



## Virginia Forest Resource Fact Sheet 2020

Rob Farrell, State Forester  
Phone: 434-977-6555

<http://www.dof.virginia.gov/>  
Email: [rob.farrell@dof.virginia.gov](mailto:rob.farrell@dof.virginia.gov)



### Investment in State's Cooperative Programs

| Program                              | FY 2019 Final      |
|--------------------------------------|--------------------|
| Cooperative Fire Protection          | \$3,245,248        |
| Cooperative Forestry                 | \$2,075,870        |
| Forest Health Management             | \$702,587          |
| Forest Legacy and Community Forestry | \$1,095,000        |
| <b>Total</b>                         | <b>\$7,118,705</b> |

NOTE: This funding is for all entities within the state, not just the State Forester's office.

### Key Issues

- Virginia's forests are under increasing pressure to provide an array of critical services to citizens and the nation. The most obvious benefits are productive jobs, strong communities, and excellent environmental health—including clean water and air, bio-energy, habitat, and buffers for climate change. We strive to equip forest landowners with the information and knowledge to sustainably manage their forests for current and future generations.
- Protecting and maintaining healthy streams and enhancing water quality and quantity are drivers in strategic planning at the Virginia Department of Forestry (VDOF). VDOF supports a unique position among southern states through a statewide logging inspection audit program and is supporting a southeastern regional effort to provide consistent monitoring of BMPs on silvicultural sites. VDOF monitored 4,404 timber harvests to ensure water quality protection and voluntary BMP compliance.
- Rapid urbanization in recent years has greatly increased fire danger in the more than 5,315 at-risk wildland-urban interface areas throughout Virginia. A concentrated focus on improvement efforts in Virginia's highest risk communities as well as a continued focus on maintaining a high level of agency readiness is important to limiting the potential for wildfire-related damages.
- Swift and efficient initial attack of wildfire is key to the protection of Virginia's assets. Agency response efforts protect an average of 1,600 homes and other structures annually, with an estimated value of more than \$115 million.
- VDOF has taken the first steps in developing what will be a long-term pursuit of improved hardwood forest management across the Commonwealth. The hardwood initiative will help landowners manage their forests to increase natural regeneration of desirable young hardwood trees, such as oak. Improving hardwood management will help protect water quality, enhance wildlife habitat, support recovery of threatened and endangered species, and bolster Virginia's outdoor recreation opportunities.
- Divestiture of industry land (now nearly complete) and continuing fragmentation of non-industrial private forestlands (NIPF) present new challenges as the number of landowners needing services increases.
- VDOF was mandated by the five-state Chesapeake Bay Agreement to achieve the adoption of urban tree canopy (UTC) goals by at least five municipalities by 2010. VDOF has engaged 37 communities in assessing their UTC goals and supports the UTC effort with both technical and limited financial assistance. VDOF must maintain the interest in UTC in the face of limited budgets at all levels of government.
- Ecosystem services and benefits provided by forests are undervalued. Even with the financial contribution provided by the forest products industry, (\$21 billion annually) losses to the forestland base are unacceptable. It is imperative that we better develop markets for ecosystem services, such as water quality, carbon sequestration, and biodiversity. It is also imperative that we better account for the conservation of these important services.
- Traditional forest industry jobs continue to transition to new markets with globalization. The carbon sequestration market-driven bioenergy sector, for example, continues to be strong. As the economy and the housing sector improve, some forest markets are growing; however, other under-performing markets are negatively impacting forest landowners and industry. Increasing efforts in exports and value-added manufacturing such as Cross-Laminated Timber and other emerging markets will be needed.
- