2018-20 Strategic Plan

Department of Forestry [411]

Mission

The mission of the Department of Forestry is to protect and develop healthy, sustainable forest resources for Virginians.

Vision

The Virginia Department of Forestry (VDOF) envisions a healthy, abundant forest resource providing economic and environmental benefits to the Commonwealth on a sustained basis. We see a resource whose scenic beauty enhances natural surroundings and whose protected environment supports clean water and wildlife. We further see a diverse forest resource as a part of natural ecosystems.

We envision the economic benefits of forest industry to be in balance with the environmental values of the resource.

We envision the Department as the most effective forestry agency in the nation and as a leader in managing and protecting the resource. We see an agency built on solid technology backed by strong ethics, one that is able to stay ahead of change and is quick to respond to citizens' needs, and one that is a leader in providing forest resource information. We see the Department responding to its employees' needs through leadership characterized by open communication.

We envision a focused, well-trained, creative workforce that is adaptive to change and that has the time and tools to provide exceptional forestry services to landowners, citizens and organizations. We see employees who are knowledgeable, motivated, proactive, and enabled to make decisions. Finally, we envision a workforce whose professional, unbiased recommendations positively impact an informed public and whose efforts result in complete customer satisfaction.

Values

In working with our customers we believe in:

- Exceeding customer expectations by delivering quality products and services in a responsive, professional manner.
- Treating customers courteously, honestly and respectfully.
- Actively listening, appreciating, understanding and responding to customer needs.
- Being trustworthy professionals who seek to ensure the integrity of the forest resource.

In working together, we believe in:

- Providing a well-trained, well-equipped, technologically-advanced and responsive workforce.
- Communicating in an open, honest, effective manner.
- Being helpful and supportive to one another, demonstrating the spirit of cooperation, teamwork and mutual trust and respect for each other.
- Providing a working environment that fosters quality and creativity, rewards team performance, and is challenging and enjoyable.
- Clearly defining, communicating and understanding our vision, goals, objectives, strategies, roles and responsibilities.

Finance

Financial Overview

The Department of Forestry has a budget for Fiscal Year 2020 of \$34 million. Approximately 56 percent of our funding is from the general fund, and the remaining 44 percent is from special revenue funds, trust funds and federal grant funds. This funding supports 230 agency personnel deployed throughout Virginia to carry-out the agency's many responsibilities. These responsibilities include: protecting the forest from wildfire and assisting in disaster response, assisting forest landowners in forest management, ensuring a healthy and robust forest resource, monitoring every timber harvest to protect water quality, encouraging forestland conservation, promoting Virginia forest products throughout the world, and providing research to support Virginia's forests.

Special revenue funds are generated through the sale of tree seedlings, timber, fire suppression services, professional forestry services and forest products taxes. More than half of the special revenue funds come from two sources: VDOF nursery seedling sales and the forest products tax. Sixty percent of agency funding supports staff salary and personal service expenses, the majority of which are full-time salaried employees. The agency is also awarded federal grant funds to carry out specific programming in support of forest management efforts. A portion of these funds are used to support staff directly involved in managing the programs supported by the grant. We have seen a steady reduction of these funds over the past few years. This has caused us to shift staff funding from federal grant funds to general funds adding additional pressure on our limited general funds.

VDOF staff are assigned to every locality in Virginia to carry out and support agency programs and responsibilities. Agency programming is administered through three geographic regions. Each region is a "one-stop shop" for agency customers, providing access to all agency programs and services.

The agency has been challenged to maintain adequate funding to be able to fully fund staff and maintain the support infrastructure necessary to

be able to meet our core responsibilities. Currently, the agency relies on vacancy savings to balance our budget. Vacated positions are left unfilled to save funding needed to balance the budget. Maintenance and upgrades to the agency's core information management system, IFRIS, are sporadic due to lack of a dedicated funding source for this critical business application. IFRIS records and maintains data on all agency activities, such as staff time, forest mapping, landowner reports and fire tracking information. The IFRIS system is critical to our ability to manage, report on, and direct staff and agency resources.

Current fiscal challenges can be traced back to general fund budget cuts during the 2008 and subsequent recessions that were never fully restored as well as a reduction in federal grant funding during this period. On the positive side, the recently acquired Master Equipment Lease Program, MELP, has been working well and we believe will provide the agency with a reliable source of equipment replacement.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	19,267,285	14,914,733	19,031,285	14,914,733
Changes to Initial Appropriation	0	0	200,000	0

(Changes to Initial Appropriation will be 0 when the plan is created. They will change when the plan is updated mid-biennium.)

Customers

Anticipated Changes to Customer Base

The Department of Forestry serves an increased number of customers due to fragmentation of forestland into small parcels. In fact, Virginia expects to see more development in the next 40 years than during the last 400 years. Additionally, the state's rapidly growing population is pushing development of homes into formerly forested areas, resulting in increased fire risks and greater challenges for protecting citizens and homes. As more Virginians move into woodland home communities, fighting wildfire becomes more complex. Our workforce is highly trained in all aspects of forestry including managing the rapid spread of invasive weeds and newly-introduced pests that threaten the health of Virginia's trees as well as the ever-important role forests have in keeping our drinking water clean.

Current Customer List

Predefined Group	fined Group User Defined Group		Potential Number of Annual Customers	Projected Customer Trend
Volunteer	Volunteer Fire Departments	155	597	Increase
Employer/ Business Owner	Forest Industry and Associated Businesses - all	2,500	15,000	Increase
Employer/ Business Owner	Harvest Professionals	300	5,000	Increase
Farm/Forest Owner	Private forest landowners	4,000	521,000	Increase
Non-Profit Agency (Boards/Foundations),	Non-Governmental Organizations - Virginia Forestry Association (VFA), Virginia Forest Products Association	26	60	Increase
Recreationalist	General Public	4,000	300,000	Increase

Partners

Name	Description
Federal Agencies: United States Forest Service (USFS), National Park Service (NPS), United States Fish & Wildlife Service (USFWS), Natural Resources Conservation Service (NRCS)	Cooperative agreements, cost-share funding, and consolidated grants for fire, forest health monitoring, Chesapeake Bay and other watersheds, forest management, ecosystem services, wildfire, and forest health initiatives and programs.
Local Governments	Joint educational and informational efforts aimed at improving and protecting community forests. Project development and implementation.
Non-Governmental Organizations: Local Land Trust Organizations, National Arbor Day Foundation, Voluntary Fire Departments, Virginia Urban Forest Council (Trees Virginia)	These groups represent a strong partner base in land conservation, urban and community forestry, ecosystem services, and forest management efforts.
North Carolina State University	VDOF participates in the tree improvement cooperative work led by N. C. State University.
Regional Planning District Commissions	Joint efforts to identify and quantify the value of forest cover in communities.
Resource Conservation & Development Districts (RC&Ds)	Joint educational and informational efforts aimed at improving and protecting community forests. Project development and implementation.

Virginia Forest Industry	The forest products industry whose revenues are taxed, collected and set aside for the RT Act Fund.
Virginia Institutions of Higher Education: Virginia Tech, University of Virginia, Virginia State University, Longwood, Old Dominion University, Dabney Lancaster Community College	Cooperative/collaborative research and extension efforts, cooperative education workshops, and networking opportunities
Virginia State Agencies: Department of Conservation and Recreation (DCR), Game & Inland Fisheries (DGIF), Department of Transportation (VDOT), Virginia Cooperative Extension (VCE)	Joint educational and informational efforts, research and demonstration areas, collaboration and cooperation on trails and greenway projects, tree planting projects

Agency Goals

• Protect the forest resources and the citizens of the Commonwealth from wildfire, and reduce impacts to the forest from other threats.

