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State Forester

COMMONWEALTH of VIRGINIA

**Department of Forestry**

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\*Date

Tract Number: \*

\*

Dear \*:

Please find within your *Virginia Forest Stewardship Plan* for your property located in \* County. It was my pleasure to prepare this plan for you knowing that you have a true interest in the good stewardship and active management of your natural resources.

In this plan, there are two basic components. The first is a personalized management plan based upon your objectives for managing your property. The second part is an extensive appendix containing important information to help you understand the plan’s recommendations and make your future management decisions. All of the recommendations within this plan are for your consideration, but I believe that they will help you achieve your long- and short-term goals for your property.

The first step you should take in managing your forest resources is to \*.

I trust that you will find this plan to be informative and useful as you actively manage your natural resources. If you have any questions or comments please feel free to contact me at any time.

Sincerely,

\*Area Forester’s Name

\*Office Address

\*City, State ZIP

(\*) \* Phone

*\*user.name@dof.virginia.gov*

# Virginia Forest Stewardship

# Management Plan

## About This Plan

This Forest Stewardship Plan was developed to help guide you in the active management of the natural resources on your property. The plan is based upon the objectives you identified as being important to you. All of the management recommendations are for your consideration. The stand data table figures in this plan are for planning purposes ONLY and not intended for making economic decisions where more detailed information would be required.

## Primary Goals That You Identified For Managing The Property

1. \*
2. \*
3. \*
4. \*
5. \*

## Introduction

This multiple-use forest management plan covers the examination of approximately \* acres of forestland in \* County, Virginia. The management recommendations, given on the following pages, were developed for each specific parcel on your property. Boundaries and acres are only estimates derived from aerial photographs. The tract map is located in the plastic folder at the front of this book, allowing you to see the map as you read through your plan.

By having this plan developed, your property is now eligible to become a certified Tree Farm through the American Forest Foundation’s Tree Farm System. It also qualifies as a Natural Resource and Conservation Service Conservation Activity Plan #106. Contact your local VDOF Forester to learn more about the benefits of these two programs.

## Tract Location

\*

## Property Overview

\*

## Parcel \*

Descriptions and Recommendations: \*(short recommendation for parcel)

Acres: \*

Forest Type: \*

Species Present: \*

Age: \*

Stand History: \*

Size: \*

Tree Quality: \*

Stocking/Density: \*

Growth Rate & Vigor: \*

Site Quality & Soils: \*

Aspect & Topography: \*

Water Resources: \*

Invasive Species: \*

Wildlife Habitat: \*

Recreation/Aesthetics: \*

Cultural Resources: \*

T&E Species Present: \*

Fire Risk: \*

Unique Natural Features: \*

Recommendations: \*

## Parcel \*

Descriptions and Recommendations: \*(short recommendation for parcel)

Acres: \*

Forest Type: \*

Species Present: \*

Age: \*

Stand History: \*

Size: \*

Tree Quality: \*

Stocking/Density: \*

Growth Rate & Vigor: \*

Site Quality & Soils: \*

Aspect & Topography: \*

Water Resources: \*

Invasive Species: \*

Wildlife Habitat: \*

Recreation/Aesthetics: \*

Cultural Resources: \*

T&E Species Present: \*

Fire Risk: \*

Unique Natural Features: \*

Recommendations: \*

## Parcel \*

Descriptions and Recommendations: \*(short recommendation for parcel)

Acres: \*

Forest Type: \*

Species Present: \*

Age: \*

Stand History: \*

Size: \*

Tree Quality: \*

Stocking/Density: \*

Growth Rate & Vigor: \*

Site Quality & Soils: \*

Aspect & Topography: \*

Water Resources: \*

Invasive Species: \*

Wildlife Habitat: \*

Recreation/Aesthetics: \*

Cultural Resources: \*

T&E Species Present: \*

Fire Risk: \*

Unique Natural Features: \*

Recommendations: \*

## Parcel \*

Descriptions and Recommendations: \*(short recommendation for parcel)

Acres: \*

Forest Type: \*

Species Present: \*

Age: \*

Stand History: \*

Size: \*

Tree Quality: \*

Stocking/Density: \*

Growth Rate & Vigor: \*

Site Quality & Soils: \*

Aspect & Topography: \*

Water Resources: \*

Invasive Species: \*

Wildlife Habitat: \*

Recreation/Aesthetics: \*

Cultural Resources: \*

T&E Species Present: \*

Fire Risk: \*

Unique Natural Features: \*

Recommendations: \*

## Cost-Share Assistance Programs

Cost-share assistance programs may be available to help defray reforestation project costs. Programs generally may pay between 35 percent and 75 percent of the costs involved in certain projects. Funds are available on a first-come, first-served basis and must be approved prior to the start of any management work. Please check with your local Virginia Department of Forestry representative for availability of programs and funds.

