdue	MD DNR FS	jack.perdue@maryland.gov
3	Patrick Graves	MD DNR RAS	patrick.graves@maryland.gov
4	Steve Carr	MD DNR Tails LAPs	steve.carr@maryland.gov
5	Skip Jones	Parker Forestry	skipjones@parkerforestryservices.com
6	Anne Hairston-Strang	MD DNR Forest Service	AnneHairston-Strang@maryland.gov
7	K.P. Powers	MD DNR Forest Service	Kip.powers@maryland.gov
8	Don VomHassent	MD DNR-Forest Service	don.b.vanhassent@maryland.gov
9	Kenneth Jolly	MD DNR FS	kenneth.jolly@maryland.gov
10	Mike Schofield	MD DNR FS	Mike.Schofield@Maryland.gov
11	Alexander Clark	MD DNR FS	alexander.clark@maryland.gov
12			
13			

Chesapeake Forest and Pocomoke State Forest • 6572 Snow Hill Road • Snow Hill, Maryland 21863
410-632-3732 • www.dnr.maryland.gov • TTY users call via Maryland Relay

Wesley Knapp

Wildlife & Heritage Service

CF and PSF 2017 AWP Comments

I have few comments pertaining to the 2017 FY AWP for Chesapeake Forest and Pocomoke State Forest. The proposals made within the Work Plan for CF and PSF are in accordance with the management outlines agreed upon between the Forest Service and Wildlife and Heritage Service.

Specific comments for individual tracts/proposals are as follows:

P-17-S-3 – Tract 21, Stand 11 – This tract is proposed for a final harvest. It is unclear if this tract is located with the Old Growth Management Zone designated by the Forest Service. This tract has a number of sizeable northern red oak (Quercus rubra) within it. Retention of these trees would be desirable.

CF17-S-28-Stand 108 – This stand is dominated by mature loblolly pine, but there are areas with high densities of pond pine. I recommend that select areas where pond pine is dominate be retained. Short-leaf pine is scarce in this stand and should be retained whenever possible.

Trail Grant Proposals: Overall, I am in favor of the proposed trails proposed in the AWP but I do have multiple concerns. The largest concern I have is that horseback riders are using these trails increasingly. Horseback riding isn't necessarily an issue but riding through ESAs can be. I have documented the spread of Korean lespedeza (Lespedeza cuneata) for the first time along the trail in the Furnace Town Natural Area and ESA. This is a major trail where horseback riding is encouraged. If we are going to create a "multi-use" trail network that will not limit horseback riding we should add funds to combat the spread of invasive species on these trails. I also recommend that monies be requested to control invasive species and for trail maintenance (i.e. manure clear-up).

Thank you for the opportunity to review and comment,

Wesley M. Knapp

Eastern Region Heritage Ecologist/Botanist

Pocomoke/Chesapeake Forest 2017 Work Plan Comments

1 message

Brett Coakley -DNR- Wed, Sep 16, 2015 at 8:19 AM

Mike et al-

I have reviewed the proposed 2017 Workplan for Chesapeake and Pocomoke State Forests. It seems that the vast majority of the proposed work are thinning activities. I am aware that some thinning of buffered water features is beneficial to help diversify the species within the buffer. However, I ask that the use of heavy equipment be very limited in these areas. This will minimize the overall disturbance of material that could be transported off the site. Additionally, any trees or vegetation providing immediate shading of the waterway should be avoided altogether.

The one tract planned for "Final Harvest" should have no impacts to water quality or aquatic resources.

Respectfully,

Brett

--

Brett Coakley

Regional Manager

Inland Fisheries, Eastern Region

MD DNR

(o) 410-928-3643 x104

Chesapeake Forest Annual Work Plan Review 2016 - TRAILS Comments

1 message

Steve Carr -DNR- Mon, Oct 19, 2015 at 3:08 PM

ANNUAL WORK PLAN REVIEW
MDNR Inter-Disciplinary Team Trails Report
Chesapeake State Forest
October 14, 2015

1. The Forest Manager maintains all of the forest trails through a $30,000 Recreational Trails Program Grant. Three seasonal trail crew staff work ten months on a rotational basis so the forest has year-round coverage.
2. The forest trails are all multi-use trails.
3. Trail maintenance includes regular leaf blowing and the removal of woody debris, trail re-routes, and new single track construction.
4. The seasonal trail crew has been certified by the International Mountain Bike Association in sustainable trail design.
5. The 5 Trail Counters funded through the Recreational Trails Program have been deployed along strategic forest trails. The Forest Manager recently shared the yearly trail counts with the Trails Division in Annapolis for each counter in order to determine the amount of trail use.
6. The forest continues to work on active Recreation Trails Grants: Little Blackwater Soft Launch, Lewis/Island Pond Soft Launch, Hudson/Tarr Handicapped Hunting Trail, Aughty Naughty Handicapped Hunting Trail, E. Mace Smith trail marking, Greenhill Trail Marking, and Furnace Town loops.
7. The forest applied for two Recreational Trails Program grants in 2015: Greenhill Trail Enhancement Project ($30,000), and the Furnace Loop Trails Project ($30,000).
8. The trails are well signed at the trailheads and along the trails. Carsonite milepost markers were installed at regular intervals.
9. The Forest utilizes innovative smart phone technology through the use of QR codes on the trailhead signs so that trail users can access GEOPDF maps without the need for internet access. The GEOPDF maps have also been used during emergencies to determine precise locations on the trails.
10. Equestrian – There is a lot of seasonal equestrian (spring & fall) trail use on the forest but the Forest Manager has met with trail riders periodically and they have a good working relationship with one another. There is a perceived need for providing equestrian camping. There is also a need for additional equestrian parking along the Algonquin Trail.
11. Off Road Vehicles (ORV) – There are no designated ORV trails on the

forest now that all of the forest trails were closed several years ago, and illegal ORV use remains a periodic problem, especially along the utility corridors.

12. Mountain Bikes – There is seasonal (spring & fall) mountain bike use on the forest but the Forest Manager has met with trail riders periodically and they have a good working relationship with one another. Some rogue trails have been closed. We seem to be meeting the riders' needs.
13. Hiking – The Forest is meeting the current needs of hikers and the Algonquin Trail has had over 900 trail users in 2015.
14. Handicap Hunting Trails – The Forest provides several ADA compatible hunting trails.
15. The Blades property was recently acquired under Program Open Space. This parcel would lend itself to group camping and has potential access to forest and park trails.
16. The Corker Creek Trail is stalled due to Heritage concerns regarding the installation of a pedestrian bridge across the creek.
17. The Milburn Creek re-route trail is an outstanding example of sustainable single track and bridge construction.
18. The GIS trails data bank in Annapolis does not have the GIS data files for the forest.

Recommendations

1. Deploy trail counters along trails leading to recreational amenities, like campgrounds or water bodies, and adjacent to forest roads in need of critical maintenance, in order to show the connection between the need to fix badly eroded roads in order for the public to get to recreational destinations on the forest.
2. Target high-use illegal ORV use and then work with the Natural Resource Police to Enforce and prosecute illegal ORV use.
3. Try and create a *Friends of Chesapeake Forest Mountain Biking* trail group (perhaps out of the local college) to help build and maintain mountain bike trails on the forest.
4. Continue to apply for the Recreational Trails Grant to fund seasonal trail maintenance crew.
5. Explore the creation of a group camping area on the newly-acquired Blade Property. Parks would manage the reservation and forest the management of the facility.
6. Apply for a grant through the Maryland Department of Business & Economic Development (Tourism) to hire the local college to perform an economic analysis of recreational use on all of the western forests.
   - George Eberling has sent the Trails Division the draft recreation report prepared by Natalie Buta at Frostburg College.
   - Explore the possibility of having Salisbury State College or UMES do the analysis for the Chesapeake Forests.

7. Continue to promote the Algonquin, Milburn Landing, and other forest trails.
8. Revisit the Corker Creek Bridge and trail project that appeared in the 2015 Annual Work Plan.
9. Explore the potential for establishing an equestrian camping area at one of the nearby state parks.
10. Explore the creation of additional equestrian parking along the Algonquin Trail.
11. The forest needs to send their GIS data files to Rob Feldt in Annapolis so that he can get that information added to the DNR Trail Atlas.

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Cheers!

STEVE CARR
Land Trails Planner
Department of Natural Resources
Tawes State Office Building
580 Taylor Avenue, E-4
Annapolis, MD 21401

Chesapeake Forest / Pocomoke State Forest

DNR-ID Team

FY-2017 Annual Work Plan Review

October 14, 2015

Attendance: Wes Knapp (WHS), Steve Carr (LAP), Kip Power (MFS), Don VanHassent (MFS), Anne Hairston-Strang (MFS), Skip Jones (Parker Forestry), Patrick Graves (RAS), Mike Schofield (CF/PSF), Alex Clark (CF/PSF), Kenneth Jolly (MFS), Jack Perdue (MFS)

State Forest Manager Overview

The Delmarva Fox Squirrel will be delisted from the Endangered Species list. This will require more set-aside lands particularly in Dorchester County but will allow more flexibility in moving individual squirrels and thus continuing to expand their presence.

Foster Tract (Pocomoke State Forest)

Recreation Trail Grants have been an excellent source for funding trail projects and maintenance. Trail counters have been installed on some trails to gauge their use.

Horse Trail Access

Horse trail access and road crossing. Equestrian camping is not available in the area. Riding here is seasonal to the Fall and Spring.

Milburn Landing Trail and Bridge

This site was visited to display recent trail and bridge work.

Harvest Site

The ID Team did a site visit of a recent thinning on the Milburn Landing - Tract 17 on 49.4 acres.

Bradley / Blades Acquisition

This is a new 185-acre acquisition with a pond. It has some cleanup issues but should be a good candidate for recreation opportunities.

The ID Team did not find it necessary to visit the other sites proposed in this annual work plan.

CITIZEN'S ADVISORY COMMITTEE COMMENTS

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Mark Belton, Secretary
Joanne Throwe, Deputy Secretary

ANNUAL WORK PLAN MEETING ATTENDEES
Friday, December 18, 2015

NAME	ORGANIZATION	CONTACT INFORMATION
David Ray	TNC	850 241 6837 d_ray@tnc.org
Larry Beauchamp	Landowner - Hunter	443-614-3879 llbeauchamp@hotmail.com
Alexander Clark	MD DNR Forest Service	alexander.clark@maryland.gov
William Giese	LANDOWNER / RETIRED FWS	billbethgiese@gmail.com
Mary Pines		Marylpines@hughes.net (410) 726-8300
Kip Powers	DNR - Forest Service	kyp.powers@maryland.gov
Mike Schofield	DNR - Forest Serv.	Mike.Schofield@Maryland.gov

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

22 December 2015

Mike Schofield
Forest Manager
MD DNR Forest Service

Dear Mike:

These are my comments on the FY 2015 Annual Work Plan for the Eastern Region State Forest Lands. I read through the document and benefited from the discussion of proposed activities that took place at the meeting held at your office. Because you made notes of the few 'typo's I found when reading the draft workplan, I won't recount those here.

As always, thank you for the opportunity to provide this feedback as the ecological representative on the CAC.

General Comments-

The format and content of this document continues to improve over time, with more useful summaries of past and present conditions and activities providing a fuller picture of the status of the forest. I believe these changes are the result of your soliciting and responding to feedback from various sources, and it's encouraging to see the system functioning as it should in that regard.

These meetings are generally well attended by representatives from diverse user groups, and I appreciate having this opportunity to interact with and learn from the other committee members. The discussions around hunting and recreational uses are always interesting, and help to inform management decisions on our lands as well.

Proposed Silvicultural Activities-

I did not find any of the timber harvests proposed for FY-17 to be controversial so have no specific comments in that regard. More generally, and this was mentioned at the meeting, I think it would be useful to add a 'Purpose' category to the 'Silvicultural Prescriptions and Stand Data' items, that would identify the primary reason(s) for undertaking the activity, e.g. economic, wildlife habitat, water quality etc, as called out in the 'Land Management Guidelines' on p. 9. The only other comment/question I have in this area is in reference to the proposed final harvest of P-17-S-3 (p. 23) which is described as a pine-hardwood stand and calls for retention of all mast producing trees- my question here is why this is not being described as a VRH, or some other variant of retention harvest?

Special Projects-

While not discussed at our meeting, I support your recent decision to maintain the early successional/open habitat on the Foster Tract in that condition in perpetuity. We have made similar decisions on our property, and feel it makes a lot of sense in terms of maintaining some amount a habitat type that is increasingly recognized as being in deficit, absent more widespread regeneration cutting.

Let me know if you have any questions, and I look forward to participating in the annual audit.

Sincerely,

David Ray
The Nature Conservancy
116 S Saratoga St
Salisbury, MD 21804
850.241.6837
d_ray@tnc.org

PUBLIC COMMENTS

Mr. Predue,

I would like to submit a quick comment on the future management plans of Maryland's forest. I would like to see a focus on promoting more early growth forests. I am an avid member of the Ruff Grouse Society and would love to have more habitat in Maryland that would support grouse, songbirds, whitetail and a variety of other wildlife that need young forests. I hope this can become one of your major priorities.

Thank you for the work that you do for all of us.

Lloyd I.

Good Afternoon,

My comments are short. We need more early successional forest within the state forest system. It seems that most of the attention is focused on larger game (deer and turkey) with minimal attention to upland animals.

Thanks.

Ryan S.

Mr. Perdue,

Generally I believe the MD state forests are pretty well managed. However, I am a grouse and woodcock hunter and I would very much like to see more management for early successional forest. More clear cutting and heavy select cutting. There is still way too much mature forest and not enough diversity on the state forests. Wildlife will thrive with a patchwork of different aged forests.

Thanks so much for the opportunity to comment.

Dave H.
Ruffed Grouse Society
American Woodcock Society
Regional Director, Mid Atlantic Area

Dear Mr. Perdue,

I wanted to take a moment to send you a brief message concerning the current State Forest Annual Work Plans posted on the Department Web site. Generally I think Maryland is doing a good job with our state forests in creating early successional forest. However, we definitely need more. The work plans reflect a well thought out program and I recognize the considerable amount of work and thought that has gone into their preparation.

I would urge you to create more young forests with buffer strips and to continue the active management of these forests. I realize there are those out there that think the State forests should not be disturbed and proper forest management tells us that is not what is good for our forests.

Sincerely,
Bill

Jack,

The forest management plan seems sound but what about opening more outdoor recreation activities for vehicular traffic? The ORV trail that was in Poplar Lick was a very fun trail system with a diverse ecosystem that you were able to enjoy and camp at. Now the system is closed to ORV traffic. Perhaps this was closed for the management of brook trout and to reduce sedimentation and erosion but I think we need more vehicular trails. Not everyone has the luxury of a snowmobile but we all have a truck or jeep that want to get out on the trails also. Perhaps Savage River State Forest isn't the best location for this but the state should look into this opportunity to expand outdoor activities offered. To me it seems all the trails systems in the state are for snowmobiles and not for 4 wheelers or trucks/jeeps, so the state currently only provides recreational activities in the form of trail riding to a very limited group of outdoor enthusiasts. Maybe Potomac-Garrett State Forest would be the best fit for vehicular traffic in the form of driving trails to protect Savage River and the vast wilderness area the state is establishing.

Thanks,

Jim

Greetings Jack

After looking through the state plans , I did not see any thing regarding food plots for local or migrating fowl and upland birds.

I have hunted and hike a great number of the state parks and there is a need to sow in feed plots to carrier over birds during the winter months.

my suggestion something in the order of mix sorghums, clover, rape along with sun flower, along with rag weed and winter wheat plants.

I believe that this would be a great start in taking care of multiple species like rough grouse, Pheasant , Deer ,rabbits and bees just to name a few primary prey and numerous secondary species what I call like song bird and black bears

This would give food during the winter months and cover from prey during the spring to raise there young.

It great to see that there is plans too thin out some of the forest trees to make more room for young trees servile , but if we are going to reforest

I would like to see more of a diversity of tree like Aspen these tree provide a good foods source for a number of wild life during the winter months.

As you can see my concern is about feeding wildlife during the winter month and providing them a day care area to raise there young at the same time giving hiker and hunter the opportunity to hunt and observe wild life first hand.

I was at two park this past week before the flood set in, one was Patapsco state park the fox hall farm area which is mostly for bow hunting deer and the fields are over grown and very bad shape with thorny mutii flower rose consuming a good part of it. not a good food source at all and the other was spice creek which is in the same poor conditions.

Hiking ,camping and Hunting/Fishing is a Trillion dollar industries and would bring money back to the state, working with local farmers and using good land conservation practices will pay off now and for future generation .

Pheasant Forever, quail Forever along with The Rough Grouse Society are great organization to look to for advice and to bring them together with local farmers to bring wild life into an area like wood cook to migrate, Pheasants and so forth

Have a great weekend

Ed G.

MARYLAND ORNITHOLOGICAL SOCIETY, INC.

www.mdbirds.org
March 22, 2016.

Jack Perdue
Forest Stewardship
Forestry Service
580 Taylor Ave., E-1
Annapolis MD 21401
jack.perdue@maryland.gov

Dear Mr. Perdue:

Regarding the Maryland Forest Annual Work Plans for fiscal 2017, the Maryland Ornithological Society (MOS) appreciates that the work plans contemplate no new offroad vehicle routes in the state forests. The closure of the severely deteriorated ORV trails in several state forests was an important step toward restoration of damaged wildlife habitat. No new ORV routes should be considered in any state forest. We urge DNR to direct any demand for ORV routes toward private lands, if any can be identified where the activity would comply with air and water pollution laws and regulations and would be consistent with local ordinances.

MOS is favorable toward the maintenance of existing ORV trails in Savage River and Potomac-Garrett as provided in the draft work plans. Such trails should be managed to hold erosion and other impacts to the absolute minimum. The damage from unmaintained or inadequately maintained trails would have an impact against wildlife habitat.

In Green Ridge SF we support the work plan items to enhance early succession wildlife habitat in the forest and enhance cerulean warbler habitat within the Pine Lick ESA. We also support the monitoring projects for American Woodcock population in Kirk Orchard area and Whip-poor-will populations with annual spring nightjar survey.

In Savage River SF we support the ongoing surveys for the Golden-winged Warbler.

Sincerely,

Kurt R. Schwarz
Conservation Chair
Maryland Ornithological Society
www.mdbirds.org
9045 Dunloggin Ct.
Ellicott City, MD 21042
410-461-1643
krschwa1@verizon.net

K. SILVICULTURAL PROJECTS

SILVICULTURAL ACTIVITY OVERVIEW

Tables 2 and 3 summarize the proposed silvicultural activities for the 2017 annual work plan on approximately 1246 acres (1.8%) of the Chesapeake Forest and 101 acres (0.5%) of Pocomoke State Forest, for a total of 1347 acres (1.6%) on both forests.