Summary and Alignment

Healthy forests are essential to the economic and environmental health of the Commonwealth and its citizens. Protecting our current healthy forest resource is the most basic duty of the agency. The range of threats facing the forest will require action by all elements of the agency.

Objectives

» Ensure the agency maintains an appropriate and efficient level of readiness to respond to wildfire and other emergencies and provide support to cooperating response agencies.

Description

The Virginia Department of Forestry is the premier wildfire prevention and wildfire fighting agency in the Commonwealth. It will maintain this role while building partnerships that expand its ability to meet the challenges of emergency response across the state.

Objective Strategies

• Capitalize on the Virginia Interagency Coordination Center to increase VDOF readiness, situational awareness and personnel safety in emergency response situations across the Commonwealth.

• Distribute state and federal grant funding to fire departments across the Commonwealth to increase the wildfire response capacity of Virginia's fire service.

Measures

- · Percentage of eligible rural volunteer fire departments receiving available state and federal financial assistance
- Percentage of wildfire responses that are 30 minutes or less.

» Ensure functional woodlands remain a part of Virginia's landscape by protecting forestland from fragmentation or conversion to non-forest uses.

Description

Interconnected and intact forests provide the Commonwealth with the greatest range of economic, environmental, and social benefits. The agency will reinforce its position as the leading forestland conservation agency in the Commonwealth to ensure a sustained flow of natural goods and services for current and future generations.

Objective Strategies

• Promote high conservation value (HCV) forestland retention through landowner programming and incentives and locality engagement.

• Protect large blocks of connected forestland with multiple conservation values using a variety of approaches.

• Emphasize and negotiate the avoidance or mitigation of forest fragmentation and loss as a result of proposed large-scale infrastructure projects.

• Effect intergenerational land transfer planning by landowners that keeps family forestland intact and in forest.

• Integrate forest management planning during the annual easement monitoring process to increase accomplishment of landowner and resource goals.

Measures

- Number of acres protected from conversion to development.
- Number of families who have taken steps to maintain their forestland intact through intergenerational land transfer planning

» Be proactive in preventing the loss of forest resources and other property due to wildfire and other natural and human-caused events

Description

The Virginia Department of Forestry will be the lead agency in protecting forests from wildfire. In addition, we will serve the Commonwealth as a member of the Virginia Emergency Response Team (VERT).

Objective Strategies

· Enhance landscape-level emphasis on wildfire prevention and mitigation.

• Implement programs and projects to monitor and protect forests from damage caused by insects, diseases, and non-native invasive plants and work with partners to disseminate forest health risk information.

· Work with the forestry community to support legislation to address timber theft.

• Establish a timber theft response program that includes an internal reporting component, an investigatory process, and an educational outreach component targeting landowners, prosecutors, and law enforcement agencies.

• Expand efforts to increase acres of key diminished tree species within their historic range.

Measures

- Number of communities at reduced level of wildfire hazard through participation in agency programs
- Number of diminished tree species projects completed
- Number of forest health surveys completed

Support a strong forest economy by ensuring a productive and sustainable resource and promoting diverse markets for Virginia's forest products.

Summary and Alignment

Our forests and the markets they support are essential to the economic well-being of all Virginians. Given the competing demands placed on our forests and the many factors impacting them, science-based management is the key to ensuring sustainable, healthy forest resources. While landowners have many reasons for owning and maintaining forestland, income from that land is critically important to support reforestation and management work and to keep forests from being converted to other uses.

Objectives

» Provide more proactive forest management planning to increase production and ensure resource sustainability on private and public lands.

Description

In our ongoing efforts to provide the widest range of options for all forest landowners, it is imperative that the agency seek to provide forest management guidance well prior to harvesting and other management activities taking place.

Objective Strategies

• Identify and implement innovative ways to reach a broader group of forest landowners, especially prior to significant management decisions.

• Use forest health and wildlife management information and practices as a means to motivate landowners to plan and implement better forest management practices on their forestlands.

- · Continue to increase the availability and productive potential of Department of Forestry pine seedlings.
- Increase collaboration with state and federal agency partners to increase the application of sound forest management on public lands.
- Establish a stakeholder group to guide implementation of the Hardwood Sustainability Strategy.

Measures

- · Forest Inventory and Analysis (FIA) growth/drain ratios for Pine Sustainability
- Number of acres of trees successfully regenerated in Virginia
- Weighted productivity rating (PRS) of seedlings produced in Department of Forestry nurseries

» Enhance the timber harvest inspection program to better help loggers protect water quality.

Description

VDOF's exemplary timber harvest inspection program assures the public that timber harvests support the sustainability of the forest industry in Virginia and have minimal impact on water quality. VDOF will look for innovative methods and technologies to make the monitoring of over 5,000 annual harvest sites more efficient and effective.

Objective Strategies

• Develop an ongoing water quality training program that enables the consistent application of and compliance with Virginia's Silvicultural Water Quality Law.

- Incorporate new technologies in the harvest inspection and Best Management Practices monitoring process.
- Seek consistent, dedicated funding for the harvest Best Management Practices implementation program.

Measures

- Number of loggers trained annually
- Statewide Best Management Practices implementation percentage

» Expand VDOF's role in support of Virginia's forest economy to develop new income streams for landowners, and pursue new markets for existing producers and additional manufacturers for underutilized forest products. Description

A strong, diverse forest economy supports healthy forests by providing an incentive for forest landowners to maintain and invest in their forests. The more options that landowners have for generating income from forestland, the more likely they are to maintain it. Virginia is part of a competitive global forest products economy. Therefore, we need dedicated, expert resources supporting existing producers and proactively seeking new markets for underutilized forest products.

Objective Strategies

· Provide technical expertise in support of state programs related to exports and increased economic development.

• Develop a forest industry roundtable to identify issues and opportunities and develop plans to grow and diversify Virginia's forest products markets.

• Increase VDOF's capacity to analyze and report on forest resource and market information to support economic development.

Measures

• Number of new and/or expanding forest related businesses or markets

• Increase the social, environmental, and economic benefits provided by trees and forests.

Summary and Alignment

Trees and forests are natural assets that build a sense of community character and place, while also providing ecosystem services such as climate mitigation, water resource protection, wildlife habitat and timber products. The extent of forest and tree cover established and maintained across the landscape directly relates to the level of benefits received from forests.

Objectives

» Promote and expand the use of prescribed fire to meet multiple management and training objectives.

Description

Prescribed fire is an important tool for the management of many forest ecosystems in Virginia, as well as a tool used to increase the economic potential of many forestlands. In many areas it has been greatly underutilized, to the general detriment of the resource. With the assistance of willing partners, VDOF will seek to expand its use in the appropriate ecosystems and locations.

Objective Strategies

• Work with cooperators to increase the number of trained personnel and other resources available to perform prescribed burning.

Measures

Acres of prescribed burning conducted in the Commonwealth

» Expand the canopy of healthy tree cover to improve the quality of life in Virginia communities.

Description

We will encourage and support sustainable community forestry programs that promote green space, tree canopy, and the awareness of

the benefits of trees to human health and well-being.

Objective Strategies

- Support planning efforts to incorporate green space into communities.
- · Support projects that expand urban tree canopies and improve their long-term maintenance and health.
- · Promote the connection between community forests and human health.
- · Increase life cycle management of trees to address urban wood utilization/waste.

Measures

Number of communities that have urban wood use plans

» Enhance the capacity of forests and trees to provide water quality and quantity.