## Cultural and Historic Resources

Cultural resourcesrefer to landscapes, structures, archeological artifacts and vegetation that represent a culture or society of historic value. Federal and state laws protect some archeological, cultural and historic sites from disturbances, destruction or removal. It is critical to understand where such sites may be located prior to ground-disturbing forest management activities.

Historic and cultural resources are a vital link to past land-use practices in Virginia. \*[While no sites were identified during my visits, old records for the area may exist.] The Department of Historic Resources offers programs which survey, catalog and encourage the preservation of historic resources. This Department maintains records of historic sites and these records are available to the general public. More information can be found at [www.dhr.virginia.gov](http://www.dhr.virginia.gov) or by calling their office at (804) 367-2323.

## Threatened or Endangered Species

\*[No endangered or protected species were observed on the property. No such species are known to exist that would be found on your property.] Information in this plan concerning the presence of Threatened and Endangered (T&E) species has been determined through observation and/or review of T&E species maps. This information does not substitute for a through exam completed by trained T&E specialists. For more information regarding threatened and endangered species or any regulations involved with them, please contact your local Virginia Department of Game and Inland Fisheries office or the Department of Conservation and Recreation, Natural Heritage office.

## Forest Health and Protection

A healthy forest is a forest that possesses the ability to sustain the unique species composition and processes that exist within it. Active management of the forest helps to maintain and improve its productive capacity, taking into account all the factors that influence the resource elements addressed in the Forest Stewardship Plan. Silviculture harvest practices and the use of prescribed fire as a tool can reduce risk from wildfire, pests and invasive species, and ensure long-term forest health and vigor. Forest health protection issues are often directly related to the active management of insects and diseases, invasive plants and wildfire. Annual inspections for signs of insects, diseases or invasive plant infestations should be completed by the landowner.

\*[No disease or insect problems were identified on the property.] Continued monitoring is the best preventative measure to ensuring forest health. If any unusual problems are found, please contact the Virginia Department of Forestry for an examination.

## Fire

Prescribed fire, also known as “controlled burn,” refers to the controlled application of fire by a team of fire experts under specified weather conditions that help restore health to fire-adapted environments to obtain specific management objectives. Prescribed burning is a critical management tool that enhances and benefits forests, grasslands and wildlife habitats. Prescribed fire is an effective tool in site preparing harvested areas for replanting tree seedlings as well as reducing excessive amounts of hazardous fuel build up and catastrophic damage of wildfire on our lands and surrounding communities. Prescribed fire is one of the most effective tools we have in preventing the outbreak and spread of wildfires.

Protection of your property from wildfire is essential. Wildfire rapidly destroys valuable timber, wildlife and property. From February 15 through April 30, open air fires are not permitted within 300 feet of woodland, brushland or field containing dry grass or other flammable material between midnight and 4:00 p.m. The number one cause of wildland fire in Virginia is debris burning. In other words, MOST of the fires that occur could have been prevented. In the case of an emergency, please report all woods fires to your local County Fire Dispatch Center at 9-1-1. If you feel that the situation does not warrant a fire department response, you may call a Virginia Department of Forestry representative at \*.

## Carbon Cycle

All forest plants and soils “store” carbon, so active forest management influences the natural cycles of that storage in both living and dead plant material. The removal of carbon from the atmosphere is the process called carbon sequestration. Carbon sequestration is the process by which atmospheric carbon dioxide is consumed by trees, grasses and other plants through photosynthesis and stored as carbon in biomass (trunks, branches, foliage and roots) and soils. Sustainable forestry practices can increase the ability of forests to sequester atmospheric carbon while enhancing other ecosystem services, such as improved soil and water quality. Planting new trees and improving forest health through thinning and prescribed burning are some of the ways to increase forest carbon in the long run. Harvesting and regenerating forests can also result in net carbon sequestration in wood products and new forest growth.