Table 2. 2017 Chesapeake Forest Silvicultural Activity Overview. (CF-17-S-1 – CF-17-S-37)

Activity	Acres
Final Harvest	53.5
Second Harvest	47.7
Pre Commercial Thinning	57.1
First Thinning	1048.7
Second Thinning	39.2
Total	**1246.2**

Table 3. 2017 Pocomoke State Forest Silvicultural Activity Overview. (P-17-S-1 – P-17-S-3)

Activity	Acres
Final Harvest	16.4
First Thinning	60.0
Second Thinning	25.0
Total	**101.4**

DEFINITIONS OF SILVICULTURAL ACTIVITIES

- **Reforestation** – Reforestation reestablishes forest cover either naturally or artificially (hand planting), and may be accompanied by some kind of site preparation during the same fiscal year. The nature of the site preparation will be determined by field examination. It is occasionally followed, in the same fiscal year, with grass control in the form of chemicals (hand-applied by ground crews). Site conditions will dictate application rates, etc., in each case.
- **Site Preparation/Regeneration** – While natural regeneration is the preferred method of reforesting harvested areas, alternative plans should be in place in case natural regeneration is unsuccessful. Alternatives include prescribed burning, herbicide, light mechanical disturbance, or a combination thereof followed by planting of native pines and/or hardwoods as the management zone dictates.
- **Pre-Commercial Thinning** – Pre-commercial thinning is the removal of trees to reduce overcrowded conditions within a stand. This type of thinning concentrates growth on more desirable trees while improving the health of the stand. This treatment is usually done on stands 6 to10 years of age. The number of trees retained will depend on growth, tree species present, and site productivity. This activity is conducted with hand held power tools and not heavy equipment, thereby reducing adverse impact to the soil.
- **First Commercial Thinning** – Usually performed on plantations 20-25 years old. The objective is to facilitate forest health and promote development of larger trees over a shorter period of time. This is accomplished in plantations by removing every 5th row of trees and selectively thinning (poor form & unhealthy trees) between rows. In naturally regenerated stands, thinning corridors will be established every 50 feet and the stand will be selectively thinned along both sides of the corridor. Approximately 30-

40% of the total stand volume will be removed in this process. Stocking levels are determined using a loblolly pine stocking chart based on the basal area, DBH, and trees per acre of the stand (USDA Forest Service, 1986). Crown ratio and site index are other factors that are used to decide whether to thin or not.

- **Second Commercial Thinning** – Usually performed on stands 35-40 years old. The objective is to lengthen the rotation age of the stand and produce larger, healthier trees. In some cases, this technique is used to improve habitat for the Delmarva Fox Squirrel (DFS) and Forest Interior Dwelling Species (FIDS). Approximately 25-30% of the total stand volume will be removed in this process.
- **Selection Harvest** – This includes the removal of single trees and groups of trees within a given stand. This method will be used to distribute age classes and to adjust species composition within a given stand (i.e. riparian buffers, ESA, DFS & FID areas).
- **Shelterwood Harvest** – The shelterwood method involves the gradual removal of the entire stand in a series of partial cuttings that extend over a fraction of the rotation (Smith, 1986). The number of trees retained during the first stage of the harvest depends on the average tree size (diameter at breast height) on the site. As with seed tree regeneration, the shelterwood method works best when overstory trees are more than 30 years old and in their prime period of seed production potential (Schulz, 1997).
- **Seed Tree Harvest** – This type of harvest is designed to regenerate pine on the site by leaving 12 to 14 healthy dominant trees per acre as a seed source. The seed trees are typically left on the site for another rotation, but can be removed once sufficient pine regeneration is achieved. The seed tree method regenerates loblolly pine effectively and inexpensively in the Coastal Plain, where seed crops are consistently heavy (Schulz, 1997).
- **Variable Retention Harvest** – This harvest type focuses on the removal of approximately 80 percent of a given stand in one cutting, while retaining approximately 20 percent as wildlife corridors/islands, visual buffers, and/or legacy trees. The preferred method of regeneration is by natural seeding from adjacent stands, or from trees cut in the clearing operation. Coarse woody debris (slash/tree tops) is left evenly across the site to decompose. A Variable Retention Harvest (VRH) is prescribed to help regulate the forest growth over the entire forest, ensuring a healthy and vigorous forest condition. Harvesting of young loblolly pine stands is done to help balance the age class distribution across the forest. Currently, about 20% of the two forests is 19 years of age or younger. VRH are also used to regenerate mixed natural stands within ESA's, DFS & Core FIDS areas. If adequate natural regeneration is not obtained within 3 years of the harvest, hand planting of the site is typically required (not required for certain restoration projects, such as bay restoration).
- **Aerial Release Spraying** – An aerial spray of herbicide is used to reduce undesirable hardwood species (i.e. sweet gum & red maple) within the stand. In many cases, a reduced rate (well below the manufactures recommendation) is used. A reduced rate has been used on the CF successfully to kill the undesirable species while maintaining the desirable ones (yellow poplar & oaks). All forms of aerial spraying are based on precision GPS mapping and accompanied by on-board flight GPS controls. GPS-generated maps shows each pass of the aircraft and are provided by the contractor to demonstrate precision application. Aerial applications are not allowed in specially designated wetland areas or within 150 feet of riparian areas on the forest.
- **Prescribed Fire** – Prescribed fires are set deliberately by MFS personnel, under proper weather conditions, to achieve a specific management objective. Prescribed fires are used for enhancing wildlife habitat, encouraging fire-dependent plant species, reducing fuel loads that feed wildfires, and prepare sites for planting.
- **Riparian Buffer Zone Establishment** – Riparian buffer zones are vegetated areas adjacent to or influenced by a perennial or intermittent bodies of water. These buffers are established and managed to protect

aquatic, wetland, shoreline, and/or terrestrial environments and ultimately the Chesapeake Bay. Boundaries of riparian buffer zones will be marked, surveyed (GPS) and mapped (GIS). Selective harvesting and/or thinnings may occur in these areas to encourage a mixed hardwood-pine composition.

SILVICULTURAL PRESCRIPTIONS & STAND DATA

CAROLINE COUNTY

[CF-17-S-1]

Proposal Name: C03 – Messenger Branch – Stand 4
Harvest Area: 28.5 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1992, sprayed and controlled for grass in 1995
Habitats and Species of Management Concern: Core FIDS, General Management; adjacent to bobwhite quail habitat project
Water Resources: None
Soil Resources: CdA, FaA, and GaB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

DORCHESTER COUNTY

[CF-17-S-2]

Proposal Name: D05 – Thomas – Stand 1
Harvest Area: 24.2 acres
Forest Community Types and Development: Overstocked loblolly pine stand naturally regenerated in 1978
Habitats and Species of Management Concern: Stream Buffer and DFS Core
Water Resources: Field ditches that drain into Church Creek
Soil Resources: EmA and OtA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-3]

Proposal Name: D12 – Marshyhope – Stand 2
Harvest Area: 39.2 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1963, first thinned in 1995
Habitats and Species of Management Concern: ESA Zone 1 and ESA Zone 3 Sawtimber
Water Resources: Marshyhope Creek
Soil Resources: EwC, GaB, HvA, RsA, RsB, and UzB
Historic Conditions: No known historic features
Sivilcultural Prescription: Second thinning, retain all hard mast species

[CF-17-S-4]

Proposal Name: D12 – Marshyhope – Stand 17
Harvest Area: 53 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1992
Habitats and Species of Management Concern: ESA Zone 1, ESA Zone 2, ESA Zone 3 Sawtimber, and Stream Buffer
Water Resources: Puckum Branch
Soil Resources: FaA, FmA, HvA, IgA, KgB, PmA, PnA, and RsA
Historic Conditions: No known historic features

Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-5]

Proposal Name: D12 – Marshyhope – Stand 24
Harvest Area: 29.3 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1995, sprayed and controlled for grass in 1996
Habitats and Species of Management Concern: ESA Zone 1 and ESA Zone 3 Sawtimber
Water Resources: Marshyhope Creek
Soil Resources: GaB, RsA, and RsB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-6]

Proposal Name: D12 – Marshyhope – Stand 25
Harvest Area: 56.6 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1993
Habitats and Species of Management Concern: ESA Zone 1, ESA Zone 3 Sawtimber, and Stream Buffer
Water Resources: Puckum Branch
Soil Resources: GaA, GaB, PnA, RsA, RsB, and Za
Historic Conditions: Home site located near access road
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-7]

Proposal Name: D12 – Marshyhope – Stand 30
Harvest Area: 30.2 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1994
Habitats and Species of Management Concern: ESA Zone 3 Sawtimber and Stream Buffer
Water Resources: Puckum Branch
Soil Resources: GaB, HvA, KgB, PnA, RsA, and RsB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-8]

Proposal Name: D12 – Marshyhope – Stand 49
Harvest Area: 23.1 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1994, sprayed and controlled for grass in 1996
Habitats and Species of Management Concern: ESA Zone 1, ESA Zone 3 Sawtimber, and Stream Buffer
Water Resources: Marshyhope Creek
Soil Resources: EwC, GaA, GaB, and RsB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-9]

Proposal Name: D13 – Rhodesdale – Stand 30
Harvest Area: 16.6 acres
Forest Community Types and Development: Overstocked loblolly pine naturally regenerated in 2011
Habitats and Species of Management Concern: DFS Core, ESA Zone 3 Pulpwood, and Stream Buffer

Water Resources: Marshyhope Creek
Soil Resources: HvA, KgB, PmA, and RsB
Historic Conditions: No known historic features
Sivilcultural Prescription: Pre-commercial thinning, retain all hard mast species

SOMERSET COUNTY

[CF-17-S-10]

Proposal Name: S01 – Eden – Stand 10
Harvest Area: 68.7 acres
Forest Community Types and Development: Overstocked loblolly pine naturally regenerated in 1996, pre-commercially thinned in 2003
Habitats and Species of Management Concern: DFS Core
Water Resources: None
Soil Resources: CRA, FgA, FhA, HvA, MuA, OKA, and QuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-11]

Proposal Name: S21 – E. Mace Smith – Stand 15
Harvest Area: 102.6 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1995
Habitats and Species of Management Concern: DFS Core
Water Resources: None
Soil Resources: FhA, OKA, OtA, and QuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-12]

Proposal Name: S36 – Strickland – Stand 13
Harvest Area: 49.4 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1994
Habitats and Species of Management Concern: DFS Core
Water Resources: None
Soil Resources: OKA and QuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-13]

Proposal Name: S53 – Handy – Stands 3 and 16
Harvest Area: 101.7 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1995
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: OKA and QuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-14]

Proposal Name: S53 – Handy – Stand 6
Harvest Area: 11.1 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1989, sprayed and controlled for grass in 1991
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: QuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-15]

Proposal Name: S53 – Handy – Stand 7
Harvest Area: 22.9 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1994
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: QuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-16]

Proposal Name: S53 – Handy – Stand 13
Harvest Area: 21.6 acres
Forest Community Types and Development: Mature loblolly pine naturally regenerated in 1941
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: QuA
Historic Conditions: No known historic features
Sivilcultural Prescription: Final harvest, natural regeneration will be supplemented with planting if suitable regeneration is not achieved

[CF-17-S-17]

Proposal Name: S53 – Handy – Stand 15
Harvest Area: 8.8 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1982
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: QuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

WICOMICO COUNTY

[CF-17-S-18]

Proposal Name: W02 – Aughty Naughty – Stand 17
Harvest Area: 13.4 acres

Forest Community Types and Development: Overstocked loblolly pine plantation established in 1985, controlled for grass in 1989, and sprayed in 2000
Habitats and Species of Management Concern: DFS Future Core
Water Resources: None
Soil Resources: BhA and MuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-19]

Proposal Name: W02 – Aughty Naughty – Stand 24
Harvest Area: 35.7 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1992
Habitats and Species of Management Concern: ESA Zone 3 Pulpwood, DFS Future Core, DFS Future Translocation, and Stream Buffer
Water Resources: Unnamed stream that flows into the Nanticoke River
Soil Resources: BhA, HvA, and MuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-20]

Proposal Name: W08 – Bacon – Stand 1
Harvest Area: 21.8 acres
Forest Community Types and Development: Overstocked loblolly pine naturally regenerated in 1981
Habitats and Species of Management Concern: DFS Future Core
Water Resources: None
Soil Resources: AsA, EwB, KgB, MuA, RsA, and RuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[CF-17-S-21]

Proposal Name: W16 – Savannah – Stand 4
Harvest Area: 40.5 acres
Forest Community Types and Development: Overstocked loblolly pine naturally regenerated in 2011, partially sprayed for hardwood control in 2012
Habitats and Species of Management Concern: Stream Buffer and General management
Water Resources: Peters Creek
Soil Resources: CoA, FaA, FgA, HbA, HnA, HvA, IeA, IeB, KgB, RsB, RwB, and Zk
Historic Conditions: No known historic features
Sivilcultural Prescription: Pre-commercial thinning

[CF-17-S-22]

Proposal Name: W35 – Messick – Stands 2 and 4
Harvest Area: 35.0 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1979
Habitats and Species of Management Concern: ESA Zone 3 Pulpwood and General management
Water Resources: None
Soil Resources: LfA, LgA, PrA, and PrB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-23]

Proposal Name: W35 – Messick – Stand 3
Harvest Area: 6.1 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1995
Habitats and Species of Management Concern: ESA Zone 3 Pulpwood and General management
Water Resources: None
Soil Resources: LfA and PrB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-24]

Proposal Name: W36 – Sturgess – Stand 6
Harvest Area: 46.8 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1996
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: HvA, KgB, MuA, RsB, and RuB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-25]

Proposal Name: W38 – Parsons – Stand 2
Harvest Area: 9.3 acres
Forest Community Types and Development: Overstocked loblolly pine naturally regenerated in 1992, pre-commercially thinned in 2000
Habitats and Species of Management Concern: Stream Buffer and General management
Water Resources: Burnt Mill Branch
Soil Resources: MuA and RsB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-26]

Proposal Name: W43 – Long – Stand 3
Harvest Area: 37.8 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1979
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: CoA, LgA, PrA, PrB, Rka, RsA, and RsB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-27]

Proposal Name: W43 – Long – Stand 6
Harvest Area: 7.9 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1986, sprayed and controlled for grass in 1989
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: CoA, PrA, RsA, and RsB

Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-28]

Proposal Name: W46 – Campbell – Stand 108
Harvest Area: 31.9 acres
Forest Community Types and Development: Mature loblolly pine stand established in 1938, burned in 1995
Habitats and Species of Management Concern: ESA Zone 3 Pulpwood and DFS Future Core
Water Resources: None
Soil Resources: BhA, KgB, MuA, and RsB
Historic Conditions: No known historic features
Sivilcultural Prescription: Final harvest, retain all hard mast species, retain pond pine and shortleaf pine
Comments: This stand is dominated by mature loblolly pine, but there are areas with high densities of pond pine. I recommend that select areas where pond pine is dominant be retained. Short-leaf pine is scarce in this stand and should be retained whenever possible.

[CF-17-S-29]

Proposal Name: W51 – Givens – Stand 3
Harvest Area: 20.2 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1994
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: CoA and LfA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-30]

Proposal Name: W57 – Willie – Stand 5
Harvest Area: 4.9 acres
Forest Community Types and Development: Overstocked loblolly pine naturally regenerated in 1983
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: AsA and LgA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-31]

Proposal Name: W57 – Willie – Stand 7
Harvest Area: 3.4 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1983
Habitats and Species of Management Concern: Stream Buffer and General management
Water Resources: Pocomoke River PDA
Soil Resources: AsA, CoA, KfA, and LfA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

WORCESTER COUNTY

[CF-17-S-32]

Proposal Name: WR08 – Godfrey – Stand 9
Harvest Area: 45.0 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1994
Habitats and Species of Management Concern: ESA Zone 1 and ESA Zone 3 Pulpwood
Water Resources: None
Soil Resources: AsA, BhA, HuA, and RuB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-33]

Proposal Name: WR08 – Godfrey – Stand 10
Harvest Area: 12.6 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1992, sprayed and controlled for grass in 1994, and pre-commercially thinned in 2000
Habitats and Species of Management Concern: ESA Zone 1, ESA Zone 3 Pulpwood, and Steam Buffer
Water Resources: Colbourne Branch
Soil Resources: AsA, KsA, and MuA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-34]

Proposal Name: WR09 – Perkins – Stand 3
Harvest Area: 47.7 acres
Forest Community Types and Development: Loblolly pine plantation established in 1992, first thinned in 1995, second thinned in 2003, and shelterwood harvested in 2011
Habitats and Species of Management Concern: General management
Water Resources: None
Soil Resources: AsA, CeB, HuA, KsA, and MuA
Historic Conditions: No known historic features
Sivilcultural Prescription: Removal of residual shelterwood trees to facilitate pine regeneration

[CF-17-S-35]

Proposal Name: WR10 – Cordery – Stand 12
Harvest Area: 92.4 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1992
Habitats and Species of Management Concern: ESA Zone 1 and ESA Zone 3 Pulpwood
Water Resources: None
Soil Resources: AsA, BhA, EvB, HmA, HmB, KsA, KsB, MuA, RuA, and RuB
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-36]

Proposal Name: WR29 – Milton Barnes – Stand 1
Harvest Area: 42.0acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1995
Habitats and Species of Management Concern: Stream Buffer
Water Resources: Ditches that drain into Spring Hill Branch
Soil Resources: KeA, OtA, SaB, and WdB

Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning

[CF-17-S-37]

Proposal Name: WR33 – John Purnell – Stand 2
Harvest Area: 4.3 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1996
Habitats and Species of Management Concern: DFS Future Core and Stream Buffer
Water Resources: Willow Grove Creek
Soil Resources: FaA, MuA, and OtA
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

POCOMOKE STATE FOREST

[P-17-S-1]

Proposal Name: P02 – Furnace – Tract 126 – Stand 3
Harvest Area: 25.0 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1987, first thinned in 2003
Habitats and Species of Management Concern: Core FIDS, DFS Future Core, Stream Buffer, and WSSC
Water Resources: Furnace Branch
Soil Resources: AsA, HuA, KsA, LO, RuB, and Za
Historic Conditions: Home site located near access road
Sivilcultural Prescription: Second thinning, retain all hard mast species

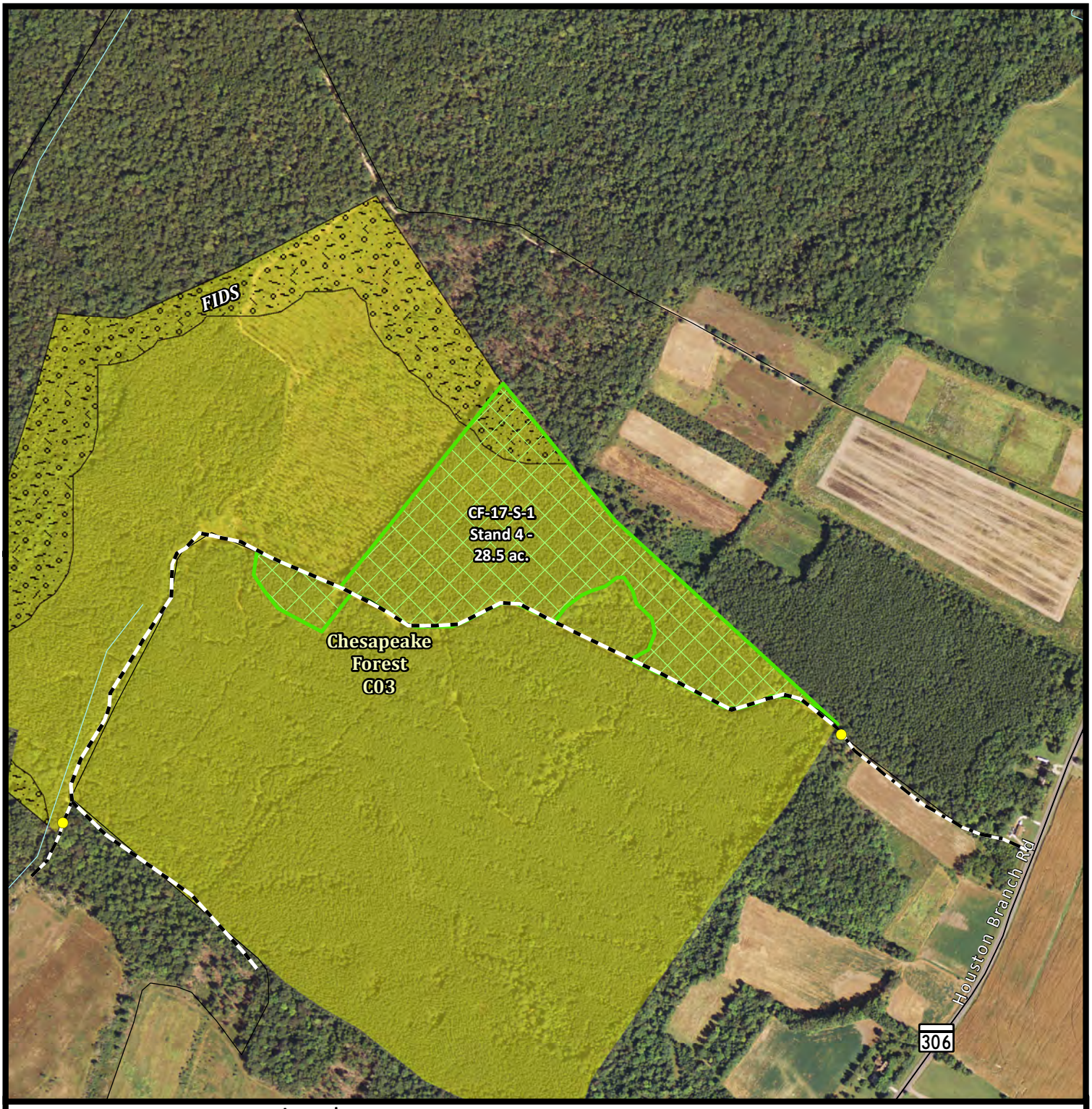
[P-17-S-2]