Description

We will support low-impact development practices, including tree planting and forestland conservation, to improve water quality and quantity in Virginia's communities.

Objective Strategies

- · Improve water quality from selected forested watersheds through collaborative partnerships.
- · Develop new strategies and identify additional resources to increase riparian buffer plantings on high-priority sites.
- · Continue to collaborate with partners to incorporate working forestland conservation in the Chesapeake Bay restoration strategies.

Measures

• Attract, develop and sustain the agency workforce to carry out our mission.

Summary and Alignment

Recruit, retain and equip an inclusive professional workforce to succeed across all levels of governance amid 21st century challenges in an adaptive workplace environment.

Objectives

» Recruit and retain an inclusive workforce that is engaged with the Agency's mission.

Description

Our ability to recruit and retain a talented workforce springs from employees' immediate involvement and engagement in all VDOF functions early in their careers. To ensure our employees support and engage with VDOF's mission, we will assure their occupational career paths are clearly intertwined with VDOF operations, and are contingent upon individual performance.

Objective Strategies

• Review and revise the New Employee Development Guide and program to effectively standardize onboarding.

• Implement occupational career paths contingent upon increased KSAs (knowledge, skills, and abilities), performance standards, and qualifications that align pay beyond state-driven salary adjustments.

• Implement a VDOF liaison team to support the Commonwealth's Talent Acquisition Strategy to attract a skilled and diverse workforce, with increased outreach efforts to veterans and minorities.

Measures

• Turnover Rate for full-time employees with up to 5 years' experience

» Implement relevant timely training programs and policies that develop technical competence while sustaining safe work environments.

Description

To increase VDOF's strength, we will deliver educational and training programs that not only allow each individual employee to maximize their technical expertise and professional development, but also instill a culture of safety across all VDOF functions.

Objective Strategies

• Implement a training and development program that centers on an occupational career path through attainment of competencies.

- Implement a formal safety program that empowers all employees to put safety first.
- Conduct a comprehensive review of VDOF's law enforcement programs.

Measures

» Establish an employee succession plan, anchored by a mentorship culture.

Description

Commonwealth agencies are expected to experience an influx of retirements over the next five years. Currently, nearly 20% of workforce is eligible for retirement. By 2022, we anticipate this number will climb to above 34%. VDOF will address this by Implementing strategies that ensure institutional knowledge is shared across all levels.

Objective Strategies

- Pair new employees with mentors to navigate the new employee guide and program.
- · Establish career and professional development advisory roles at regional headquarters.
- Implement a talent management process to foster upward mobility of VDOF employees.

Measures

• Continuously improve agency efficiencies and effectiveness and ensure that the agency has the necessary resources to carry out the mission.

Summary and Alignment

Developing a system for continuous improvement will enable the agency to evaluate changing program needs, prioritize actions, assign and manage scarce agency resources, and allow for effective program integration in a manner that supports the agency's strategic goals.

Objectives

» Practice continuous process improvement.

Description

To increase agency effectiveness and employee involvement, VDOF will employ a standardized method for continuous improvement that incorporates input and feedback from all levels of the agency and includes routine reviews of decisions will increase agency effectiveness and employee involvement.

Objective Strategies

- Promote awareness and implementation of best internal procurement practices.
- Ensure internal communications effectively provide for input, feedback, and progress reporting.

• Build a knowledge base in a variety of formats to document frequently asked questions (FAQs) for technology and information systems used by the agency.

• Increase efficiencies in the processing of cost share transactions through the acceptance of digital signatures and the exchange of pertinent documents in electronic form.

Measures

• Percentage change in agency vehicle maintenance costs for pick-up trucks and SUV's

» Ensure the VDOF adapts to address the changing needs of forest resources and society.

Description

To help VDOF adapt to ongoing changes, we will develop a protocol enabling agency leadership to evaluate potential new programs and activities that align with the agency's mission, develop strategies to incorporate those programs and activities into the agency's operations based on available resources, and evaluate the success and scale of existing programs. will help the agency adapt to ongoing changes.

Objective Strategies

• Develop a process to determine the desired scale and scope of all existing VDOF programs to effectively allocate resources.

• Develop a framework and implementation plans for the Forest Conservation, Community Forestry, and Marketing programs to effectively integrate these programs within regional operations.

• Establish a protocol to evaluate new opportunities, determine their desired scope and scale, and prioritize or develop the necessary

Measures

Ensure VDOF has adequate equipment, tools, facilities and resources.

Description

DOF's unique mission requires the agency to maintain facilities in geographically dispersed and remote areas; to procure and maintain specialized equipment; and most importantly to support employees with the tools, resources, and communication and information systems that will enable them to effectively carry out that mission in a safe and professional manner.

Objective Strategies

• Establish an advisory group of knowledgeable vehicle operators and mechanics to help guide the procurement of agency vehicles.

• Determine acceptable levels of broadband capacity for satellite offices, survey existing broadband capacity and other connectivity issues at those offices, and prioritize upgrade work accordingly.

• Work proactively with VITA on all facets of Northrop Grumman disentanglement in order to minimize disruption to agency operations.

• Evaluate IFRIS modules and determine funding needs for modules that require critical upgrades or replacement with Commercial-Off-The-Shelf products where appropriate.

 Contact decision makers in other state and local agencies to secure long-term agreements for the construction of garages for our firefighting equipment.

• Develop a plan to prioritize and obtain funding the removal of all abandoned DOF fire towers over a ten-year span.

Measures

- Number of new IFRIS modules and IFRIS enhancement activities or technology updates
- Percentage of VDOF facilities with acceptable broadband capacity and connectivity

• Broaden outreach and collaboration to increase our influence, and generate support for VDOF and our mission.

Summary and Alignment

To be relevant to our audience and best serve the forest resource, we must communicate science-supported information that educates, inspires and motivates engagement.

Objectives

» Increase VDOF's visibility and communications with key audiences.

Description

To support VDOF's mission and help achieve its goals, we will strengthen and expand our position as a trusted voice of forestry information and valued resource for our diverse audiences.

Objective Strategies

• Develop strategies (e.g., conservation education, digital marketing) to reach target audiences and sustain engagement through relevant media platforms.

· Develop and implement a business plan for the website redesign.

Measures

» Cultivate partnerships to increase our influence and reach.

Description

VDOF will cultivate strong partnerships that enable us to balance the economic, environmental and social benefits of Virginia's forest resources.

Objective Strategies

- Identify key partners and corresponding VDOF liaisons.
- · Develop and implement mutually supportive plans of action.

Measures

Major Products and Services

Current data on the value of Virginia forest products supports its' importance to Virginia's economy. For 2018, Virginia's forest industry employed nearly 108,000 Virginians with an annual impact of \$21.5 billion to the state's economy, making it the third largest economic sector – behind agriculture and tourism – in the state. Protecting and enhancing the 15.8 million acres of forestland and serving the 521,000 (2018 State of the Forest) landowners who control 62 percent of the forestland are 233 dedicated professionals – 155 of whom are first responders – at the Virginia Department of Forestry.

In Calendar Year 2018, through fire prevention and fire suppression efforts, VDOF protected 382 homes and 368 other structures with a total estimated value of \$81 million. This was accomplished with a fleet of 12 specially-equipped wildland brush trucks, 89 dozer/transport units and 160 fire-equipped pickup trucks located across the Commonwealth.

For Fiscal Year 2019, 43,115 forested acres in Virginia were funded by the Reforestation of Timberlands (RT) Program. These funds go to Virginia landowners after a timber harvest to support their efforts to replant and grow the forests of tomorrow. This ensures a sustainable forest resource for Virginia and that the ecosystem services, including water quality, carbon sequestration, recreation and air quality, provided by forests are available to all Virginians.