## Wetlands

Wetlands include areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances, do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands are also highly diverse and productive ecosystems with emphasis on supporting timber production, water quality protection, wildlife habitat and more. It is important for you to be aware of and understand the laws and regulations related to forestry practices before engaging in wetland management activities on your land. Chapter 9 of the publication “Virginia’s Forestry Best Management Practices for Water Quality Technical Manual, 2011” offers many of the guidelines for forestry activities within a wetland. The publication can be found on the web at: <http://www.dof.virginia.gov/print/water/BMP/Technical/BMP-Technical-Guide.pdf>.
Your local Virginia Department of Forestry forester can provide information on forestry practices permitted in wetlands.

## Biological Diversity

Biodiversity is the variety of life (including diversity of species, genetic diversity and diversity of ecosystems) and the processes that support it. Landowners can contribute to the conservationof biodiversity by providing diverse habitats. It is important to select management options that offer the greatest opportunities for promoting wildlife habitats and conserving biodiversity while fulfilling other land management objectives. Some of these options include, but are not limited to, the conservation of wildlife habitats and biodiversity by:

1. Managing stand-level habitat features.
2. Promoting aquaticand riparian areas.
3. Managing landscape features.
4. Conserving rare species and communities.
5. Protecting special features and sites.

## Agroforestry/Silvopasture

**Agroforestry** intentionally combines agriculture and forestry to create integrated and sustainable land-use systems. Agroforestry takes advantage of the interactive benefits from combining trees and shrubs with crops and/or livestock. In the United States, agroforestry is commonly divided into five main practices: Windbreaks, Alley Cropping, Silvopasture, Riparian Forest Buffers and Forest Farming.

**Silvopasture** combines trees with forage and livestock production. The trees are managed for high-value saw logs while providing shade and shelter for livestock and forage, reducing stress and sometimes increasing forage production. Silvopasture is increasingly popular in the southeastern region of the United States as a way to supplement timber income on small pine plantations and some hardwood stands. However, there can be problems with combining the two management schemes if it is not done correctly or actively managed. This management system requires active rotational grazing to avoid damage to the standing trees and allowing the forage to recover. Before any new silvopasture system is established, you should thoroughly explore the associated economic and environmental considerations along with local land use, zoning, cost-share programs and tax regulations.

## Forests of Recognized Importance (FORI)

Forests of recognized importance (FORI) represent globally, regionally and nationally significant large landscape areas of exceptional ecological, social, cultural or biological values. These forests are evaluated at the landscape level, rather than the stand level and are recognized for a combination of unique values, rather than a single attribute. FORIs may include but are not limited to landscapes with exceptionally high concentrations of one or more of the following:

* protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes
* areas containing endemic species and critical habitats of multiple threatened or endangered plant and animal species, as identified under the Endangered Species Act (ESA) or other recognized listings
* recognized large-scale cultural or archeological sites including sites of human habitation, cities, burial grounds and in situ artifacts
* areas containing identified and protected water resources upon which large metropolitan populations are dependent
* areas containing identified unique or geologic features including geysers, waterfalls, lava beds, caves or craters

In the United States, because of their significance, FORIs have generally been identified and protected by federal or state governments or are under conservation easement by an environmental nonprofit organization. There is, at this time, no state or federal agency that regulates FORIs on private forestlands in the United States. Several conservation organizations have identified areas that they believe are of exceptional status yet there remains no single central clearinghouse of information regarding such forested landscapes.

In an effort to support and facilitate identification of these resources, American Forest Foundation (AFF) developed the Forests of Recognized Importance Resource as a reference for landowners and qualified natural resource professionals. This resource is available at MyLandPlan.org: [https://mylandplan.org/content/forests-recognized-importance-fori](https://mylandplan.org/content/forests-recognized-importance-fori%20)

Due to the small scale and low intensity of family forest operations, informal assessment for the occurrence of FORIs through consultation with experts or review of available and accessible information is appropriate. For family landowners, a more likely scenario is that their property is adjacent to a state or federally protected area and identified as a FORI at a landscape scale. Landowners should consider the impact to a neighboring FORI and opportunities to support consideration of specific values or attributes when planning and implementing activities on their forest property. Given the size and scale of family ownerships eligible for ATFS certification, landowners may be limited in their abilities to significantly impact FORI presence and quality through management at the small scale. *(American Forest Foundation - Standards of Sustainability)*