Proposal Name: P02 – Furnace – Tract 126 – Stand 4
Harvest Area: 60.0 acres
Forest Community Types and Development: Overstocked loblolly pine plantation established in 1991
Habitats and Species of Management Concern: Core FIDS, DFS Future Core, G3 Community, Stream Buffer, WSSC, and ESA Zone 1
Water Resources: Furnace Branch
Soil Resources: AsA, BhA, CeA, EvB, HmA, HuA, KsA, KsB, LO, RuA, RuB, and Za
Historic Conditions: No known historic features
Sivilcultural Prescription: First thinning, retain all hard mast species

[P-17-S-3]

Proposal Name: P07 – Chandler – Tract 21 – Stand 11
Harvest Area: 16.4 acres
Forest Community Types and Development: Mature pine-hardwood stand naturally regenerated in 1922
Habitats and Species of Management Concern: DFS Future Core
Water Resources: None
Soil Resources: FaA, HmB, HuA, KsA, MuA, and WdB
Historic Conditions: No known historic features
Sivilcultural Prescription: Final harvest, retain all hard mast species, natural regeneration will be supplemented with planting if suitable regeneration is not achieved
Comments: This tract has a number of sizeable northern red oak (*Quercus rubra*) within it. Retention of these trees would be desirable.

SILVICULTURAL SITE MAPS



Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-1

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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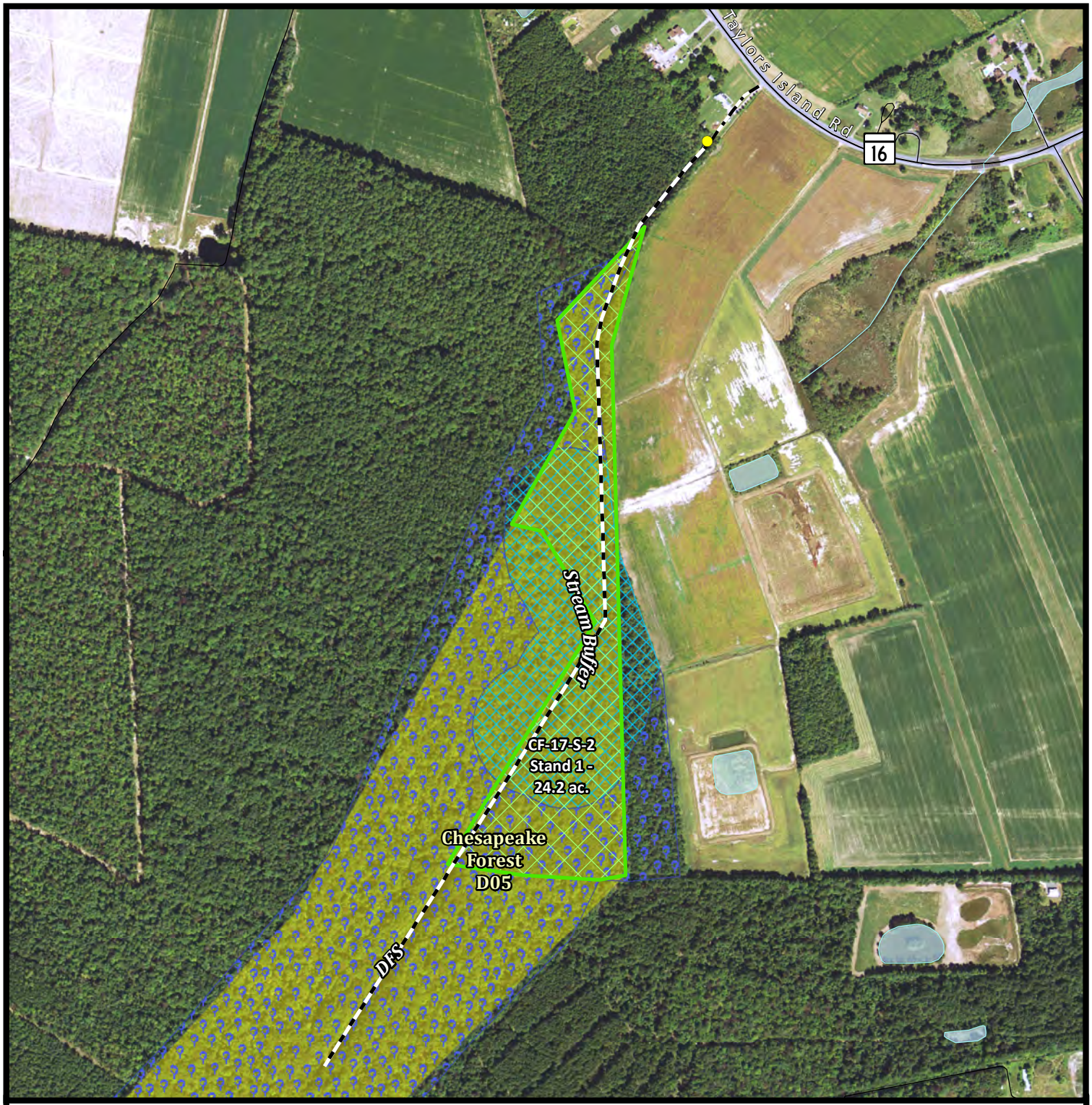
N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES



Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-2

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-3, CF-17-S-4, CF-17-S-5
CF-17-S-6, CF-17-S-7, CF-17-S-8

Scale: 1:24,000
Prepared by: DNR Forest Service
Date: 07/2015

1,320 0 1,320 2,640 3,960 Feet

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N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-9

Scale: 1:7,920
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Date: 07/2015

660 0 660 1,320 Feet

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MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-10

Scale: 1:7,920
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660 0 660 1,320 Feet

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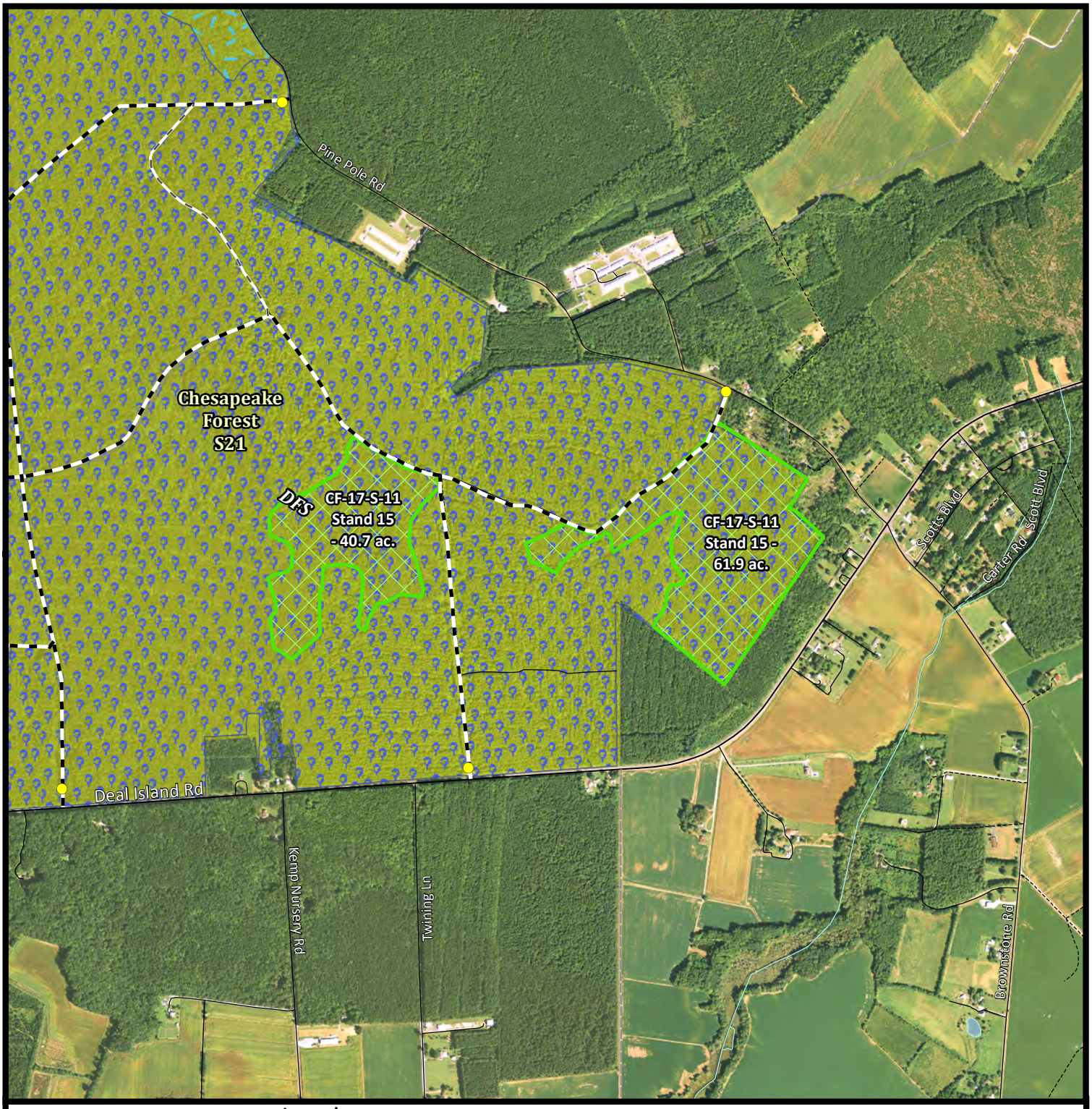
MARYLAND DEPARTMENT OF NATURAL RESOURCES



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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-11

Scale: 1:15,840
Prepared by: DNR Forest Service
Date: 07/2015

1,320 0 1,320 2,640 Feet

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N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-12

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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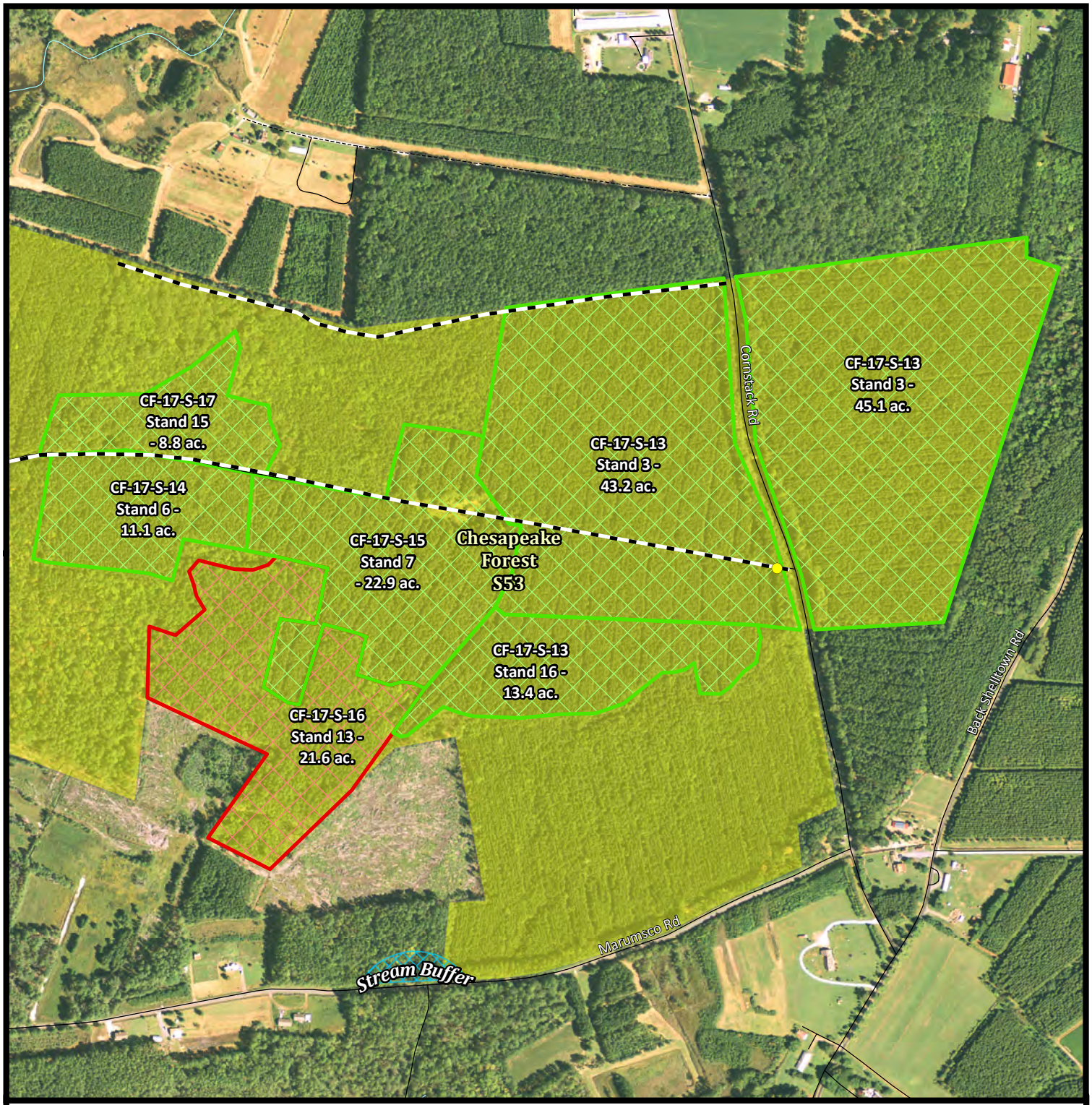
MARYLAND DEPARTMENT OF NATURAL RESOURCES



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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-13, CF-17-S-14, CF-17-S-15,
CF-17-S-16, CF-17-S-17

Scale: 1:7,920
Prepared by: DNR Forest Service
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N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-18, CF-17-S-19

Scale: 1:7,920
Prepared by: DNR Forest Service
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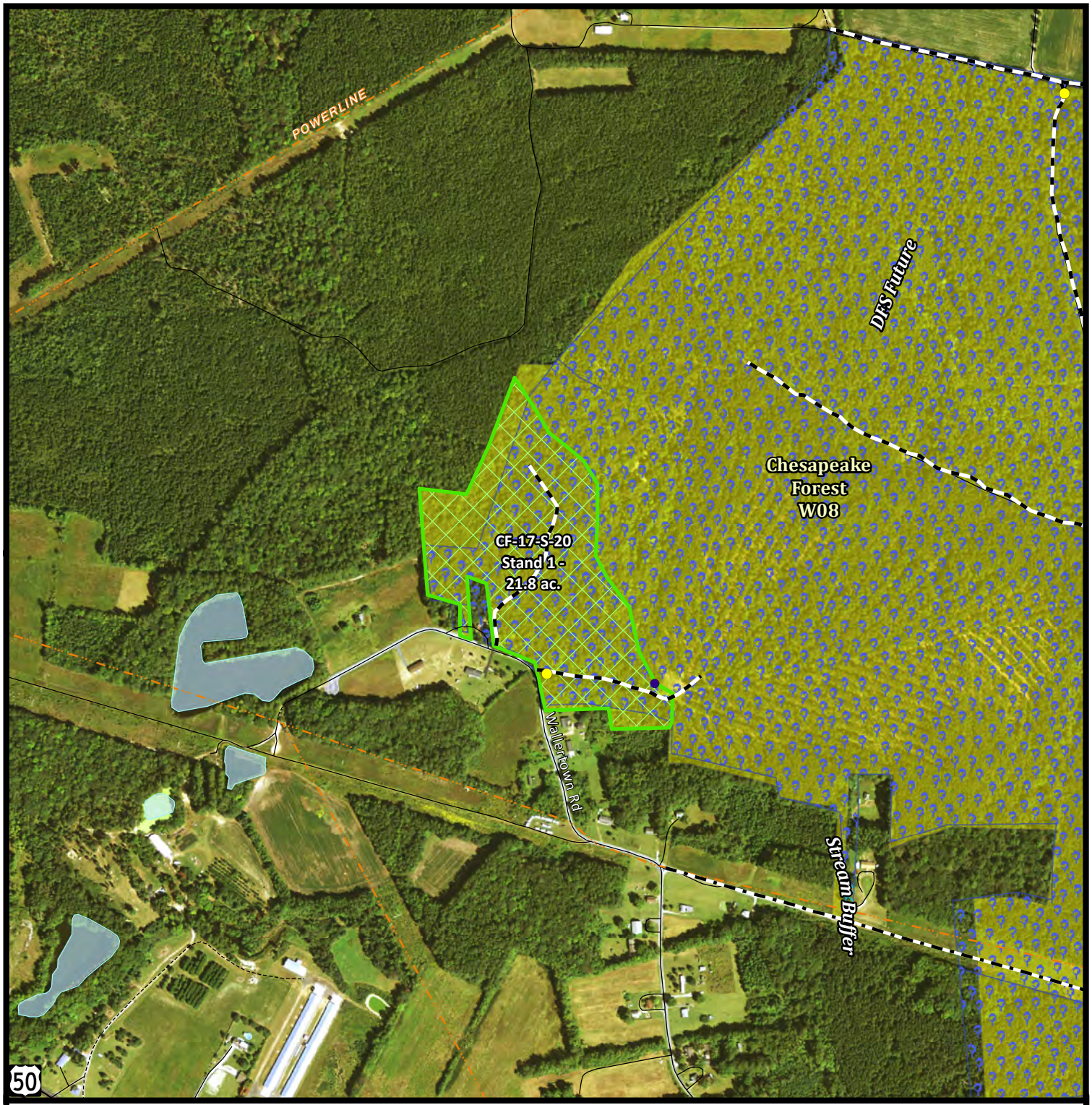
MARYLAND DEPARTMENT OF NATURAL RESOURCES



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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-20

Scale: 1:7,920
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N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-21