In 2018, the Virginia Department of Forestry monitored 4,777 timber harvests to ensure voluntary best management practices are working for the benefit of all. The inspections conducted by VDOF water quality specialists demonstrate a very high compliance rate among harvesting professionals. New and refocused assistance programs are emphasizing the critical role forests play in the health of the Chesapeake Bay and all those who rely on or use this treasured place. By providing valuable, unbiased, third-party, scientifically-based technical assessments and recommendations, VDOF directly impacts the success of Virginia landowners who strive to sustainably manage their forest resources for the greatest possible economic gain.

In addition to emergency response, forest management and water quality, VDOF has a number of other products and services that contribute to the agency's successful efforts to protect and serve all Virginians. These include 25 state forests, which provide abundant recreational opportunities, demonstrate the benefits of good forest management and financially support the communities in which they are located by returning up to 25 percent of the gross proceeds from timber sales and other profitable activities. Another valuable program includes our land conservation efforts, which aim to ensure working forestland remains intact and in the family that owns the property. In addition, our work in the forest health realm, identifying harmful insects and diseases as well as invasive species, strives to prevent forest loss and economic harm. VDOF is devoted to recognizing the importance of our community forests within the built environment. Cities and towns are complex ecosystems that link interacting human and natural components. Emphasizing these important linkages, we are able to convey the societal benefits these forests provide by helping to manage stormwater, conserve energy, reduce heat island effect, improve quality of life of residents and enhance resiliency of our communities. Striving to accentuate the connectivity between green infrastructure planning, management and maintenance of these forests, and their importance to our future development are essential to creating dynamic cities with economic, environmental and social benefits.

Performance Highlights

National Leader in Wildfire Suppression: The Department of Forestry (VDOF) is a recognized national leader in the delivery of wildfire suppression services, incident management and personnel development training for emergency responders. In 2019, VDOF hosted the 19th Virginia Interagency Wildfire Academy. VDOF trains nearly 1,000 wildland firefighter students representing more than 10,000 hours of total training annually.

State Forest Certification: All of VDOF's state forest lands received both Sustainable Forestry Initiative (SFI) and American Tree Farm System certification. Following a week-long audit, no major or minor non-conformances with certification standards were found. In addition, three areas were identified as exceeding the standards:

- 1. Providing recreational opportunities for the public;
- 2. Support of research on state forests; and
- 3. Providing educational opportunities promoting sustainable forestry.

Timber theft legislation to assist landowners: VDOF worked with major Virginia forestry and landowner associations to develop code language to assist in the prevention and prosecution of timber theft and fraud. The legislation that passed in the 2019 General Assembly session was submitted by the forestry and agriculture associations and establishes penalties for businesses that do not honor agreements with landowners. VDOF will assist landowners with existing agency resources initially in order to determine the scope of the problem in Virginia.

Nationally-Recognized Firewise Program: The main goal of Firewise is to educate homeowners and localities in the wildland/urban interface on how to design, construct, landscape, and maintain their homes and property to avoid destruction during a wildfire. VDOF has been a leader nationally in the promotion and expansion of the Firewise Program.

Award-Winning Succession Planning Workshops: VDOF, in collaboration with Virginia Cooperative Extension and other public and private partners, delivered the fifth offering of Focusing on Land Transfer to Generation "NEXT". The in-depth course provides families the information needed to ensure a smooth intergenerational transfer of their property and ensure continued management of their forest resources, keeping critical forestlands intact. As a result of the workshops, almost 52,000 acres of land is expected to remain forested and "family owned".

Clean Drinking Water: The VDOF Water Quality Program has been touted as the leading water quality program in the South. VDOF is the leader in the statewide logging inspection audit program in the South and is supporting a Southeastern Regional attempt to provide consistent auditing of logging jobs across state boundaries.

High-Quality Seedlings: Two VDOF tree seedling nurseries produce approximately 40 million softwood and hardwood tree seedlings for reforestation and general conservation. Seedlings are available for sale to private landowners and industry owners to help with their reforestation needs and to provide future forest product raw materials.

Improved Quality of Life for Urban Communities: VDOF developed an important program to determine a community's Urban Tree Canopy (UTC) (the layer of leaves, branches and stems of trees that cover the ground when viewed from above). UTC provides many benefits to communities including improved water quality, conserving energy, lowering temperatures in urban areas, reducing air pollution, enhancing property values, providing wildlife habitat, facilitating social and educational opportunities, and providing aesthetic benefits.

Tree Planting in Urban and Rural Areas for Water Quality

Urban forests are a critical ecosystem for improving water quality to benefit the Chesapeake Bay clean-up efforts. The Urban and Community Forests program helps Virginia communities maintain and enhance their community forests and raise citizen awareness of the multiple benefits these forest provide: clean air, storm water management, community revitalization, community health and wellbeing, business district enhancement, aesthetics and the all-important contact with nature. This important program meets the vast majority of the population where they live and work. An increasingly important focus of the program is to lessen impacts from development in the Bay watershed by promoting green infrastructure planning and implementation. As the eastern seaboard anticipates more flooding, urban and community forestry has much to contribute to coastal resiliency. This will be an area of continuing focus for VDOF as we develop strategies to assist localities. In addition, the U&CF program oversees the Tree City USA, the Tree Campus USA and the Tree Line USA programs. Through the VDOF the U&CF program has supported 129 cities and towns, 57 counties and 10 military bases, 112 non-profit organizations, Planning District Commissions and Soil and Water Conservation Districts with education, grants and project assistance. To date the program has contributed \$606,608 to 146 projects contributing to long-term and sustained tree canopy cover. This effort has resulted in approximately 50,000 trees being planted and over 17, 837 volunteer hours.

Longleaf Pine Restored in Virginia: VDOF is highly engaged in restoring native longleaf pine to the landscape of southeast Virginia, which had been nearly exterminated over time. Significant accomplishments include harvesting cones (seeds) from the last remaining longleaf stand, producing seedlings, establishing a new seed orchard, addition of the new 266-acre South Quay State Forest, and the production of 500,000 longleaf pine seedlings annually for replanting throughout the state at VDOF's Garland Gray Forestry Center.

Conservation Easements Recorded: In Fiscal Year 2018, VDOF permanently protected 7,018 acres of open space through 18 conservation easements; the agency now holds 172 easements covering roughly 60,000 acres. VDOF easements continue to reflect the goal of conserving large blocks of forestland, perpetually preserving the sustainable flow of products, functions and values from our woodlands and serving as the backbone for a \$21.5 billion economic engine.

Staffing	
Authorized Maximum Employment Level (MEL)	279
Salaried Employees	233
Wage Employees	32
Contracted Employees	507

Key Risk Factors

Lack of or Potential Loss of Markets: Robust markets for wood products are critical to provide the financial incentive for landowners to invest in and manage their woodlands. Loss of markets contributes to a lack of management and increased risk that forestland will be converted to more developed uses, thereby depriving society of the many benefits that forests provide. Challenges in numerous wood products markets continue to present challenges for the agency and forest landowners across the Commonwealth. There remains a general lack of markets for low-grade material, which greatly impacts the ability to effectively manage for higher-quality hardwood stands. The recent closing of the Verso Paper mill (formerly Westvaco) in Luke, MD has had a significant impact on an already limited market for pine and hardwood pulpwood, especially in the northwest quadrant of the state. On the positive side, the growth/drain ratio for pine, especially in the important wood basket area of Southside Virginia, has improved and the resource has continued to grow.