Places that combine and contain these features are rare, so it’s especially important to protect them. *(American Forest Foundation)*

## Integrated Pest Management

A pest control strategy may use a variety of complementary strategies including mechanical devices, physical devices, genetic, biological or cultural management and chemical management. *(U.S. EPA)*

Integrated Pest Management (IPM) combines several appropriate pest control tactics into a single plan to reduce pests and their damage to an acceptable level. Using many different tactics to control a pest problem causes the least disruption to the living organisms and non-living surroundings at the treatment site. Relying only on pesticides for pest control can cause pests to develop resistance to pesticides, can cause outbreaks of other pests, and can harm surfaces and non-target organisms. With some types of pests, using only pesticides achieves very poor control.

To solve pest problems, first:

* Identify the pest or pests and determine whether control is warranted for each,
* Determine pest control goals,
* Know what control tactics are available,
* Evaluate the benefits and risks of each tactic or combination of tactics,
* Choose the most effective strategy that causes the least harm to people and the environment,
* Use each tactic in the strategy correctly, and
* Observe local, state, and Federal regulations that apply to the situation.

The best strategy for each situation depends on the pest and the control needed.

(Michael J. Weaver, Patricia A. Hipkins, Virginia Tech Pesticides Program, 2013)

## Legacy Planning

**YOUR LAND LEGACY**

Owning forestland is a privilege. Whether you are a first generation owner or part of a long line of family owners, your decisions have lasting impacts. Perhaps the greatest opportunity you have to impact the future is by answering this question; “What will happen to this land after my tenure?” Will it become one of the thousands of properties sold each year and subsequently developed, never to return to woodland, or will it remain intact, in forest and family owned?

Most landowners desire to pass their land forward to the next generation of family members, yet few take the next steps to insure that exchange will happen. The plan you now hold helps to guide your management decisions to reach certain property management goals. Likewise, a legacy, or succession plan helps to guide you and your family along a path to successfully transferring not only land, but also values & ethics, to your next generation.

Do you need a legacy plan? Consider these questions:

1. Do you know what you want to have happen to you land?
2. Are the people who need to know this answer aware of your desires?
3. Do you know what other members of the family want to have happen?
4. Is there strong agreement within the family on these matters?
5. Have you considered various ownership tools like LLC’s & Trusts?

If you answered “NO” to any of these questions, it may be worthwhile to learn more about this topic. Many estate planning resources exist both in print and online.

A good place to start for Virginia landowners is this following website <http://www.ext.vt.edu/topics/environment-resources/legacy-planning/index.html>. On this website is a list of resources that have been critically reviewed for accuracy by VDOF, VT and VCE. For printed material, contact the Generation NEXT program coordinator at (540)231-6391 or Virginia Department of Forestry at (434)220-9182.

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| 10-YEAR RECOMMENDED SCHEDULE OF MANAGEMENT ACTIVITIES |
| Year | Parcel | Activity | \*Possible Cost Share | Future Stand Conditions |
| Year | Stocking | Species |
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| This schedule may need to be adjusted depending on financial needs, timber markets, timing of actual harvest and availability of contractors. |

\*Cost-share program eligibility requirements vary between the programs and funding may not be available. Contact your local VDOF forester for up-to-date information about the various programs.

RT – Reforestation of Timberlands Program EQIP – Environmental Quality Incentives Program CRP – Conservation Reserve Program

WHIP – Wildlife Habitat Incentives Program AgBMP – Agricultural Best Management Practices Program CREP – Conservation Reserve Enhancement Program

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| STAND DATA SUMMARY |
| Parcel | Forest Type | Acres | Year Estab. | Age | Site Index | Avg. DBH | Stocking/ Density | Stand Quality | Annual Growth | Other Important Stand Attributes (nat. regen., invasive plants, etc.) |
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| **Parcel:** Identifying letter or number for each parcel**Forest Type:** **Pine** – by primary species **Pine/Hardwood** – by primary species or major species group **Upland Hardwood** – by pure species or major species group **Bottomland Hardwood** – by pure species or major species group | **Site Index:** For dominant species present, indicate base age**Stocking/Density:** Basal area or trees per acre**Other Important Stand Attributes:** Is natural regeneration present? Are there invasive plant species present?  (species and level of presence – heavy, moderate, low) |