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

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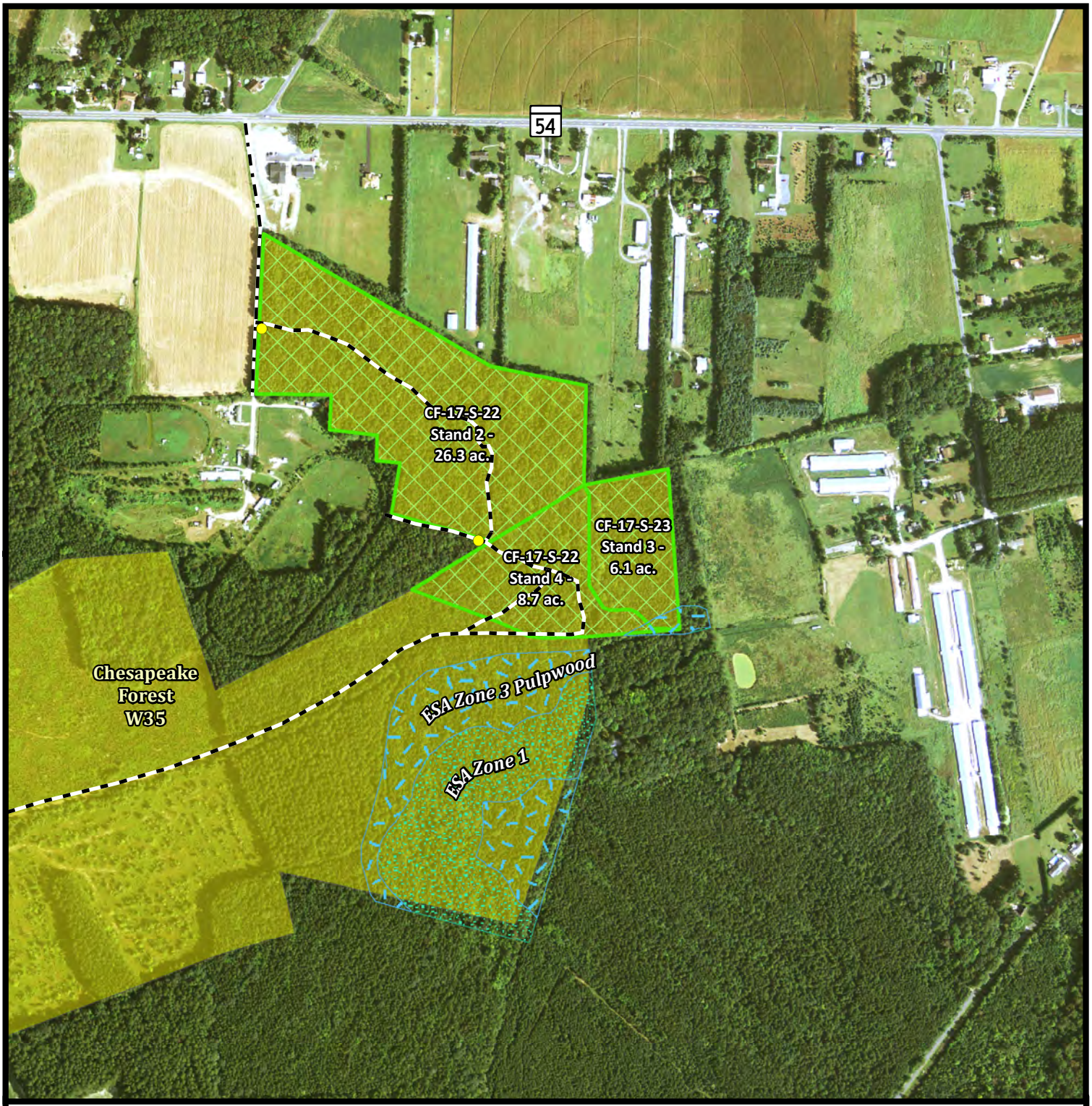

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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-22, CF-17-S-23

Scale: 1:7,920
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Date: 07/2015

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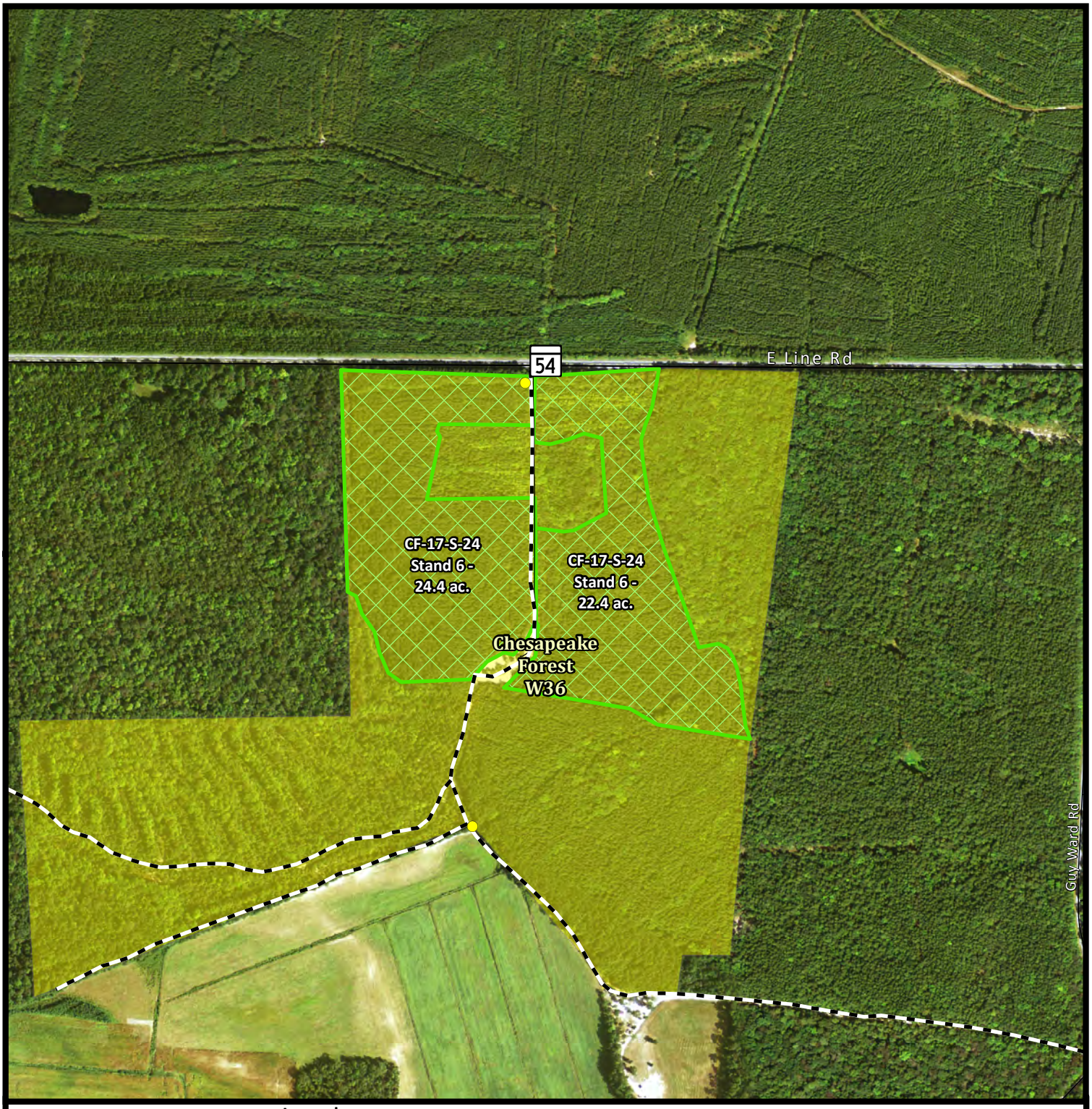
MARYLAND DEPARTMENT OF NATURAL RESOURCES



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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-24

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

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N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-25

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

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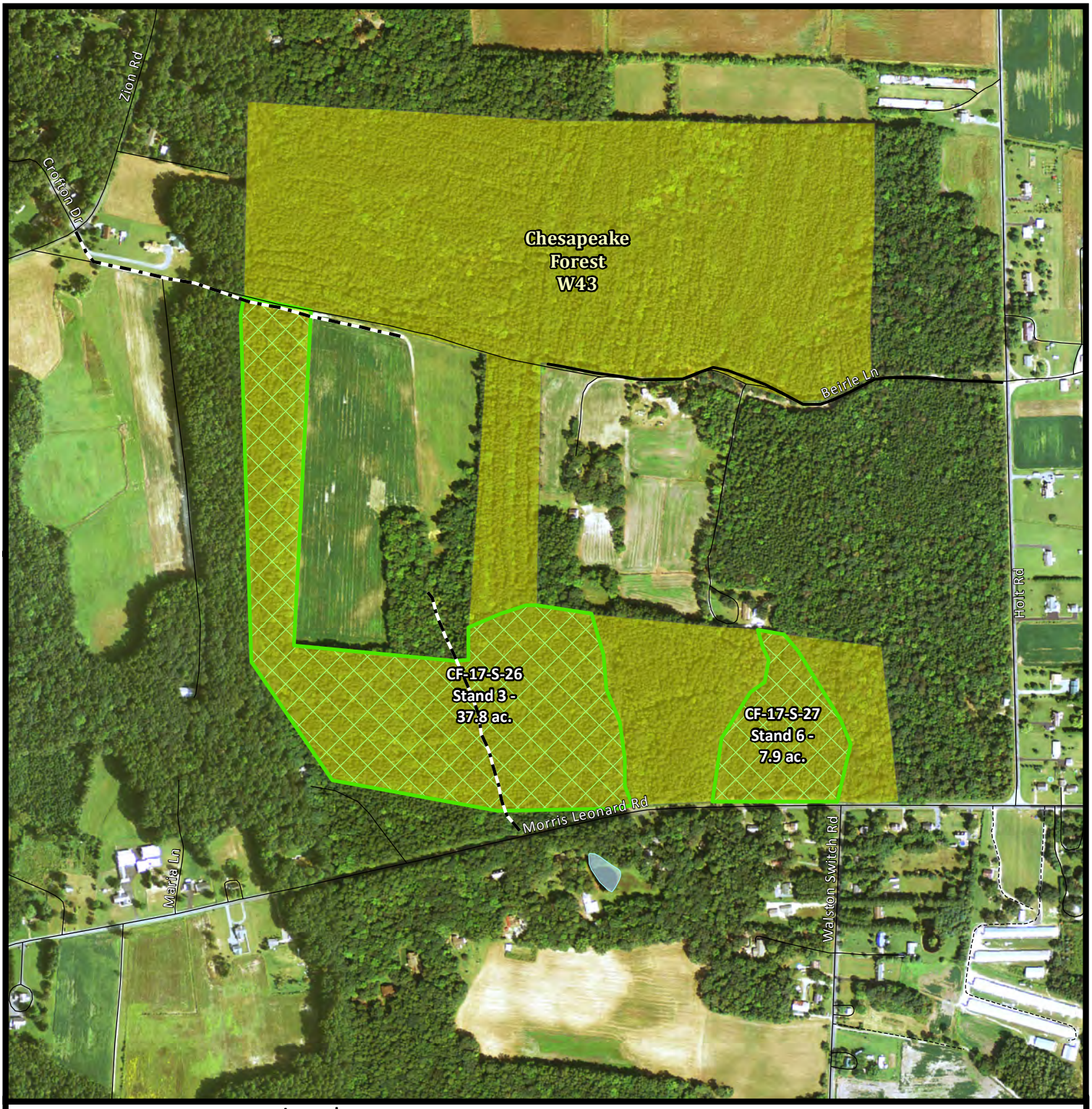
MARYLAND DEPARTMENT OF NATURAL RESOURCES



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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-26, CF-17-S-27

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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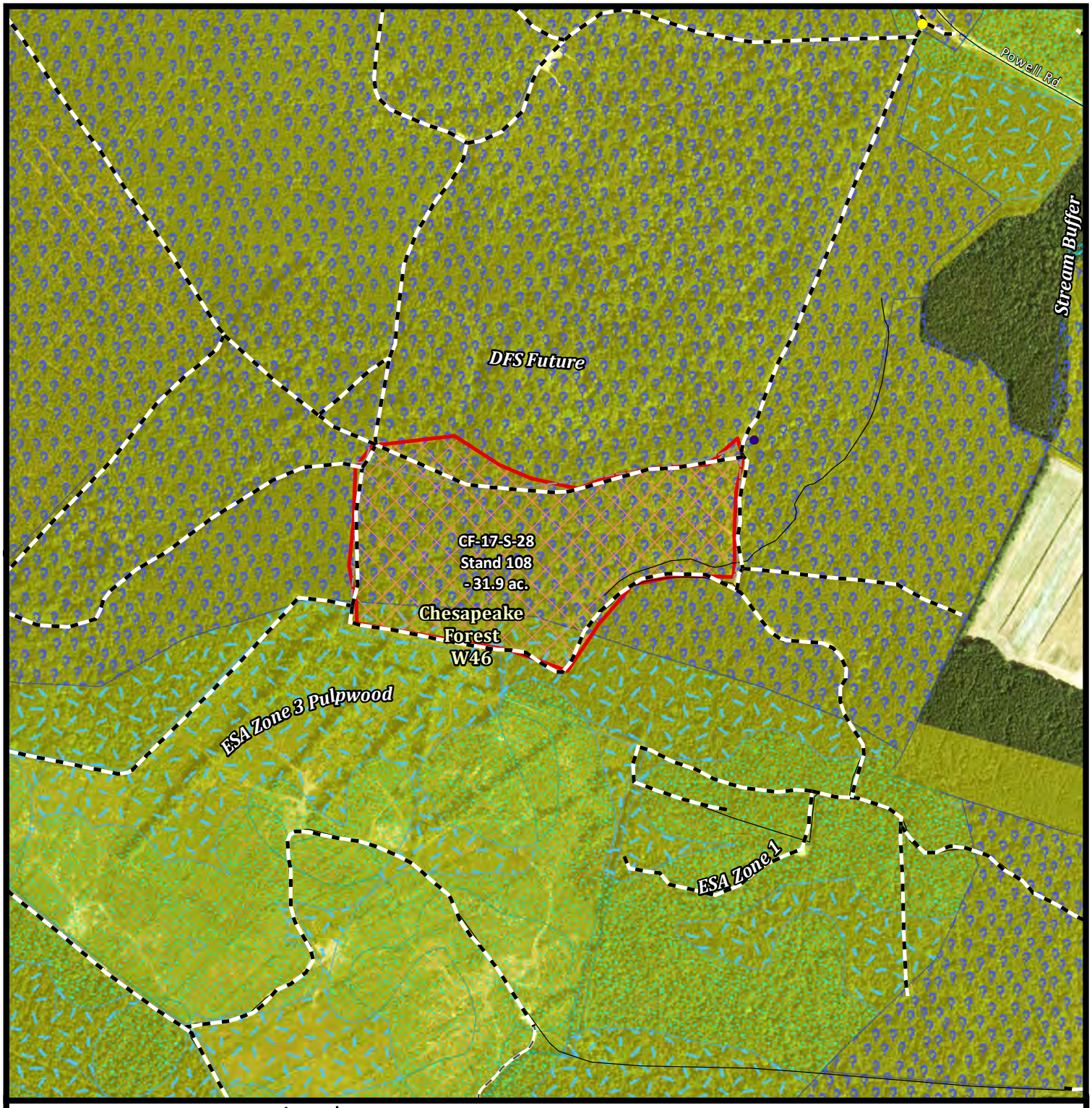
MARYLAND DEPARTMENT OF NATURAL RESOURCES



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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-28

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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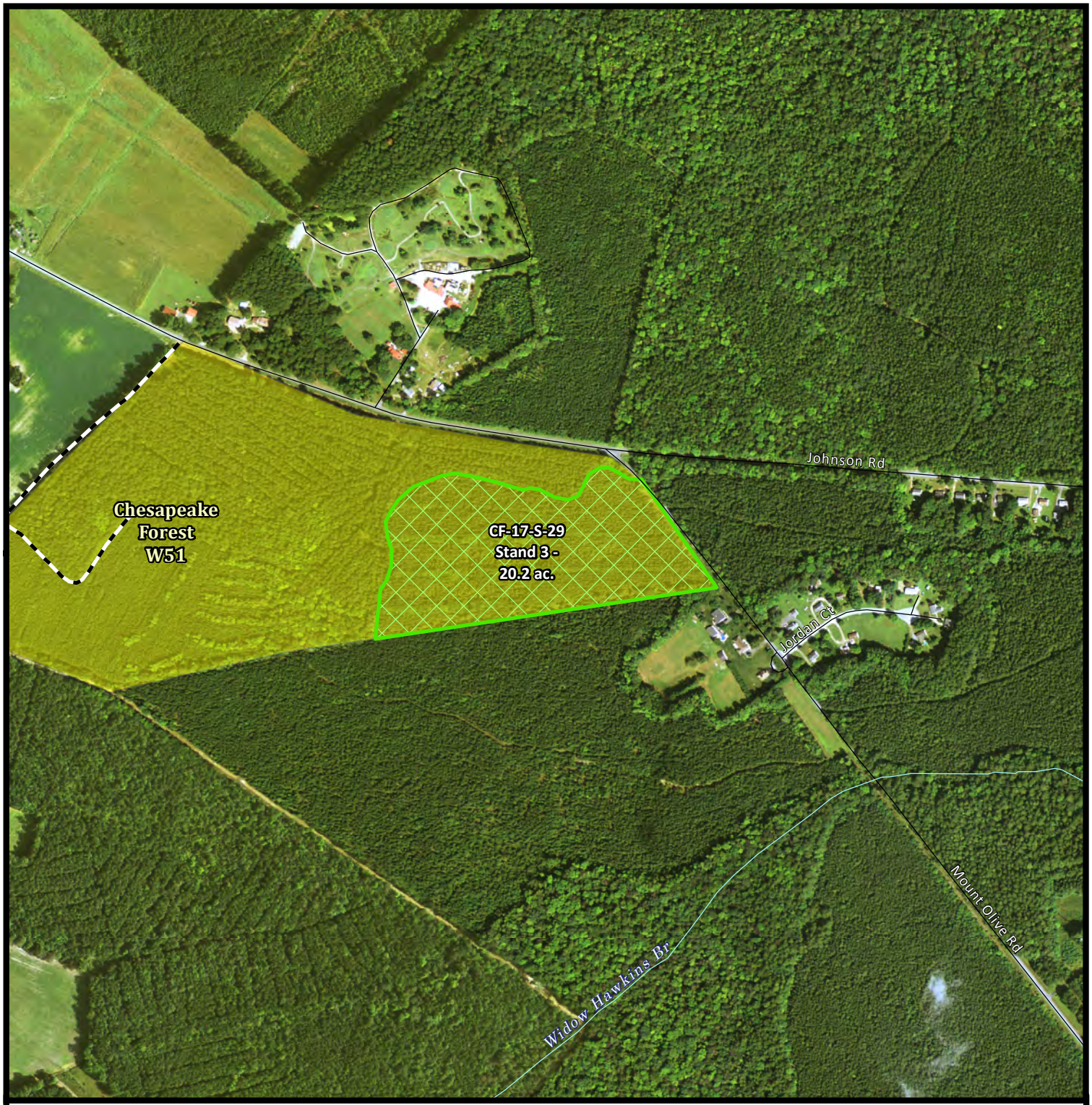
MARYLAND DEPARTMENT OF NATURAL RESOURCES



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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-29