Changes in Land Ownership: Much of Virginia's forestland resides in the hands of private ownership (61%). Many of these forest landowners are people who are either of retirement age or soon will be. A wave of intergenerational transfer of ownership has begun and larger waves are anticipated. VDOF has had great success helping forest landowners plan for this transition, but it is estimated that tens of thousands of landowners are potentially being left to figure it out on their own, or divide or sell their forestland. We have 521,000 family forest owners who control the majority of Virginia's forestland and 75 percent of the available timber supply. Seventy percent of this forestland is owned by the aging population and only three percent have some sort of succession plan in place for their transfer. This is placing a huge acreage of our forestland at risk for conversion and fragmentation within the next two decades. This situation almost guarantees that millions of acres of private forestland are at risk of being lost by the families who have cared for the land for generations. In addition, large tracts of forestland are being divided into smaller parcels, which increases the challenges associated with proper forest management and economic stability.

Invasive Pests and Species: Multiple invasive insects are currently impacting or have the potential to significantly impact Virginia's forests. The emerald ash borer is an aggressive insect that attacks and kills ash trees and is expected to nearly remove ash trees as a component of our forest. The spotted lanternfly is Virginia's newest invasive insect, first found in Winchester in 2018. This pest will feed on 70 different host plants including walnut and poplar as well as orchards and vineyards. This is will certainly be an agricultural pest and a nuisance to landowners, but research is still ongoing to determine how much of an impact this pest will have on forestry. The Asian longhorn beetle has not yet been found in Virginia, but has been found in other parts of eastern North America in New York, Massachusetts and Ohio. It feeds on maple, as well as a handful of other hardwoods and costs of eradication efforts can be extremely high. The gypsy moth continues to affect our hardwood forests. The caterpillars feed on hundreds of different tree species, but prefer oaks. The gypsy moth has defoliated 75 million acres in North America since 1970, but the slow-the-spread program, a region-wide coordinated effort between the USDA and 10 states has prevented the infestation of more than 130 million acres. Invasive plants are an ongoing problem in our forests and new species continue to be introduced.

Management Discussion

General Information About Ongoing Status of Agency

The Virginia Department of Forestry works with forest landowners and forest product producers to ensure the forest resource is healthy and sufficient to meet demand... today and in the future. We work with landowners and localities in the Chesapeake Bay watershed to plant forested buffers adjacent to the waterways that feed into the Bay improving water quality and enhanced benefits. We identify communities at risk of wildland fire and work with them to create Firewise communities to mitigate risk. In the past decade, our Forestland Conservation Division has secured more than 172 conservation easements on nearly 60,000 acres of valuable forestland. Together, we can ensure our working forests stay that way in perpetuity. We created the award-winning program Generation Next to teach forest landowners how to successfully pass ownership to a new generation of forest landowners. We honored those who have kept their land as working forestland and in the family for 100 years or more through our new Century Forest Program. We pioneered the successful cost-share program that makes pine forests less susceptible to southern pine beetle through thinning operations on small tracts. We monitor the spread of invasive pests and advise landowners how to protect and grow their valuable trees. We take great care and perform preventative maintenance and training to keep our staff, trucks, engines and fire plows/dozers mission ready.

VDOF must continue to develop a trained cadre of public safety professionals ready to answer the call 24 hours a day, 365 days a year. Whether the call goes out to suppress a wildfire or to assist in the removal of trees following a hurricane or ice storm, VDOF's 155 emergency responders stand ready to assist.

In addition to the expanding traditional forest products industry, new demands are being placed on our utilization and marketing effort. Emerging markets for biomass energy, animal bedding, specialty and non-timber products, and agro-forestry require that we become more adaptive, creative and flexible in our advice to landowners as they contemplate replanting after a harvest.

Information Technology

VDOF is committed to using technology in the most effective/efficient manner to support evolving business needs. For customers, access to professional guidance provided by VDOF staff continues as a cornerstone. A majority of staff support field operations through assistance to landowners, on-site harvest inspections, land conservation activities, forestry education and research, and maintenance of forestlands. Field personnel are organized in 22 service areas and many work out of small local offices. Challenges exist for communication and network connectivity due to wireless voice and data service limitations in less-populated rural areas of Virginia. Customers expect information to be available as needed in a variety of channels. The agency has an internet presence through a static, non-interactive site. The agency has begun a project to upgrade the website into a more comprehensive and interactive business tool to provide better information, resources and timely service to our customers, agency and business partners, and staff. The agency has embraced social media platforms, Facebook and Twitter, to engage our various constituencies and communities.

VDOF supports existing infrastructure and systems while implementing new projects to move the agency forward as necessitated by technology and business changes. Agency technology infrastructure (i.e., network hardware, personal computers, servers, telecommunications) is managed through Virginia Information Technology Agency (VITA). The Integrated Forest Resource Information System (IFRIS), a customized application built and managed by VDOF, maintains records and reporting metrics on agency-specific programs. IFRIS development began in 2004 with business modules added over time. An upgrade completed in 2015 addressed an end-of-life GIS server and updated the database management, web and operating systems. In 2017, Forestland Conservation Easement Monitoring module was completed. A project to integrate cost-share programs (Reforestation of Timberlands) was just completed during the fall of 2018. Along with IFRIS, agency-specific information is stored on network file shares. Changes and upgrades to IFRIS are challenging because we lack a dedicated funding source for the system. IFRIS is critical to our ability to carry out our core mission and a dedicated source of funding for system maintenance and upgrades is needed.

Improving workflows by upgrading agency forms to include electronic signatures and fillable data as a first step, with a move in the future to a document management system. The FiResponse project resulted in the development of a web application for dispatch purposes and a corresponding mobile application for installation on responders' smart phones to review status and resources available. In addition, the agency maintains an online store to sell tree seedlings. Maintaining an efficient and secure online presence is critical to our business and essential to support our efforts to make trees available to landowners for planting.

Estimate of Technology Funding Needs

Workforce Development

VDOF's Maximum Employment Level (MEL) is 279 but only 233 classified Full-Time Employee (FTE) positions are currently filled. The operations

of the agency are also supplemented by seasonal, long-term, part-time employees. Almost 80 percent of VDOF's employees are considered part of the mobile workforce. More than half of VDOF's workforce are sworn law enforcement officers and are also qualified as first responders to suppress forest fires and support local, state or federal emergencies.

The biggest challenges in workforce development that VDOF faces are the development of a diverse workforce, succession planning and competitive compensation to attract highly-qualified applicants. In an effort to address some of the gaps, our executive leadership championed a plan towards increasing opportunities via the recommended and approved change to the Forester title criteria within the Virginia Code, which now provides an alternative credentialing path into a forestry career. An agency apprenticeship program is sought in order to attract veterans and minorities to enter the field of forestry with no prior experience. Positively, by leveraging retirements, VDOF was able to restructure vacancies into entry-level and developmental positions that support succession plans for information technology, human resources and public information careers.

Nonetheless, continual work is needed to sustain operations across the Commonwealth. Presently, 22 percent of VDOF's workforce is eligible to retire with unreduced retirement benefits. Within five years, this number increases to more than 35 percent. Alarmingly, if those eligible to retire with reduced retirement benefits desire to do so within the next five years, this number increases to more than 50 percent of the workforce. Within these figures are the most experienced maintenance staff, forest technicians and a significant number of department heads/directors. Succession planning is necessary to sustain successful programs, operations and response that support the agency's mission. VDOF has been creative in seeking external partners for training and is fortunate to have the Virginia Natural Resources Leadership Institute as a resource, yet budget constraints have limited our ability to make these resources available to more than a few employees each year. VDOF is also fortunate to have a federal grant cover training expenditures for wildland firefighters each year. However, the most efficient way to transfer VDOF institutional knowledge from its most experienced employees lies in an apprenticeship program that pairs the apprentice credentialing process with mentors that are within two to three years from an unreduced retirement.

Overall, VDOF has maintained an average attrition rate of 7 percent for the last three years, which is significantly less than the statewide average of 14.5 percent. We suspect that this rate will increase as we encounter more employees eligible for retirement. Hence, our ability to be an employer of choice hinges on leveraging flexible or alternative schedules, and telework opportunities – but such programs ought to be complementary to competitive salaries. Competitive salaries for employees in the natural resource manager and specialist positions in the private and federal sector continues to be the main reason for attrition of employees with less than five years of state service. The state code requires that our forester positions are specialized professionals with a four-year degree with a specific accreditation, yet due to budgetary constraints, we often offer starting salaries in the mid \$30Ks. Even though VDOF recently implemented budgetary actions to ensure forest technician (do not need the four-year degree) starting salary is in the low \$30Ks rather than upper \$20Ks, our ongoing compensation analyses substantiates that a forester shall yield a starting salary in the high \$30Ks if we were to retain and attract the best talent to join VDOF.

Physical Plant

VDOF owns approximately 137 buildings located throughout Virginia supporting agency programs and services. They include offices, mechanic shops, warehouse and storage buildings, greenhouses, quarters (sleeping rooms), and assorted sheds for fire bulldozer and transport storage, fuel and paint, tree seedlings, cone drying, etc. In addition, VDOF has access and land easements for 20 fire towers (some up to 75 years old) and owns approximately 68,000 acres of state forests and another 1,800 acres of land in forestry centers/tree nurseries, tree improvement plots, tree seed orchards, small donated lots for office buildings, and the property around the Charlottesville Headquarters. Most of the office buildings were constructed more than 40 years ago and have had additions and renovations over the years. Many systems in the buildings are deteriorating: including plumbing, HVAC systems, foundation slabs, doors and windows original to the buildings, and electrical wiring that is outdated and incapable of delivering technology required for a modern facility. Also, VDOF has several modular office buildings located across the state originally approved by the Division of Engineering and Buildings under temporary building permits, many of which have been in place for more than 20 years. The agency has a maintenance reserve fund that provides funding for routine maintenance of agency facilities, but it isn't adequate to address failing HVAC and electrical systems as well as the long list of other significant repairs and maintenance to our buildings. Some agency facilities need to be decommissioned and new facilities constructed.

The agency has bulldozers used in firefighting operations. These pieces of heavy equipment need to be maintained under cover in secure staging areas throughout Virginia. VDOF received funding to build 24 tractor garages throughout the Commonwealth to protect this important and expensive firefighting equipment. The agency is in the process of negotiating with localities to build the garages.

Capital investments and maintenance reserve funds allow VDOF the flexibility to mold our activities to reflect public priorities as we strive to protect and develop healthy forest resources. Demands on our forest resources grow with increasing population and VDOF must meet the needs to educate the public on both the economic and ecological benefits of forest management.

Supporting Documents

Title

Reforestation Incentives to Private Forest Land Owners [50102]

Description of this Program / Service Area

The Reforestation Incentives to Private Forest Land Owners service area consists of administering the Reforestation of Timberlands Act by implementing a cost-share assistance program for private forest landowners. In 1970, the forestry community and state officials were concerned about overharvesting of pine and came together to establish the Reforestation of Timberlands (RT) Program. Funded by the Forest Products Tax and general funds, the community recognized a need to provide incentive to landowners to replant lands. The success of the RT Program caused the reverse in the decline of the pine resources with nearly 49,000 projects on 1.9 million acres treated since the inception of the program.

The Virginia Department of Forestry (VDOF), upon request of a landowner, examines timberland and makes recommendations concerning reforestation. Reforestation practices require an investment of financial resources by the landowner for land preparation, tree seedlings and tree planting. When these trees are eventually harvested, they will provide benefit not only to the landowner but the greater good of the Commonwealth through employment of loggers, truckers, mill workers and through manufacturing, marketing and sales of forest products.

Mission Alignment

The Code of Virginia established the Virginia Department of Forestry's Reforestation of Timberland Fund in Code Section 10.1-1174. In addition, the Code of Virginia sections specific to forest products tax begin with Code Section 58.1-1600.

This service area aligns directly with VDOF's mission to protect and develop healthy, sustainable forest resources for Virginians. VDOF encourages greater reforestation in the Commonwealth through the authority to offer financial incentives to forest landowners to invest in trees for the long term.

Products and Services

Description of Major Products and Services

The RT Program provides for partial reimbursement of the landowner's expenses for tree planting, site preparation and herbicide release.

Products / Services						
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF	
Reforestation of Timberlands Incentives	COV § 10.1-1170 - § 10.1-1176	4 VAC 10-40	Required	1,945,239	2,399,800	

Anticipated Changes

The anticipated continued high levels of harvesting coupled with ongoing full match by the General Assembly will have an ongoing positive effect on forestry and private forest landowner willingness to invest money into forestry long-term practices. The incentive from cost-share reimbursement helps reduce the initial costs and increases the financial return to the landowner, who must wait up to 15 to 20 years before the possibility of the first potential revenue from the investment through thinning.

Factors Impacting

The purpose of the funds collected from the RT Program is to assist small timber owners with financial incentives to reforest their cutover land and is provided from two sources: (1) a self-imposed timber products tax paid by the forest products industry and (2) state general funds. The amount collected from the industry is by law to be matched by the general fund in a like amount and the total must be used to provide the establishment and improvement of the pine resource. This helps assure a pine resource will be available in the future. VDOF is the lead state agency in implementing procedures, program oversight and accounting of the funds.

Financial Overview

The purpose of the funds collected from the RT program is to assist small timber owners with financial incentives to reforest their cutover land and is provided from two sources: (1) a self-imposed timber products tax paid by the forest products industry and (2) state general funds. The amount collected from the industry is by law to be matched by the general fund in a like amount and the total must be used to provide the establishment and improvement of the pine resource. This helps assure a pine resource will be available in the future. DOF is the lead state agency in implementing procedures, program oversight and accounting of the funds.

Biennial Budget

		2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial	Appropriation for the Biennium	1,945,239	2,399,800	1,945,239	2,399,800

Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title

Forest Conservation, Wildfire & Watershed Services [50103]

Description of this Program / Service Area

Through Forest Conservation, Wildfire Protection and Watershed Services, VDOF protects and develops healthy, sustainable forest resources for all Virginians. Headquartered in Charlottesville, the agency has forestry staff members assigned to every county to provide citizen service and public safety protection across the Commonwealth. Their expertise includes forest management, incident management, heavy equipment operation and direct wildland firefighting experience.

Virginia's forestland is a valuable asset to society, providing clean air and water, wildlife habitat, recreation opportunities and renewable wood resources for all Virginians. With nearly 16 million acres of forestland and more than 108,000 Virginians employed in forestry, forest products and related industries, Virginia forests provide an overall economic output of more than \$21 billion annually.

Because almost two-thirds of Virginia's woods are owned by private individuals, the decisions they make for their land can have far reaching impacts on the sustainability of Virginia's forests. VDOF professional foresters and forest technicians are available statewide to provide unbiased professional advice to forest landowners.

Mission Alignment

The Code of Virginia sections specific to the Department of Forestry begin with Code Section 10.1-1100 with the appointment of the State Forester. This service area directly aligns with the VDOF's mission to protect and develop healthy, sustainable forest resources for Virginians.