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-30, CF-17-S-31

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

N W E S

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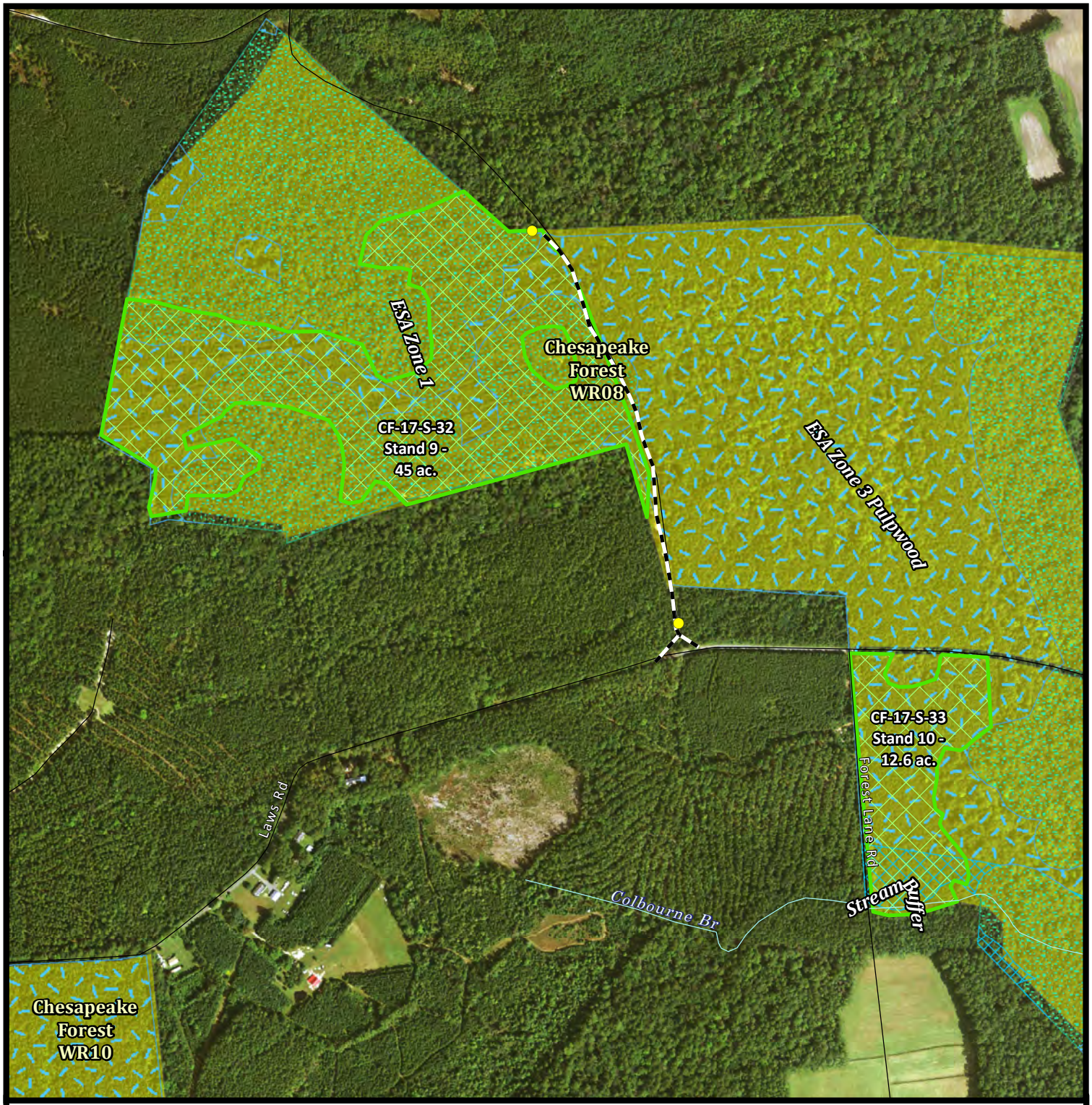
MARYLAND DEPARTMENT OF NATURAL RESOURCES



Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-32, CF-17-S-33

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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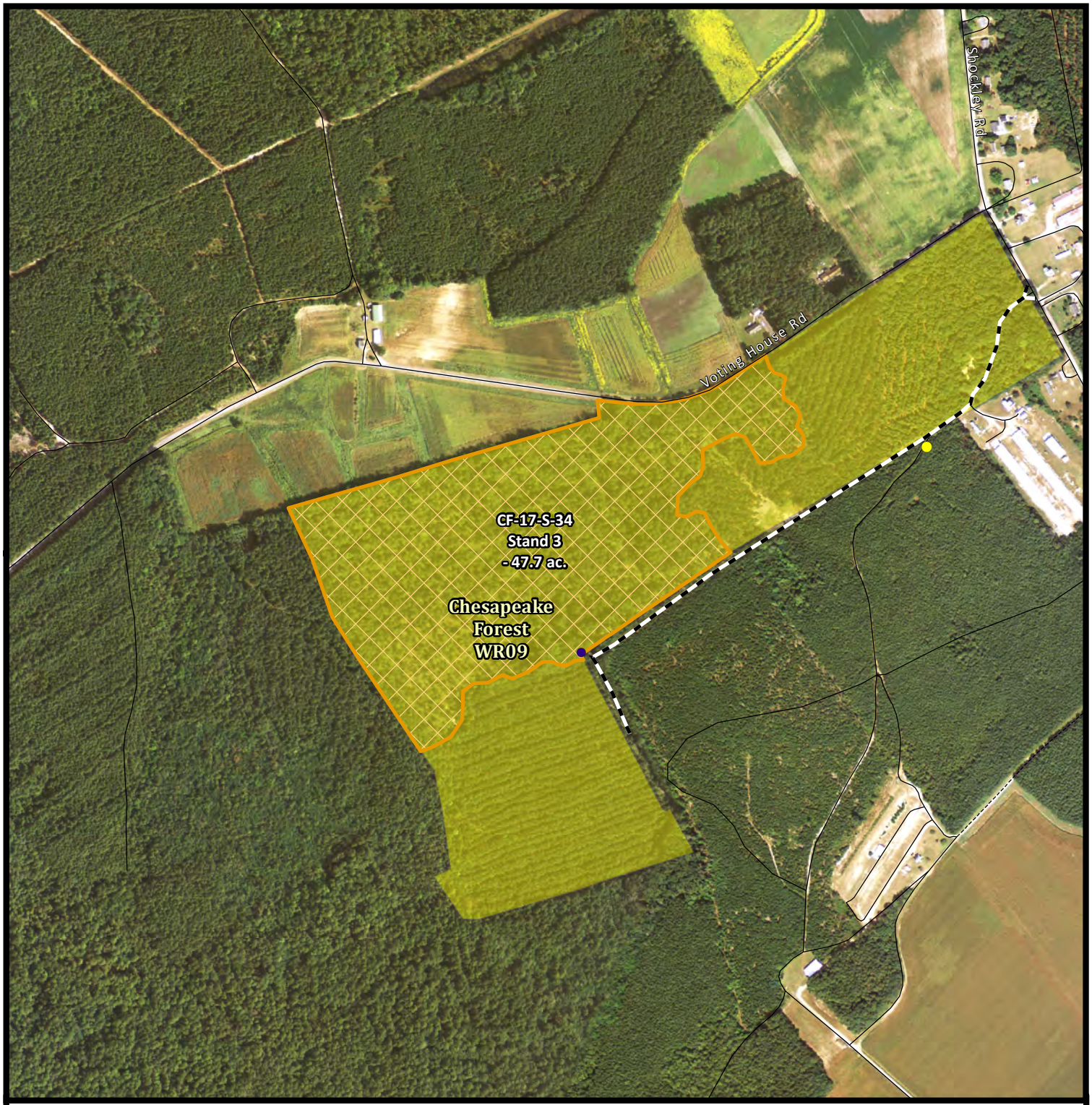
N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES



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AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-34

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES

Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-35

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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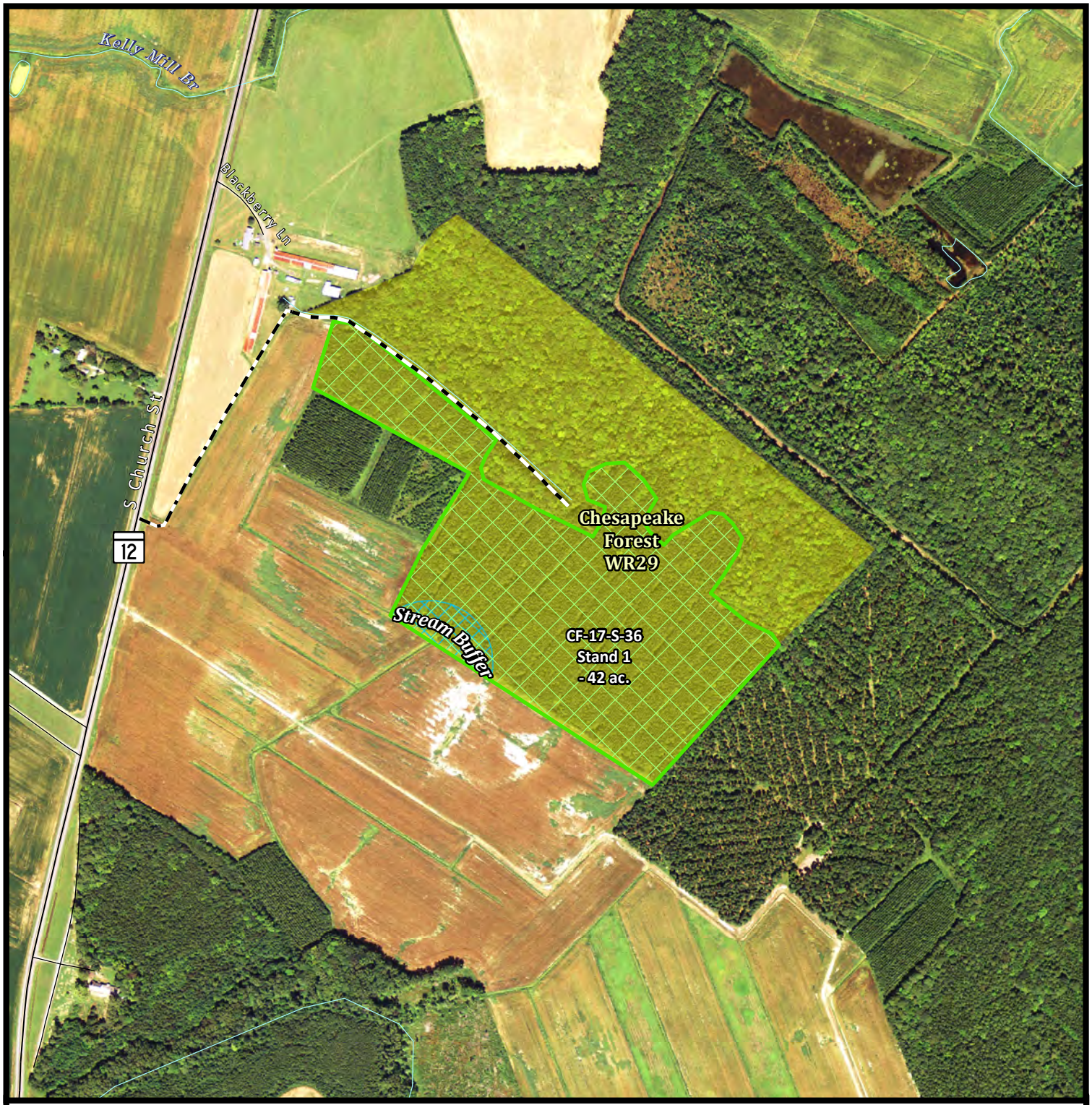
N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES



Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-36

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

660 0 660 1,320 Feet

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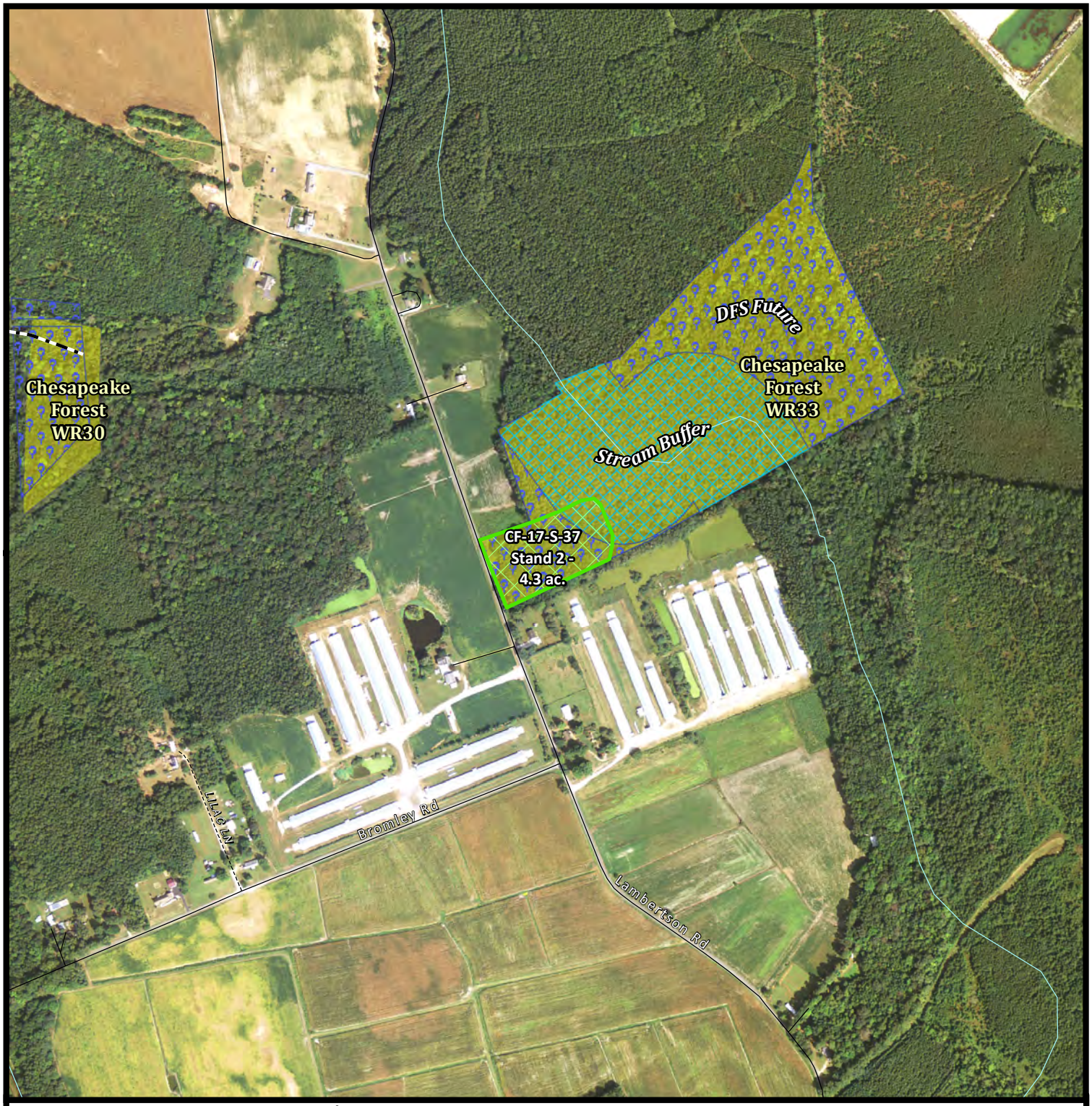
N W E S

MARYLAND DEPARTMENT OF NATURAL RESOURCES



Legend

AWP
- 2017 FH
- 2017 H2
- 2017 T0
- 2017 T1
- 2017 T2

Management Zones
- DFS
- ESA Zone 1
- ESA Zone 2
- ESA Zone 3 Pulpwood
- ESA Zone 3 Sawtimber
- Core FIDS
- G3
- Stream Buffer

Chesapeake Forest
CF-17-S-37

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

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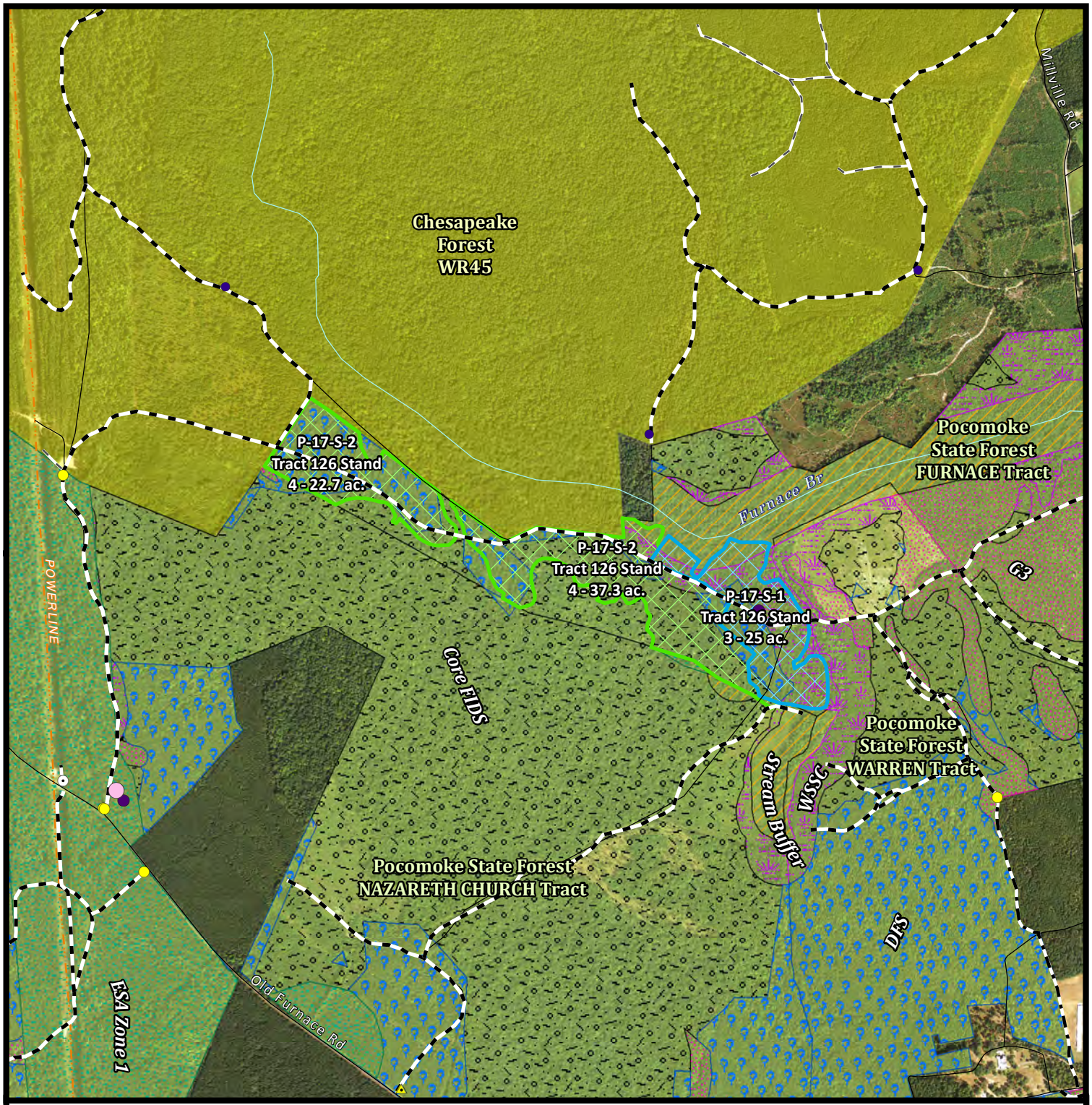
This map is not a boundary survey