Products and Services

Description of Major Products and Services

Products / Services						
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF	
Provide technical assistance to landowners	COV §10.1-1105 - §10.1-1106; COV §10.1-1117 - §10.1-1118	Federal Public Law 95-313 as amended through Public Law 110-246	Required	5,372,373	1,790,791	
Enforce the Seed Tree Law	COV §10.1-1163 - §10.1-1169		Required	0	0	
Protect the forest resource and citizens from wildfire	COV §10.1-1124 - §10.1-1125; COV §10.1-1135 - §10.1-1159		Required	7,254,668	2,418,223	
Protect stands of forest trees from Insects & disease	COV §10.1-1177 - §10.1-1181		Required	125,579	365,318	
Protect, promote and enhance water quality through silvicultural best management practices	COV §10.1-1181.1 - §10.1-1181.7	Federal Public Law 100-1 Section 319	Required	4,156,682	1,653,607	
Protect threatened and Endangered species		Federal Public Law 100-478	Required	0	0	
Restore the forest landscape	COV §10.1-1106, COV §10.1-1119, COV §58.1-513, subdivision C 2	Federal Public Law 111-11	Required	376,744	642,178	
Virginia Land Use		4 VAC 10-20	Required	0	0	

Anticipated Changes

VDOF expects to see increased demand for its services in all aspects of this service area. Forest industry is selling off more forestland to Timberland Investment Management Organizations (TIMOs), Real Estate Investment Trusts (REITs) and private individuals. This shift away from a vertically-integrated forest industry will have significant impacts on forestland conversion rates, forest fragmentation and parcelization, and dramatic increases in the number of forest landowners. This means more forest landowners owning smaller parcels of land resulting in more requests for forest management assistance.

As logging continues to occur across more and smaller ownerships, an increase in harvest inspections and the demand for assistance with pre-harvest planning and enforcement of the water quality laws and procedures could occur.

Recent changes to the Logging Notification requirements and increasing demand of certification programs (e.g., SFI) will require more logger

training and assistance in adjusting to the new requirements.

Recent developments at the state and federal level to improve the water quality of the Chesapeake Bay will create increasing interest in riparian buffer plantings, urban tree canopy, applications for the riparian buffer tax credits and afforestation. Afforestation is the practice of planting new forests on lands that are currently open.

Efforts in voluntary mitigation to offset forests lost to development, employing forestland conservation specialists and increased awareness of the VDOF's Conservation Easement Program is resulting in a significant increased demand on staff resources to develop, monitor and enforce donated easements. The Forest Legacy Program also contributes significantly to the easement workload. Demand currently exceeds capacity and there are areas where VDOF presence is minimal. VDOF's continued success in developing and accepting conservation easements will result in increased need for easement stewardship and enforcement. Adequate funding to meet these increasing needs over time will be necessary.

As forestland becomes increasingly fragmented and IFRIS reporting is enhanced, the VDOF expects an increased interest and demand for information regarding non-native species control or eradication. Efforts are already occurring to create market opportunities for some non-native species (e.g., ailanthus).

VDOF expects increased demand for more native species tree establishment and restoration. Restoration of species such as shortleaf pine, longleaf pine and American chestnut continue to be an area of emphasis for the agency and the ecosystems that require them.

VDOF expects strong increased demand for timely forest resource information for planning and land-use decision making. The agency continues to be active in partnering with county governments, planning district commissions, river basin commissions and non-governmental organizations in efforts to keep working forests on the landscape and reduce the rate of forestland conversion.

Participation in climate change discussion and planning efforts has significantly increased recently. The VDOF is being recognized as an important source of information for data on forest carbon sequestration rates, climate change planning and developing carbon offset protocols. Paramount to these discussions are the VDOF position to watershed management and coastal resiliency responses. Utilization of forests to positively impact the negative correlation between coastal flooding, shore line erosions and wetland mitigation are on the increase.

Factors Impacting

Many factors impact the largest service area for VDOF. This service area has the greatest number of VDOF employees engaged in its success. Employees properly trained and motivated to the delivery of the products and services are essential to its success. Reductions in staff due to resignations, retirements and budget cuts can impact products and services. These factors necessitate the need for personnel to cover multiple counties applying further stress to the employee and the equipment needed to serve constituents. Additional funding is necessary to recruit, train and retain qualified employees.

Forest parcelization, the division of forest land into smaller and smaller ownerships, occurs along with forestland conversion. Both of these trends will likely result in a decrease for traditional forestry services and an increase in demands from small woodlot landowners.

The loss of the forest land base, significantly reduces the flow of ecosystem services and benefits derived from our environmental infrastructure. This creates a two-fold problem. First, we must better manage the remaining acres of forestland in an attempt to partially offset these losses. Second, society will incur greater costs for engineered solutions in our efforts to provide clean air and clean water to the citizens of the Commonwealth. Forestland is a critical solution to the economy of Virginia and the overall economic and environmental health of the Commonwealth. Ecosystem services outreach requests and interest in developing market-based conservation initiatives continue to demand attention. In the future, market-based conservation will become an important mechanism to finance conservation and financially reward landowners for managing their properties in ways that ecosystem services are enhanced and improve the built urban environment.

Funding for cost-share programs is an important factor impacting the outcomes of this service area. Private landowners count on cost-share reimbursement for employing forestry practices. Funding for the cost-share programs should be consistent with the level of need and inflation adjusted to advance products and services in this service area. Funding for forestland conservation in Virginia consists mainly of tax benefits for landowners who donate land or easements. Continued interest in conservation will be significantly determined by changes in tax policy at the county, state and federal level.

Because land-use decisions are determined primarily by local governments, impacting forest conversion on a large scale will require outreach to and influencing the local planning process. Quality training is necessary to ensure that a workforce of knowledgeable employees have the latest technical information and are able to effectively communicate appropriate forest resource assessment information and management recommendations. The VDOF's ability to transfer information significantly impacts the recognition of the importance of the forest resource and the implementation of forest management practices, and the incorporation of forest-related considerations in land-use planning.

Financial Overview

Forestland conservation, wildfire protection and watershed services receives funding from general fund appropriations (71%), special revenue funds (15%) and federal grants (14%). The majority of the funding in this service area is needed to fund salaries, which continue to increase; thus reducing our discretionary spending. In addition, the majority of our federal funding in this service area is from competitively-funded special projects dedicated for specific projects, thus further reducing our discretionary spending and placing these funds in jeopardy year to year.

Finding dedicated funding to consistently replace equipment is key in being able to provide a fleet of vehicles and dozers that are ready to meet the emergency response duties of the agency. In 2017, the Governor and the General Assembly came together to secure new funding for wildfire suppression vehicles. The new fire vehicles were desperately needed to replace some pieces of equipment that were as much as 30 years old. To date, 41 dozer/transport units, 75 fire-equipped pickup trucks and two brush trucks were replaced.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	17,086,046	6,870,117	17,086,046	6,870,117
Changes to Initial Appropriation	0	0	200,000	0

Supporting Documents

Title

Tree Restoration and Improvement, Nurseries & State-Owned Forest Lands [50104]

Description of this Program / Service Area

Through Tree Restoration and Improvement, Nurseries and State-Owned Forest Lands service areas, the Virginia Department of Forestry (VDOF) produces tree seedlings, manages a system of state-owned forest lands and conducts tree improvement research. The VDOF nursery operations reached a milestone in 2017 of two billion seedlings produced, the Tree Improvement Program has more than 50 active studies at 82 locations across the Commonwealth and the state forest system is comprised of 25 state forests, totaling 69,181 acres.

VDOF operates two nurseries to produce softwood and hardwood seedlings for reforestation needs in Virginia. The Garland Gray Forestry Center (GGFC) is located in Sussex County and produces more than 30 million bare-root loblolly seedlings annually and roughly 500,000 shortleaf pine seedlings. With the addition of our containerized seedling operation VDOF is producing roughly 200,000 longleaf pine seedlings to support our ecosystem restoration efforts and contractually producing over 330,000 containerized loblolly seedlings for Weyerhaeuser Corporation. The Augusta Forestry Center (AFC) is located in Crimora, on the western side of the Shenandoah National Park and produces two million bare-root hardwood and conifer species annually. The nurseries operate from revenue they generate from the sale of tree seedlings. Additionally, the nursery program funds the agency's Applied Forest Research Program and the Tree Improvement Program, which includes two seed orchards and one advanced progeny testing orchard.

The Applied Forest Research Program has been installing controlled scientific studies across Virginia since 1955 with the goal of providing new information to better protect and improve Virginia's forests. By working closely with a broad array of partners and collaborators, we are able to leverage our modest resources to deliver practical solutions for forest owners across the Commonwealth. Without this spirit of teamwork, technical support and valuable current practices, such as selecting and deploying the best-growing loblolly pine seedlings, customizing forest management to best suit individual sites and objectives, using crop tree release to sustain desirable hardwood regeneration, or restoring longleaf pine using seedlings native to Virginia might not have been fully developed or implemented.

State forest lands have multiple objectives and are managed to provide the greatest range of benefits to the citizens of Virginia while protecting or improving the forest ecosystem. The state forests are well distributed around the Commonwealth and vary in size from 121 acres to 19,808 acres. The large state forests in central Virginia and southeastern Virginia are the core of the working forest concept and provide the majority of the income to fund the forest system. Recreational opportunities on these lands are focused on self-directed activities that are not available on many other state lands. These activities include hiking, bike riding, horseback riding, orienteering, hunting, fishing and wildlife viewing. The central Virginia state forests provide for a unique opportunity to enjoy the outdoors due to their large size, which provides for an outdoor experience far removed from many of the distractions found in more densely-populated areas.

The State Lands Program also falls into this service area plan. VDOF is required by the Code of Virginia to assist other state agencies, with the exception of the Department of Conservation and Recreation and the Department of Game and Inland Fisheries, with the management of their forestlands. VDOF staff assesses the condition and quality of Virginia's forest resources on lands of other state agencies and recommend management practices that fit the agency needs and benefit the forest. Expenses incurred in the State Lands Program are funded via timber sales from the state agency land.

Mission Alignment

This service area directly supports the agency mission of providing a sustained forest resource for Virginians by providing high-quality seedlings for private forest landowners, industry and organizations for forest regeneration. In addition, the state forests serve as role models for landowners, students of forestry and other organizations for the proper way to manage a forest. The self-supporting state forests provide opportunity to demonstrate the values of Virginia's forests. Most of these forests were denuded by clearing and abandoned farming operations in the late 1800s and early 1900s. In 2018, the state forests were third-party certified to the Sustainable Forestry Initiative and to the Tree Farm System forestry management standards, which verifies these forests are managed sustainably now and for future generations. VDOF also practices sound management on other state agency forestland to help the agency meet its objectives and provide for healthy forests.

Products and Services

Description of Major Products and Services

Forest tree seedlings are produced in the nurseries and sold to forest landowners, the forest industry and the general public. Seedlings are used in reforestation, conservation, erosion control, wildlife habitat and riparian buffer plantings. Many seedlings are the result of genetic tree improvement work. All seedlings produced are appropriate for Virginia's climate and soils. In addition, the state forest system sell permits to persons who wish to use the state forests, such as hunters, trappers, fishermen, bikers and horseback riders for a fee.

Products / Services						
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF	
Tree Seedling Nursery	COV §10.1-1114 - §10.1-1115		Required	0	2,620,229	

State Forest System	COV §10.1-1107 §10.1-1119.1	4 VAC 10-30	Required	0	2,064,587
Management of State-owned Lands	COV §2.2-1158; COV §10.1-1120 - §10.1-1123		Required	0	60,000

Anticipated Changes

The nursery is undertaking a new project to start producing containerized longleaf pine seedlings at Garland Gray Forestry Center. This project will produce up to 500,000 longleaf seedlings annually to help restore this diminished species to the landscape of Virginia. Additional containerized species will be produced depending upon customer needs. In addition, VDOF embarked on the establishment of a forest conservation and education center located at the Matthews State Forest in Grayson County. Construction on this facility is being primarily funded through a trust established by the late Judge Jack and Clare Matthews.

Factors Impacting

Demand for forest tree seedlings and the availability of labor to package the seedlings for sale are important factors for the nursery operations. Extreme or unusual weather patterns can impact nursery operations, impacting not only the health of the trees, but also our ability to harvest the trees for sale.

Weather-related events, insects, diseases and the timber market can impact state forest operations.

Financial Overview

Funds received for the nurseries are derived through the sale of forest tree seedlings produced and sold by the nurseries. All operating expenses and capital expenses must be covered by the seedling sales. No general tax funds are provided for the operation of the nursery with the exception of one-time funding of \$236,000 in FY2019 for start-up costs associated with the production of containerized longleaf and loblolly seedlings. This funding was essential to accelerate the restoration of longleaf pine in Virginia and to meet the growing demand for containerized loblolly seedlings.

Funds to operate the state forests must be derived from the sale of timber and user fees. The majority of the funding is made up from the sale of timber. The user fees currently available to the state forest system are generated from hunting, trapping, fishing, mountain bike and horseback riding, which amounts to approximately \$150,000 annually. All funds are used to cover operating and capital expenses. In all cases of timber sales, VDOF gives a percentage of the gross proceeds from the timber sales to the local government.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	236,000	4,744,816	0	4,744,816
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title

Financial Assistance for Forest Land Management [50105]

Description of this Program / Service Area

Financial Assistance for Forest Land Management provides federal financial assistance to help improve the livability of cities and communities through managing urban forest resources to promote a healthy ecosystem and to increase the fire protection capability in Virginia. Partners and cooperators accomplish the work in the localities and the Virginia Department of Forestry administers the programs to ensure success.

Mission Alignment

The Code of Virginia requires aid to localities be presented separately. This service Area is exclusively federal pass-through payments to localities.

Products and Services

Description of Major Products and Services

Federal financial assistance is contingent upon federal awards received primarily from the United States Forest Service for the Urban and Community Forestry Program and the Volunteer Fire Assistance Program.

Products / Services								
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF			
Aid to Localities	COV §2.2-1508	Federal Public Law 95-313 as amended through Public Law 110-246	Required	0	900,000			

Anticipated Changes

VDOF recognizes a strong interest from communities and volunteer fire departments in this service area. Historically, VDOF receives more requests for federal grant funding than appropriated funds. If funds are increased, VDOF anticipates greater interest and more applications from communities for the federal funding.

Factors Impacting

Funding is the primary factor impacting this service area.

Financial Overview

This service area provides financial assistance to non-profits. VDOF administers federal pass-through grant programs to communities and non-profits to develop and maintain urban and community forests as well as to train wildland firefighters and purchase firefighting equipment for volunteer fire departments. VDOF provides technical information and advice, and oversees the federal grants to ensure funds are used appropriately. Financial assistance for forest land management is entirely from federal sources.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	0	900,000	0	900,000
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title