MARYLAND DEPARTMENT OF NATURAL RESOURCES



Legend

AWP	Management	
2017 FH	Core FIDS	ESA Zone 3
2017 T1	DFS	G3
2017 T2	ESA Zone 1	Stream Buffer
	ESA Zone 2	WSSC

1,320 0 1,320 2,640 Feet

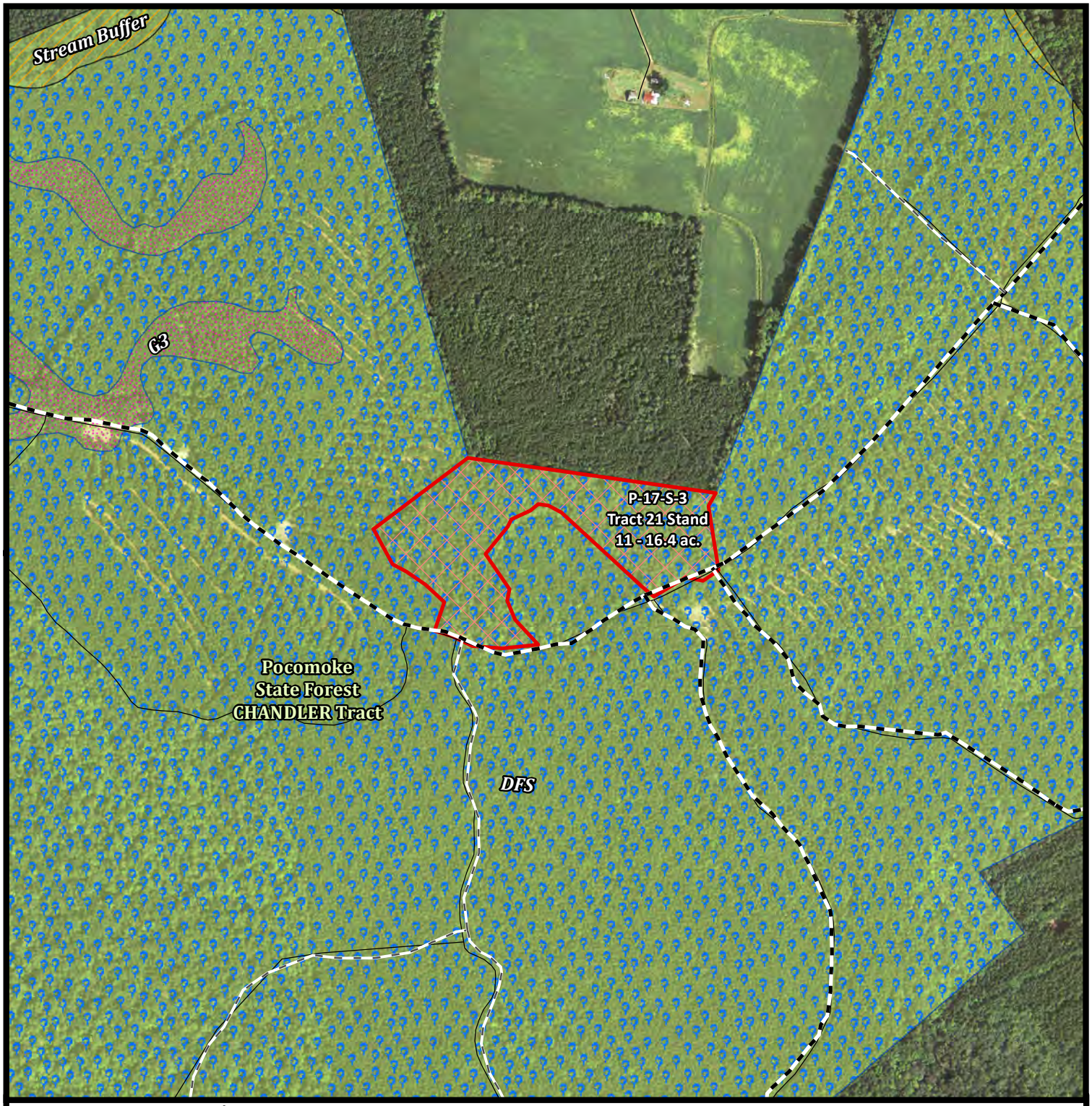
This map is for planning purposes only.
This map is not a boundary survey

N W E S

Pocomoke State Forest
P-17-S-1, P-17-S-2

Scale: 1:15,840
Prepared by: DNR Forest Service
Date: 07/2015

MARYLAND DEPARTMENT OF NATURAL RESOURCES



Legend

AWP	Management	
2017 FH	Core FIDS	ESA Zone 3
2017 T1	DFS	G3
2017 T2	ESA Zone 1	Stream Buffer
	ESA Zone 2	WSSC

1,320 0 Feet

This map is for planning purposes only.
This map is not a boundary survey

N W E S

Pocomoke State Forest
P-17-S-3

Scale: 1:7,920
Prepared by: DNR Forest Service
Date: 07/2015

MARYLAND DEPARTMENT OF NATURAL RESOURCES

L. BUDGET

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

Operating Revenues & State Funding	
Forest Product Sale Revenues	$ 650,000
Hunt Club Revenues	$ 400,000
State Funding	$ 100,000
Total	**$1,150,000**

APPENDIX A - RECREATION TRAIL GRANTS

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

Please email tmaxwell@sha.state.md.us with any questions about this application.

Project Title:

Chesapeake Forest – E. Mace Smith Trail Enhancement Project

Trail Uses
Check all that apply

☒ Diverse ☐ Motorized Recreational ☒ Non-motorized Recreational ☐ Transportation Trail

Project Types
Check only one category

Construction
☐ Construction of new trail or facilities ☐ Maintenance of trail or facilities (with ground disturbance)

Non-Construction
☐ Purchase or lease of equipment ☒ Maintenance of trail or facilities (without ground disturbance)
☐ Acquisition of easements ☐ Interpretive/educational programs/facilities

Project Cost:

$30,000	**$6,000**	**$36,000**
RTP Funding Request	Matching Funds	Total Project Cost

Project Sponsor (Applicant)
Please provide contact information for the Project Sponsor Entity and the Project Manager.

Project Sponsor Entity	Department of Natural Resources	
Project Manager	Michael Schofield	
Title	Forest Manager	
Organization	Forest Service	
Address 1	6572 Snow Hill Road, Snow Hill, MD 21863	
Address 2		
Telephone	(410)632-3732	
Cell Phone	(410)713-5091	
Fax	(410)632-3730	
E-mail	mschofield@dnr.state.md.us	

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

1. Project Location

The project is located in Somerset County, Maryland just 2 miles west from the city of Princess Anne, Maryland (population 3,290) and 15 miles south of the city of Salisbury (population 30,343).

2. Project Abstract

This project will….. enhance the existing 7.6 mile multi use trail system in the Chesapeake Forest.

Benefits the trail user by…..removing trail obstructions, clearly identifying the trail, trail head and parking areas.

This project will maintain the existing 7.6 miles of hiking and horseback riding trails within the 1,711 acre E. Mace Smith, Chesapeake Forest tract (see attached map). The trail system is used frequently by hikers, bird watches, horseback riders and hunters. This site is one of the largest public hunting areas in Somerset County. The forest trails are located along old woods roads that require routine maintenance to provide users with a quality outdoor experience. Many sections of the trails are blocked by over hanging branches, brush, downed trees and vines that need to be cleared from the trails to make them passable.

The project will involve maintaining sections of the trail with a flail axe mower, removing overhanging vegetation and brush, downed trees will be removed with chainsaws. Tall grasses will be mowed on the trails to reduce problems with ticks coming into contact with mountain bikers, hikers and horseback riders. Parking areas at the 3 trail heads will be maintained for improved trail user access, by adding additional gravel where needed and clearing brush from around the edges, new trail head and parking signage will be added along with trailside markers.

3. Project Summary

Task No. & Name	Task Description
1. Trail Clearing	Remove and clear vegetation obstructing trail
2. Mark Trail	Install trailside markers identifying main trail and other trail segments.
3. Improve parking areas	Install parking signs, gravel and grade parking pads. Cut back encroaching vegetation
4. Install trail head sign	Install new trail head sign, highlighting the trail system.
5. Install gates	Install metal gates at each of the trail heads adjacent to parking areas.

4. Project Property Owner

This project is located on State of Maryland property, which is managed by the Department of Natural Resources, Maryland Forest Service (Project Sponsor).

5. Project length

The dirt trail is 7.6 miles long and 10 feet wide.

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

6. Prior Projects

RT07-41 *Tom Tyler Demonstration Forest & Nature Trail, $3,500 reimbursed for trail enhancement supplies & materials. Project completed.*
RT08-26 *WDF & CF Trail Enhancement Project, $28,000 reimbursed for labor used to maintain and enhance existing horseback trails. Project completed.*
RT09-25 *CF 2009 Green Hill Trail Enhancement Project, $26,052 reimbursed for labor used to maintain and enhance existing multi-use trails. Project completed.*
RT07-46 *Foster Trail Enhancement Project, $12,000 reimbursed for labor used to enhancement trail system. Project completed.*
RT10-31 *Milburn Landing, Dividing Creek & Whitesburg Trail Enhancement Project, $30,000 reimbursed for labor used to enhance existing trail system. Project completed.*
RT11-32 *UTV Trail Enhancement Project, $20,000 reimbursed for the purchase of a utility vehicle and attachments used for trail maintenance and construction. Project completed.*
RT11-34 *Marshyhope Trail Enhancement Project, $30,000 reimbursed for labor and supplies used to enhance existing trail system. Project completed.*
RT12-28 *Equestrian Trail Enhancement Project, $32,000 reimbursed for labor and supplies used to enhance existing trail system. Project completed.*
RT12-31 *PSF Mountain Bike Trail Enhancement, $30,000 reimbursed for labor and supplies used to enhance existing bike trail system. Project is complete.*
RT12-31 *Algonquin Cross County Trail Establishment, $25,000 awarded for labor and supplies to enhance existing trail and to create new connecting sections of trail. This project is complete and close out paperwork has been submitted.*
RT13-51 *Wicomico Demonstration Forest Trail Enhancement, $23,000 awarded for labor and supplies to enhance existing trail system. This project is complete and close out paperwork has been submitted.*
RT13-54 *Mattoponi Soft Launch, $17,000 awarded for labor and supplies used to establish a new water access point along the Pocomoke River. Project completed.*
RT14-32 *Boom Arm Mower, $36,000 awarded for replacement of boom arm and mower head for a John Deere tractor used for trail maintenance. This project is 70% complete.*
RT14-41 *Milburn Landing Trail Enhancement, $36,000 awarded for labor and supplies to enhance existing trail system. This project is 60% complete.*
RT14-51 *Chadler Trail Enhancement, $36,000 awarded for labor and supplies to enhance existing trail system. This project is 20% complete.*
RT14-49 Trail Maps, $12,000 awarded for trail map design and printing. This project is 10% complete.

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

7. Project Work Plan

Task Number & Name	Start Date	Duration	Responsible Party	Justification
1. NEPA Approval	11/2015	7 months	Ken Jolly	Approval
2. PCA Codes Assigned	5/2016	1 month	Shenika Dyson	Tracking grant expenditures
3. Hire Contractual Staff	5/2016	4 months	Mike Schofield	Hiring process
4. Purchase Materials/Supplies	6/2016	2 months	Mike Schofield	Procurement process
5. Implement Trail Work	9/2016	12 months	Mike Schofield	Work through contract period
6. Grant Close Out	9/2017	1 month	Shenika Dyson	Documentation submitted to HQ

8. Project Budget

Task No. & Name	Requested Funds 80%	Sponsor Match 20%	Total Task Cost 100%
1. Seasonal labor @ $15/hour (1764 hrs)	$26,460	$5,292	$31,752
2. (2) Trail Head Sign @ $200 each	$400	$80	$480
3. (10) Loads of gravel/stone @ $200/load	$2,000	$400	$2,400
4. (50) Trail side posts @ $16 each	$800	$160	$960
5. (100) Trail post markers @ $0.40 each	$40	$8	$48
6. (3) Metal Gates @ $100 each	$300	$60	$360
Total	$30,000	$6,000	$36,000

9. Matching Funds (20%)

Task	Source	Type (Cash or In-kind)	Description Including Hours and Rate	Amount
Supervision	MD Forest Service	In kind	27hrs. @ $30/hr.	$810
Labor	MD Forest Service	In kind	173hrs. @ $30/hr.	$5,190
Total				$6,000

10. Location Map

Please attach 8.5 x 11 map of project area showing as many details of the project as possible. The map must have a north arrow, scale and the title of the project. It should clearly show the project location, property lines, public facilities, state roads, and any other relevant information. **The Map must clearly identify the proposed project site with beginning and ending points.**

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

11. Submission

It is preferred that applications be submitted electronically to tmaxwell@sha.state.md.us by **2 p.m. on July 1, 2015.** Because our email server rejects most attachments larger than 6 MB, please use an FTP site or file sharing service, to transmit the application and any large attachments. Confirmation will be sent when the application is received. Please contact us at the email above with any questions about submissions or to discuss potential projects. The Recreational Trail Advisory Committee will meet to review projects in August. Awards will be announced in the October.

Options for Submission include:

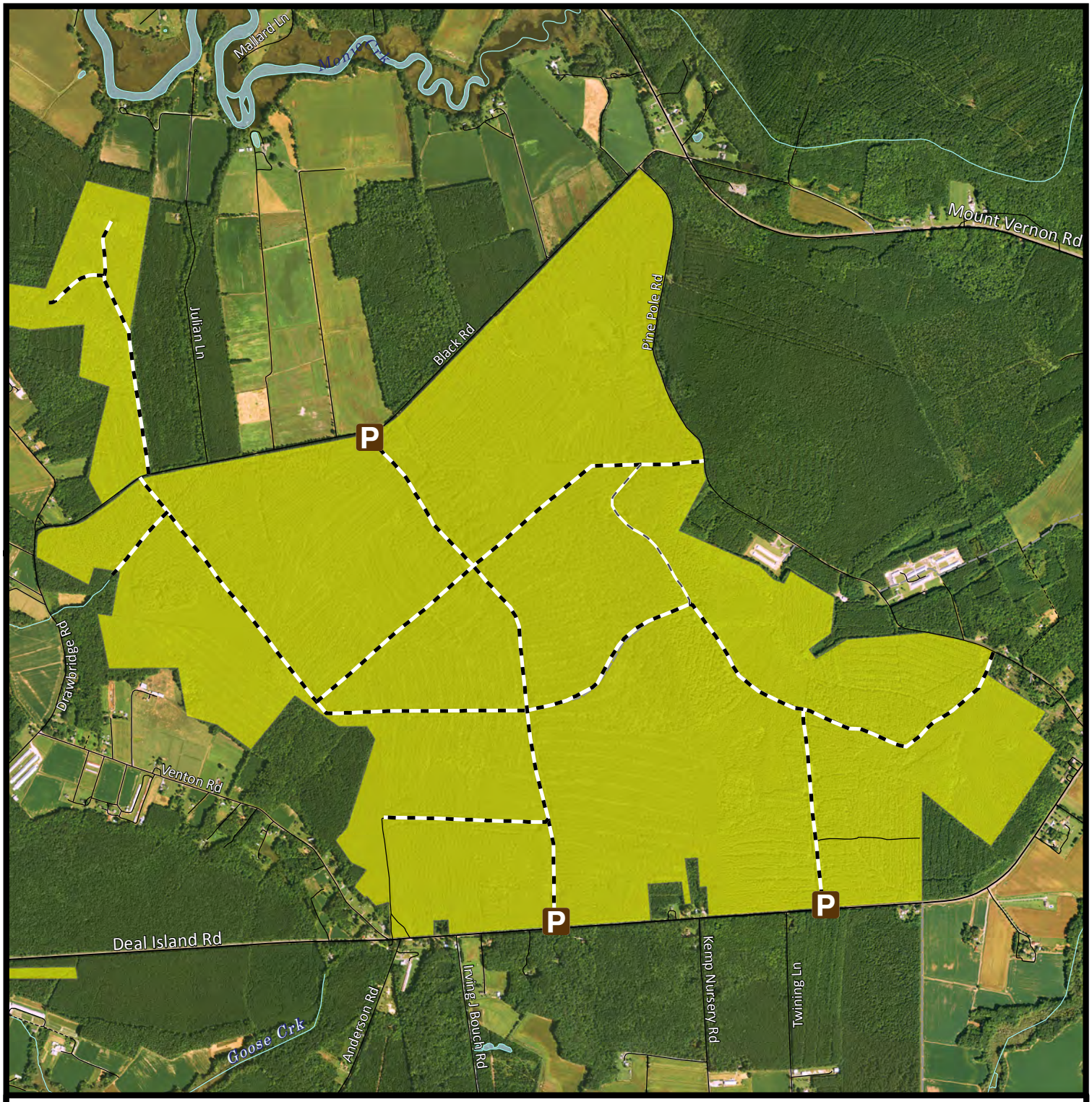
Internet/E-mail (preferred)

- Complete the form on your computer and save the file on your computer.
- Email the file as an attachment to: Terry Maxwell, tmaxwell@sha.state.md.us
- Use an FTP site or file sharing service to transmit the application and any large attachments.

U.S. Mail

- Mail a completed application to:

  Terry Maxwell
  Maryland Scenic Byways / Recreational Trails Program
  Maryland State Highway Administration
  707 N. Calvert Street, MS C-303
  Baltimore, MD 21202



Legend

- Major
- Right-of-Way
- Forest Trail
- Forest Single-Track Path
- Parking Areas
- Chesapeake Forest

1,320 0 1,320 2,640 Feet

This map is for planning purposes only.
This map is not a boundary survey

N W E S

Recreation Trail Grant Map
for E. Mace Smith Trails Project
Total Trail Distance: 7.6 miles

Scale: 1:24,000
Prepared by: DNR Forest Service
Date: 05/2015

MARYLAND DEPARTMENT OF NATURAL RESOURCES

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

Please email tmaxwell@sha.state.md.us with any questions about this application.

Project Title:

Pocomoke State Forest – Furnace Loop Trails Project

Trail Uses
Check all that apply

☒ Diverse ☐ Motorized Recreational ☒ Non-motorized Recreational ☐ Transportation Trail

Project Types
Check only one category

Construction
☒ Construction of new trail or facilities ☐ Maintenance of trail or facilities (with ground disturbance)

Non-Construction
☐ Purchase or lease of equipment ☐ Maintenance of trail or facilities (without ground disturbance)
☐ Acquisition of easements ☐ Interpretive/educational programs/facilities

Project Cost:

$30,000	**$6,000**	**$36,000**
RTP Funding Request	Matching Funds	Total Project Cost

Project Sponsor (Applicant)
Please provide contact information for the Project Sponsor Entity and the Project Manager.

Project Sponsor Entity	Department of Natural Resources	
Project Manager	Michael Schofield	
Title	Forest Manager	
Organization	Forest Service	
Address 1	6572 Snow Hill Road, Snow Hill, MD 21863	
Address 2		
Telephone	(410)632-3732	
Cell Phone	(410)713-5091	
Fax	(410)632-3730	
E-mail	mschofield@dnr.state.md.us	

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

1. Project Location

The project is located in Worcester County, Maryland just 5 miles north of Snow Hill, Maryland (population 2,103)and just 14 miles south of the city of Salisbury, Maryland (population 30,343).

2. Project Abstract

This project will….. enhance the existing 30 mile multi use trail system in the Pocomoke State Forest by establishing 3 new loop trails.

Benefits the trail user by…..providing an additional 11.5 miles of additional trails to explore. The three new loops vary in length, giving the recreationalist choices in terms of time and difficulty while in the forest.

This project will create three new loop trails (11.5 miles) on the Pocomoke State Forest, Furnace Tract. Each loop will vary in length (see map) and connect to the existing 30 mile trail system which includes the popular Algonquine Cross County Trail (RT12-31). The new loop trail sections will utilize abandoned historic logging roads. The roads were build in the mid 1800's for the Nassawango Iron Furnace built in 1832, which is located on adjacent property managed by The Nature Conservancy. The Furnace Town where the Iron Furnace sits is a popular tourism destination on the Lower Eastern Shore hosting numerous organized events throughout the year. Visitors frequently venture into the State Forest via the trail head located adjacent to the Furnace Town parking lot. This trail system is used frequently by hikers, mountain bikers, bird watches, horseback riders and hunters. The addition of three new loop trails will add to the diversity and intensity of the existing system and will provide additional options to the user. This site is one of the largest public recreation areas in Worcester County. The new loop sections are located along old woods roads that require significant maintenance to provide users with a quality outdoor experience. Many sections of the trails are blocked by over hanging branches, brush, downed trees and vines that need to be cleared from the trails to make them passable.

The project will involve opening up sections of the trail with a flail axe mower, removing overhanging vegetation and brush, downed trees will be removed with chainsaws. Tall grasses will be mowed on the trails to reduce problems with ticks coming into contact with mountain bikers, hikers and horseback riders. Each new loop will be identified with trail side posts and a colored marker. A large trail head sign that includes a map of the entire trail system with the new loops will be installed at the trail head parking area. The parking area will also be graveled and graded.

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

3. Project Summary

Task No. & Name	Task Description
1. Trail Clearing	Remove and clear vegetation obstructing trail
2. Mark Trail	Install trailside markers identifying main trail and other trail segments.
3. Improve parking areas	Cut back encroaching vegetation, add gravel and grade surface level.
4. Install trail head sign	Install new trail head sign (with map), highlighting the trail system.

4. Project Property Owner

This project is located on State of Maryland property, which is managed by the Department of Natural Resources, Maryland Forest Service (Project Sponsor).

5. Project length

The dirt trail is 11.5 miles long and 10 feet wide.

6. Prior Projects

RT07-41 *Tom Tyler Demonstration Forest & Nature Trail, $3,500 reimbursed for trail enhancement supplies & materials. Project completed.*
RT08-26 *WDF & CF Trail Enhancement Project, $28,000 reimbursed for labor used to maintain and enhance existing horseback trails. Project completed.*
RT09-25 *CF 2009 Green Hill Trail Enhancement Project, $26,052 reimbursed for labor used to maintain and enhance existing multi-use trails. Project completed.*
RT07-46 *Foster Trail Enhancement Project, $12,000 reimbursed for labor used to enhancement trail system. Project completed.*
RT10-31 *Milburn Landing, Dividing Creek & Whitesburg Trail Enhancement Project, $30,000 reimbursed for labor used to enhance existing trail system. Project completed.*
RT11-32 *UTV Trail Enhancement Project, $20,000 reimbursed for the purchase of a utility vehicle and attachments used for trail maintenance and construction. Project completed.*
RT11-34 *Marshyhope Trail Enhancement Project, $30,000 reimbursed for labor and supplies used to enhance existing trail system. Project completed.*
RT12-28 *Equestrian Trail Enhancement Project, $32,000 reimbursed for labor and supplies used to enhance existing trail system. Project completed.*
RT12-31 *PSF Mountain Bike Trail Enhancement, $30,000 reimbursed for labor and supplies used to enhance existing bike trail system. Project is complete.*
RT12-31 *Algonquin Cross County Trail Establishment, $25,000 awarded for labor and supplies to enhance existing trail and to create new connecting sections of trail. This project is complete and close out paperwork has been submitted.*
RT13-51 *Wicomico Demonstration Forest Trail Enhancement, $23,000 awarded for labor and supplies to enhance existing trail system. This project is complete and close out paperwork has been submitted.*
RT13-54 *Mattoponi Soft Launch, $17,000 awarded for labor and supplies*

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

used to establish a new water access point along the Pocomoke River. Project completed.
RT14-32 *Boom Arm Mower, $36,000 awarded for replacement of boom arm and mower head for a John Deere tractor used for trail maintenance. This project is 70% complete.*
RT14-41 *Milburn Landing Trail Enhancement, $36,000 awarded for labor and supplies to enhance existing trail system. This project is 60% complete.*
RT14-51 *Chadler Trail Enhancement, $36,000 awarded for labor and supplies to enhance existing trail system. This project is 20% complete.*
RT14-49 Trail Maps, $12,000 awarded for trail map design and printing. This project is 10% complete.

7. Project Work Plan

Task Number & Name	Start Date	Duration	Responsible Party	Justification
1. NEPA Approval	11/2015	7 months	Ken Jolly	Approval
2. PCA Codes Assigned	5/2016	1 month	Shenika Dyson	Tracking grant expenditures
3. Hire Contractual Staff	5/2016	4 months	Mike Schofield	Hiring process
4. Purchase Materials/Supplies	6/2016	2 months	Mike Schofield	Procurement process
5. Implement Trail Work	9/2016	12 months	Mike Schofield	Work through contract period
6. Grant Close Out	9/2017	1 month	Shenika Dyson	Documentation submitted to HQ

8. Project Budget

Task No. & Name	Requested Funds 80%	Sponsor Match 20%	Total Task Cost 100%
1. Seasonal labor @ $15/hour (1812 hrs)	$27,180	$5,436	$32,616
2. (1) Trail Head Sign @ $204 each	$204	$41	$245
3. (3) Loads of gravel/stone @ $200/load	$600	$120	$720
4. (120) Trail side posts @ $16 each	$1,920	$384	$2,304
5. (240) Trail post markers @ $0.40 each	$96	$19	$115
Total	$30,000	$6,000	$36,000

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

9. Matching Funds (20%)

Task	Source	Type (Cash or In-kind)	Description Including Hours and Rate	Amount
Supervision	MD Forest Service	In kind	27hrs. @ $30/hr.	$810
Labor	MD Forest Service	In kind	173hrs. @ $30/hr.	$5,190
Total				$6,000

10. Location Map

Please attach 8.5 x 11 map of project area showing as many details of the project as possible. The map must have a north arrow, scale and the title of the project. It should clearly show the project location, property lines, public facilities, state roads, and any other relevant information. **The Map must clearly identify the proposed project site with beginning and ending points.**

11. Submission

It is preferred that applications be submitted electronically to tmaxwell@sha.state.md.us by **2 p.m. on July 1, 2015.** Because our email server rejects most attachments larger than 6 MB, please use an FTP site or file sharing service, to transmit the application and any large attachments. Confirmation will be sent when the application is received. Please contact us at the email above with any questions about submissions or to discuss potential projects. The Recreational Trail Advisory Committee will meet to review projects in August. Awards will be announced in the October.

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- Mail a completed application to:

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  Maryland Scenic Byways / Recreational Trails Program
  Maryland State Highway Administration
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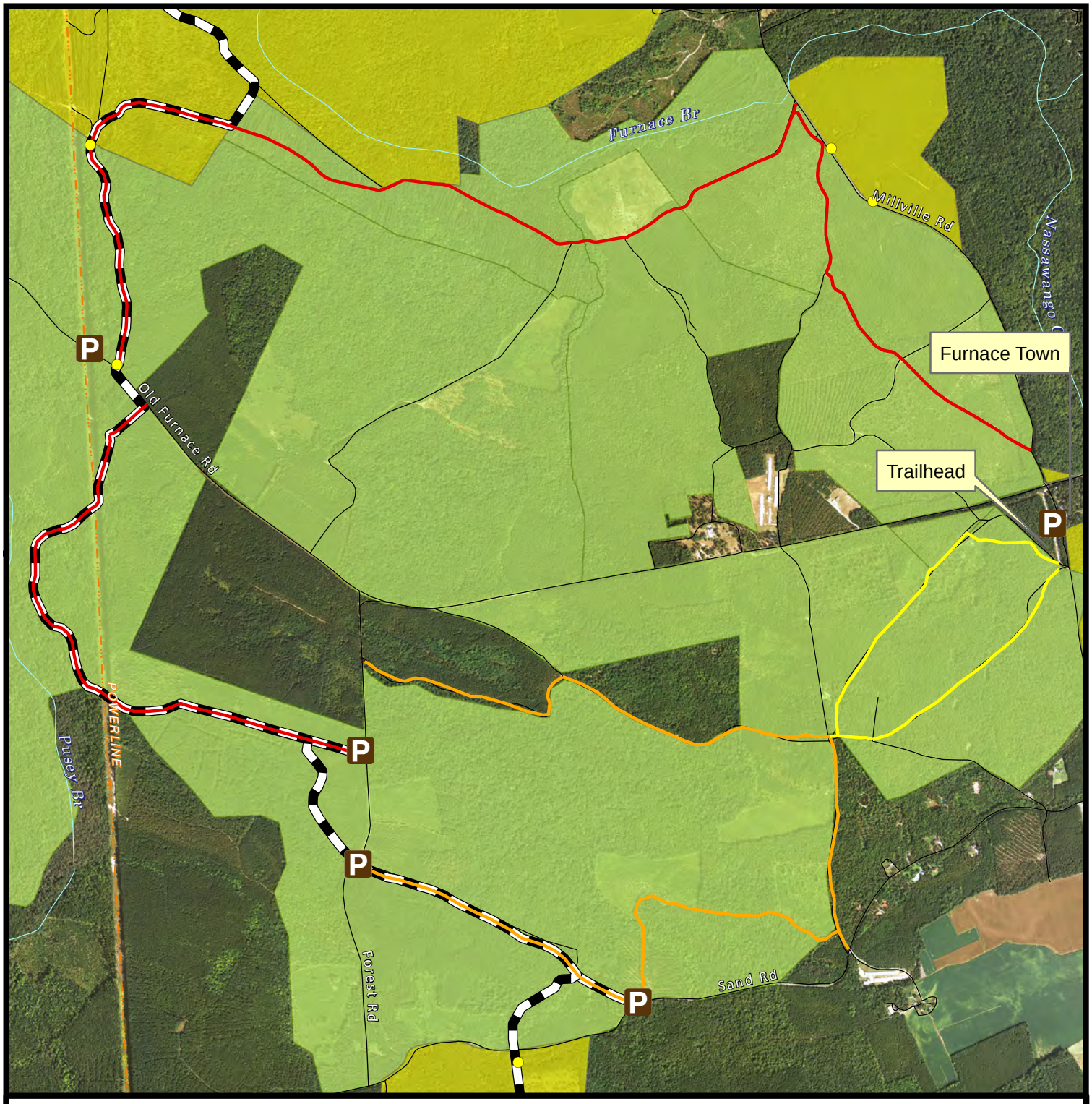

Legend

Furnace Loop Trails
- Yellow (1.8 mi)
- Orange (3.8 mi)
- Red (5.9 mi)

- Algonquin Cross County Trail
- Chesapeake Forest
- Pocomoke State Forest

1,320 0 1,320 2,640 Feet

This map is for planning purposes only.
This map is not a boundary survey

N W E S

Recreation Trail Grant Map
for Furnace Loop Trails Project

Scale: 1:24,000
Prepared by: DNR Forest Service
Date: 05/2015

MARYLAND DEPARTMENT OF NATURAL RESOURCES

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

Please email tmaxwell@sha.state.md.us with any questions about this application.

Project Title:

Chesapeake Forest – Green Hill Trail Enhancement Project

Trail Uses
Check all that apply

☒ Diverse ☐ Motorized Recreational ☒ Non-motorized Recreational ☐ Transportation Trail

Project Types
Check only one category

Construction
☐ Construction of new trail or facilities ☐ Maintenance of trail or facilities (with ground disturbance)

Non-Construction
☐ Purchase or lease of equipment ☒ Maintenance of trail or facilities (without ground disturbance)
☐ Acquisition of easements ☐ Interpretive/educational programs/facilities

Project Cost:

$30,000	**$6,000**	**$36,000**
RTP Funding Request	Matching Funds	Total Project Cost

Project Sponsor (Applicant)
Please provide contact information for the Project Sponsor Entity and the Project Manager.

Project Sponsor Entity	Department of Natural Resources	
Project Manager	Michael Schofield	
Title	Forest Manager	
Organization	Forest Service	
Address 1	6572 Snow Hill Road, Snow Hill, MD 21863	
Address 2		
Telephone	(410)632-3732	
Cell Phone	(410)713-5091	
Fax	(410)632-3730	
E-mail	mschofield@dnr.state.md.us	

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

1. Project Location

The project is located in Wicomico County, Maryland just 13.5 miles west from the city of Salisbury, Maryland (population 30,343).

2. Project Abstract

This project will….. enhance the existing 15.6 mile multi use trail system in the Chesapeake Forest.

Benefits the trail user by…..removing trail obstructions, clearly identifying the trail, trail head and parking areas.

This project will maintain the existing 15.6 miles of hiking and horseback riding trails within the 3,311 acre Green Hill, Chesapeake Forest tract (see attached map). The trail system is used frequently by hikers, bird watches, horseback riders and hunters. This site is one of the largest public hunting areas in western Wicomico County. The forest trails are located along old woods roads that require routine maintenance to provide users with a quality outdoor experience. Many sections of the trails are blocked by over hanging branches, brush, downed trees and vines that need to be cleared from the trails to make them passable.

The project will involve maintaining sections of the trail with a flail axe mower, removing overhanging vegetation and brush, downed trees will be removed with chainsaws. Tall grasses will be mowed on the trails to reduce problems with ticks coming into contact with mountain bikers, hikers and horseback riders. Areas of invasive plants found along the trails will be controlled with herbicides. One invasive species mile-a-minute (*Polygonum perfoliatum*) has been a problem on this tract and control efforts have been on-going. Parking areas at the 6 trail heads will be maintained for improved trail user access, by adding additional gravel where needed and clearing brush from around the edges, new trail head and parking signage will be added along with trailside markers.

3. Project Summary

Task No. & Name	Task Description
1. Trail Clearing	Remove and clear vegetation obstructing trail
2. Mark Trail	Install trailside markers identifying main trail and other trail segments.
3. Improve parking areas	Install parking signs, gravel and grade parking pads. Cut back encroaching vegetation
4. Install trail head sign	Install new trail head sign, highlighting the trail system.
5. Install gates	Install metal gates at each of the trail heads adjacent to parking areas.

4. Project Property Owner

This project is located on State of Maryland property, which is managed by the Department of Natural Resources, Maryland Forest Service (Project Sponsor).

5. Project length

The dirt trail is 15.6 miles long and 10 feet wide.

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

6. Prior Projects

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RT08-26 *WDF & CF Trail Enhancement Project, $28,000 reimbursed for labor used to maintain and enhance existing horseback trails. Project completed.*
RT09-25 *CF 2009 Green Hill Trail Enhancement Project, $26,052 reimbursed for labor used to maintain and enhance existing multi-use trails. Project completed.*
RT07-46 *Foster Trail Enhancement Project, $12,000 reimbursed for labor used to enhancement trail system. Project completed.*
RT10-31 *Milburn Landing, Dividing Creek & Whitesburg Trail Enhancement Project, $30,000 reimbursed for labor used to enhance existing trail system. Project completed.*
RT11-32 *UTV Trail Enhancement Project, $20,000 reimbursed for the purchase of a utility vehicle and attachments used for trail maintenance and construction. Project completed.*
RT11-34 *Marshyhope Trail Enhancement Project, $30,000 reimbursed for labor and supplies used to enhance existing trail system. Project completed.*
RT12-28 *Equestrian Trail Enhancement Project, $32,000 reimbursed for labor and supplies used to enhance existing trail system. Project completed.*
RT12-31 *PSF Mountain Bike Trail Enhancement, $30,000 reimbursed for labor and supplies used to enhance existing bike trail system. Project is complete.*
RT12-31 *Algonquin Cross County Trail Establishment, $25,000 awarded for labor and supplies to enhance existing trail and to create new connecting sections of trail. This project is complete and close out paperwork has been submitted.*
RT13-51 *Wicomico Demonstration Forest Trail Enhancement, $23,000 awarded for labor and supplies to enhance existing trail system. This project is complete and close out paperwork has been submitted.*
RT13-54 *Mattoponi Soft Launch, $17,000 awarded for labor and supplies used to establish a new water access point along the Pocomoke River. Project completed.*
RT14-32 *Boom Arm Mower, $36,000 awarded for replacement of boom arm and mower head for a John Deere tractor used for trail maintenance. This project is 70% complete.*
RT14-41 *Milburn Landing Trail Enhancement, $36,000 awarded for labor and supplies to enhance existing trail system. This project is 60% complete.*
RT14-51 *Chadler Trail Enhancement, $36,000 awarded for labor and supplies to enhance existing trail system. This project is 20% complete.*
RT14-49 Trail Maps, $12,000 awarded for trail map design and printing. This project is 10% complete.

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

7. Project Work Plan

Task Number & Name	Start Date	Duration	Responsible Party	Justification
1. NEPA Approval	11/2015	7 months	Ken Jolly	Approval
2. PCA Codes Assigned	5/2016	1 month	Shenika Dyson	Tracking grant expenditures
3. Hire Contractual Staff	5/2016	4 months	Mike Schofield	Hiring process
4. Purchase Materials/Supplies	6/2016	2 months	Mike Schofield	Procurement process
5. Implement Trail Work	9/2016	12 months	Mike Schofield	Work through contract period
6. Grant Close Out	9/2017	1 month	Shenika Dyson	Documentation submitted to HQ

8. Project Budget

Task No. & Name	Requested Funds 80%	Sponsor Match 20%	Total Task Cost 100%
1. Seasonal labor @ $15/hour (1562 hrs)	$23,430	$4,686	$28,116
2. (2) Trail Head Sign @ $200 each	$400	$80	$480
3. (10) Loads of gravel/stone @ $200/load	$2,000	$400	$2,400
4. (200) Trail side posts @ $16 each	$3,200	$640	$3,840
5. (400) Trail post markers @ $0.40 each	$160	$32	$192
6. (8) Metal Gates @ $100 each	$800	$160	$960
7. (8) Parking Signs @ $1.25 each	$10	$2	$12
Total	$30,000	$6,000	$36,000

9. Matching Funds (20%)

Task	Source	Type (Cash or In-kind)	Description Including Hours and Rate	Amount
Supervision	MD Forest Service	In kind	27hrs. @ $30/hr.	$810
Labor	MD Forest Service	In kind	173hrs. @ $30/hr.	$5,190
Total				$6,000

10. Location Map

Please attach 8.5 x 11 map of project area showing as many details of the project as possible. The map must have a north arrow, scale and the title of the project. It should clearly show the project location, property lines, public facilities, state roads, and any other relevant information. **The Map must clearly identify the proposed project site with beginning and ending points.**

FY 2016 RECREATIONAL TRAILS PROGRAM FUNDING APPLICATION

Maryland State Highway Administration / Office of Environmental Design
ATTN: Terry Maxwell
707 N. Calvert Street Baltimore, Maryland 21202 Phone: 410-545-8637

Application Submission Deadline: July 1, 2015

11. Submission

It is preferred that applications be submitted electronically to tmaxwell@sha.state.md.us by **2 p.m. on July 1, 2015.** Because our email server rejects most attachments larger than 6 MB, please use an FTP site or file sharing service, to transmit the application and any large attachments. Confirmation will be sent when the application is received. Please contact us at the email above with any questions about submissions or to discuss potential projects. The Recreational Trail Advisory Committee will meet to review projects in August. Awards will be announced in the October.

Options for Submission include:

Internet/E-mail (preferred)

- Complete the form on your computer and save the file on your computer.
- Email the file as an attachment to: Terry Maxwell, tmaxwell@sha.state.md.us
- Use an FTP site or file sharing service to transmit the application and any large attachments.

U.S. Mail

- Mail a completed application to:

  Terry Maxwell
  Maryland Scenic Byways / Recreational Trails Program
  Maryland State Highway Administration
  707 N. Calvert Street, MS C-303
  Baltimore, MD 21202

Legend

- Major
- Right-of-Way
- Forest Trail
- Forest Single-Track Path
- Chesapeake Forest

DNR Lands

- HCF
- State Park
- Wildlife Management Area
- Parking Areas

1,320 0 1,320 2,640 Feet

This map is for planning purposes only.
This map is not a boundary survey

N W E S

Recreation Trail Grant Map
for Green Hill Trails
Total Trail Distance: 15.6 miles

Scale: 1:24,000
Prepared by: DNR Forest Service
Date: 05/2015

MARYLAND DEPARTMENT OF NATURAL RESOURCES

APPENDIX B - SOIL SERIES MANAGEMENT GROUPS, ABBREVIATIONS, AND SYMBOLS

Soil Series	MG	Caroline	Dorchester	Somerset	Wicomico	Worcester
Acquango sand	4					AcB, AcC
Annemessex-Manokin complex	1			AoA, AoB		
Askecksy loamy sand	1	AsA			AsA	As
Askecksy-Urban land complex	1				AtA	
Beaches	-		Be	Be	Be	Be
Berryland mucky loamy sand	2				BhA	BhA
Bestpitch and Transquaking	5		BT			
Boxiron and Broadkill soils	1			BX		BX
Broadkill mucky silt loam	1					Br
Brockatonorton sand	3					BkA, BkB
Cedartown loamy sand	4	CdA, CdB			CdA	
Cedartown-Rosedale complex	4					CeA, CeB
Chicone mucky silt loam	5		Ch			Ch
Corsica and Fallsington soils	2			CRA		
Corsica mucky loam	1	CoA			CoA	
Corsica mucky loam, Carolina Bay	1	CrA				
Downer loamy sand	3		DnC			
Downer sandy loam	3		DoA, DoB	DoA, DoB		
Elkton loam	1		EkA			
Elkton mucky silt loam	1		EoA			
Elkton sandy loam	1					EkA
Elkton silt loam	1	EmA	EmA	EmA		EmA
Endoaquepts and Sulfaquepts	5			EQB	EQB	
Evesboro loamy sand	4					EvA, EvB, EvC
Evesboro sand	4	EwA, EwB	EwC, EwE		EwA, EwB, EwC	
Evesboro-Galestown complex	4			EzB		
Fallsington loam	2	FgA		FgA	FgA	
Fallsington sandy loam	2	FaA	FaA	FaA	FaA	FaA
Fallsinston-Glassboro complex	2			FhA		
Fort Mott loamy sand	3		FmA, FmB		FmA, FmB	FmA, FmB
Fort Mott, Evesboro, and Downer soils	3		FNE			
Fort Mott-Urban land complex	3				FuA, FuB	
Galestown loamy sand	4	GaA, GaB	GaA, GaB	GaB	GaA, GaB	GaA, GaB, GaC
Galestown and Rosedale soils	4	GAE				
Glassboro loam	2			GlA		
Hambrook loam	3	HcA	HcA, HcB	HcA		
Hambrook sandy loam	3	HbA, HbB, HbC		HbB	HbA, HbB	HbA, HbB
Hambrook-Sassafras complex	3					
Hammonton loamy sand	3			HmA		HmA, HmB
Hammonton sandy loam	3	HnA	HnA	HnA	HnA	
Hammonton-Fallsington-Corsica complex	2	HoB				
Hammonton-Glassboro complex	3			HgB		
Honga peat	5		Ho	Ho	Ho	
Hurlock loamy sand	2			HuA		HuA
Hurlock sandy loam	2	HvA	HvA	HvA	HvA	
Ingleside loamy sand	3	IeA, IeB, IeC			IeA, IeB	
Ingleside sandy loam	3	IgA, IgB, IgC	IgA, IgB	IgA, IgB		
Ingleside-Runclint complex	3			IkC		
Kentuck silt loam	5					KeA
Keyport fine sandy loam	3				KfA, KfB	
Keyport silt loam	3		KpA	KpA		
Klej loamy sand	2					KsA, KsB
Klej-Galloway complex	2	KgB	KgB	KgB	KgB	
Lenni loam	2	LgA			LgA	
Lenni sandy loam	2	LhA			LfA	
Longmarsh and Indiantown soils	5	LO		LO	LO	LO
Manahawkin muck	5	Ma		Ma	Ma	Ma
Manokin silt loam	3			MdA. MdB		
Matapeake fine sandy loam	3					MeA, MeB

Soil Series	MG	Caroline	Dorchester	Somerset	Wicomico	Worcester
Matapeake silt loam	3					MkA, MkB
Mattapex fine sandy loam	3		MpA		MpA	MpA, MpB
Mattapex silt loam	3	MtA, MtB	MtA, MtB		MtA, MtB	MtA, MtB
Miscellaneous water	-	M-W		M-W	M-W	
Mullica-Berryland complex	2			MuA	MuA	MuA
Nanticoke and Mannigton soils	5	NM	NM	NM	NM	NM
Nassawango fine sandy loam	3				NnA, NnB	NnA, NnB
Nassawango silt loam	3	NsA, NsB	NsA, NsB		NsA, NsB	NsA, NsB
Othello and Kentuck soils	1		OkA	OKA	OKA	
Othello silt loam	1		OtA	OtA	OtA	OtA
Othello silt loam, loamy substratum	1			OoA		
Othello-Fallsington complex	2			OvA		
Pepperbox-Rockawalkin complex	3				PrA, PrB	
Pone mucky loam	2		PmA			
Pone mucky sandy loam	2		PnA			
Puckum mucky peat	5	Pk	Pk	Pk	Pk	Pk
Purnell peat	5					Pu
Queponco loam	3			QbB		
Queponco silt loam	3			QeA, QeB		
Quindocqua silt loam	1			QuA		
Rockawalkin loamy sand	3	RkA			RkA, RkB	
Rockawalkin-Urban land complex	3				RnA, RnB	
Rosedale loamy sand	4	RoA, RoB			RoA	RoA, RoB
Runclint loamy sand	4				RuA, RuB	RuA, RuB
Runclint sand	4		RsA, RsB	RsB	RsA, RsB	
Runclint-Cedartown complex	4			RwB, RwC	RwA, RwB	
Runclint-Evesboro complex	4			RxB		
Runclint-Urban land complex	4				RzA, RzB	
Sassafras loam	3		SnA			
Sassafras sandy loam	3	SaA, SaB				SaA, SaB, SaC
Sunken mucky silt loam	5		SuA	SuA	SuA	SuA
Tangier mucky peat	5			Ta		
Transquaking and Mispillion soils	5	TP		TP	TP	TP
Udorthents	4	UbB, UfF, UoB	UzB	UbB, UfB, UfF, UgB, UoB, UwB	UbB, UfB, UoB	UzB
Unicorn-Sassafras complex	3					
Urban Land	-	Up			Up	UpB
Urban Land-Acquango complex	-					UcB
Urban Land-Askecksy complex	-					UmA
Urban Land-Brockatonorton complex	-					UnA
Urban Land-Evesboro complex	-				UrB	
Urban Land-Fort Mott complex	-				UsB	
Urban Land-Rockawalkin complex	-				UtB	
Urban Land-Runcline complex	-				UuB	
Urban Land-Udorthents complex	-				UwB	UwB
Water	-	W	W	W	W	W
Woodstown loam	3	WoA, WoB	WoA	WoA		
Woodstown sandy loam	3	WdA, WdB	WdA, WdB	WdA, WdB	WdA	WdA, WdB
Woodstown-Glassboro complex	3			WpA		
Zekiah sandy loam	5	Za	Za			Za
Zekiah silt loam	5				Zk	Zk

CHESAPEAKE FOREST/POCOMOKE STATE FOREST: SOIL MANAGEMENT GROUPS

This is a forest management grouping designed specifically for the Chesapeake Forest and Pocomoke State Forest Sustainable Forest Management Plans, based on the soil series descriptions contained in the six county surveys.

Management Group 1 – Poorly and very poorly drained medium textured soils with heavy subsoils.

Soils:
- Annemessex-Manokin complex
- Askecksy loamy sand
- Corsica mucky loam
- Corsica mucky loam, Carolina Bay
- Crosiadore silt loam
- Elkton loam
- Elkton mucky silt loam
- Elkton sandy loam
- Elkton silt loam
- Othello and Kentuck soils
- Othello silt loam
- Othello silt loam, loamy substratum
- Quindocqua silt loam

Description: These are poor and very poorly drained, medium textured soils that have a fine-textured subsoil. They are generally found in broad upland flats, depressions, and swales. Slopes are 0 to 2%. Ponding may occur after heavy rains, and high water table may limit access from December through May. These soils may have seasonal limitations for wetness, but the firm subsoils may allow mechanical operations, particularly with low-impact equipment, that allows them to be managed with intensive forestry methods.

Management Group 2 – Poorly and very poorly drained loam and sandy loam soils with sandy and medium textured subsoils.

Soils:
- Berryland mucky loamy sand
- Corsica and Fallsington soils
- Fallsington loam and sandy loam
- Fallsington-Glassboro complex
- Glassboro loam
- Hurlock loamy sand and sandy loam
- Klej loamy sand
- Klej-Galloway complex
- Klej-Hammonton complex
- Lenni loam and sandy loam
- Mullica-Berryland complex
- Othello-Fallsington complex
- Pone mucky loam and mucky sandy loam

Description: Medium and sandy-textured, poorly and very poorly drained soils on upland flats. Small areas in depressions will pond in very wet periods. Many of these soils lack firm subsoils, and when saturated may be very subject to soil rutting by equipment. This leads to shorter-season access, which may limit their use. With appropriate seasonal scheduling, these soils are suited for intensive forest management.

Management Group 3 – Well drained and moderately well drained sandy and loamy soils that formed in sandy materials and have sandy loam to silty or sandy clay subsoils.

Soils:
- Downer loamy sand and sandy loam
- Fort Mott loamy sand
- Hambrook loam and sandy loam
- Hambrook-Sassafras complex
- Hammonton loamy sand and sandy loam
- Hammonton-Glassboro complex
- Ingleside loamy sand and sandy loam
- Ingleside-Runclint complex
- Keyport fine sandy loam and silt loam
- Manokin silt loam
- Matapeake fine sandy loam and silt loam
- Mattapex fine sandy loam and silt loam
- Nassawango fine sandy loam and silt loam
- Pepperbox-Rockawalkin complex
- Queponco loam and silt loam
- Rockawalkin loamy sand
- Sassafras sandy loam
- Woodstown sandy loam
- Woodstown-Glassboro complex

Description: Well drained soils that are generally better-suited to pine than to hardwoods. These may occur on slopes of 0 to 10 percent. On the steeper slopes erosion potential needs to be addressed. Rutting and soil damage by machine operations

are minor problems and most sites will have good access and operability most of the year. These are the best suited soils for intensive forest management.

Management Group 4 – Deep, sandy soils that are well to excessively well drained.

Soils:
- Cedartown loamy sand
- Evesboro loamy sand and sand
- Evesboro-Galestown complex
- Galestown loamy sand
- Galestown and Rosedale soils
- Rosedale loamy sand
- Runclint loamy sand and sand
- Runclint-Cedartown complex
- Runclint-Evesboro complex
- Udorthents

Description: These sandy soils have few operating limitations due to soil wetness, and can provide sites for mechanical activities during wet seasons. Productivity is low, and some sites may be occupied by Virginia or shortleaf pine. Some may occur in a landscape pattern of sand ridges interspersed with low wet soils or Delmarva Bays, and provide an important habitat type, particularly for herpivores and invertebrates. Some may have slopes of up to 10-15%, which may limit management. Udorthents are soils that have been mechanically altered and may occur mainly as borrow pits, landfills, or other re-worked areas. Intensive forest management is probably limited on many of these soils.

Management Group 5 – Low-elevation, poorly and very poorly drained soils that formed in organic materials. They may lie in flood plains, freshwater wetlands, or areas that can be affected by tidal flooding.

Soils:
- Chicone mucky silt loam
- Honga peat
- Johnston loam
- Kentuck mucky silt loam
- Kentuck silt loam
- Longmarsh and Indiantown soils
- Manahawkin muck
- Nanticoke and Mannington soils
- Nanticoke silt loam
- Puckum mucky peat
- Sunken mucky silt loam
- Tangier mucky peat
- Transquaking and Mispillion soils
- Zekiah sandy loam and silt loam

Description: These poorly drained soils occupy flood plains and both fresh and brackish marshes. Some lie at elevations where flooding by salt water during high tides or storms is a possibility and trees may be affected by salt spray. The sites are marginal in terms of timber or pulpwood productivity, and access is often very restricted. Many of these areas will be riparian forests and other water-related areas that should be managed primarily for water quality and wildlife purposes.

Other types without Management Groups – Other map units that are too small, are comprised of minor soil types, or are not suitable for forest management.

Soils:
- Beaches
- Miscellaneous water
- Urban Land
- Water

APPENDIX C. SILVILCULTURAL ACTIVITY SUMMARIES

The following summary compares the work scheduled in each annual work plan against the amount of work implemented/completed in the field. Annual Work Plans (AWP's) are developed 18 months in advance of any work being implemented in the field to allow time for an internal departmental and public review process. Activities listed in the AWP's are many times not accomplished due to several unforeseen factors. Rainfall has the greatest effect on limiting the implementation of forestry work on Delmarva each year with wet soil conditions frequently restricting access to approved harvest sites with heavy logging equipment. Another factor that affects commercial forestry practices is the limited number of trained logging crews available to carry out thinning operations. Other types of planned practices, such as site preparation, tree planting, herbicide applications, and fertilization are occasionally not implemented due to changes in the field since the plan was written. An example would be a harvested area that regenerated itself naturally (won't require planting) and experienced little or no competition with undesirable species (won't require herbicide application).

Chesapeake Forest Silvicultural Activity Summary By Annual Work Plan

Workplan Activity	2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		10 Year Total	
	Plan Acres	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*
Final Harvests	209	202	579	449	244	35	294	47	152		239	256	180	94	81	84	96	67	52	12	***2,126***	***1,247***
Various Select Harvests &/or other treatments			135		52								139	121	22	31					***349***	***152***
First Thinning	1,011	478	1,655	431	1,831	385	1,847	986	1,602	387	924	956	970	729	117	505	451	573	2,036	601	***12,444***	***6,031***
Second Thinning	1,382	1,058	579	298	257	30	257	151	113	65	86	299	106	88	55	38	350	74	331	49	***3,515***	***2150***
Site Preparation	593	32	135	68	167		106														***1,001***	***100***
Tree Planting	593	32	135	68	167				42			11		14				199		40	***937***	***364***
Regeneration Release	77	29	191	68	199																***467***	***97***
Grass Control									42						25						***67***	***-***
Mid Rotation Release			29		24		160	48													***213***	***48***
Fertilization							71														***71***	***-***
Natural Regeneration		149				87						62		181				84			***-***	***563***
Pre Commercial Thinning	24		388	178	573	298	573	197	139		81	94	10		186	125	49	49	76	81	***2,099***	***1,021***
Prescribed Fire		217	268	440	47	553	202		76			29		31		48		63		427	***593***	***1,808***
Boundary Maintenance		2,150		4,552		2,108		12,608		10,945		6,162		3,644						3,400	***-***	***45,569***
Restoration Projects	362		334		26	362					130	130	143	143	328	41		20		168	***1,323***	***864***
Watershed Imp. Projects	15		50		20	50	351	351													***436***	***401***
Harvests within HCVF areas*			2,815	695	1,384	447	1,782	883	1,651	454	1,235	599	566	321	391	380	335	509	961	659	***11,120***	***4,946***

* High Conservation Value Forests (HCVF) were initially identified and designated in 2007 on the Chesapeake Forest. The current designation includes Ecologically Significant Areas (ESA) Zone 1 & 2, Core Forest Interior Dwelling Bird (FIDS) Habitat, Core Delmarva Fox Squirrel (DFS) Habitat, and Riparian Forested Buffers. Management activities within the HCVF have been designed to maintain or enhance the attributes that define such forests. Activities thus far have included the conversion of loblolly pine plantations to natural mixed forest conditions for DFS habitat or the removal of woody plant material from xeric dune and Carolina bay communities (ESA Zone 1 & 2).

The following summary compares the work scheduled in each annual work plan against the amount of work implemented/completed in the field. Annual Work Plans (AWP's) are developed 18 months in advance of any work being implemented in the field to allow time for an internal departmental and public review process. Activities listed in the AWP's are many times not accomplished due to several unforeseen factors. Rainfall has the greatest effect on limiting the implementation of forestry work on Delmarva each year with wet soil conditions frequently restricting access to approved harvest sites with heavy logging equipment. Another factor that affects commercial forestry practices is the limited number of trained logging crews available to carry out thinning operations. Other types of planned practices, such as site preparation, tree planting, herbicide applications, and fertilization are occasionally not implemented due to changes in the field since the plan was written. An example would be a harvested area that regenerated itself naturally (won't require planting) and experienced little or no competition with undesirable species (won't require herbicide application).

Pocomoke State Forest Silvicultural Activity Summary By Annual Work Plan

Workplan Activity	2007		2008		2009		2010		2011		2012		2013		2014		2015		9 Year Total	
	Plan Acres	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*	*Plan Acres*	*Acres Comp.*
Final Harvests	90	68	115	62	51		105	71	112	24	33	11	149	27	31	23		25	***687***	***311***
Various Select Harvests &/or other treatments					64		15	17	19		42		38	47	85		226		***490***	***64***
First Thinning	127		57		100				305		120	114	623	248	586	212	75	345	***1,993***	***918***
Second Thinning												26	120						***120***	***26***
Site Preparation																			-	-
Tree Planting		48								15						23		4	-	***90***
Regeneration Release																			-	-
Grass Control																			-	-
Mid Rotation Release																			-	-
Fertilization																			-	-
Natural Regeneration		14		77		44		62		43		46		12		74		20	-	***392***
Pre Commercial Thinning	36	69	21	20	20		21		59	59			18	18	45	45			***219***	***210***
Prescribed Fire										35		22							-	***57***
Boundary Maintenance				2,606				280						100		634		18	-	***3,638***
Restoration Projects													12						***12***	-
Watershed Imp. Projects																			-	-
Harvests within HCVF areas*							53	42	176	23	86	51	181	96	114	177	27	74	***636***	***462***

* High Conservation Value Forests (HCVF) were initially identified and designated in 2009 on the Pocomoke State Forest. The current designation includes Ecologically Significant Areas (ESA) Zone 1 & 2, Core Forest Interior Dwelling Bird (FIDS) Habitat, Core Delmarva Fox Squirrel (DFS) Habitat, and Riparian Forested Buffers. Management activities within the HCVF have been designed to maintain or enhance the attributes that define such forests. Activities thus far have included the conversion of loblolly pine plantations to natural mixed forest conditions for DFS habitat or the removal of woody plant material from xeric dune and Carolina bay communities (ESA Zone 1 & 2).

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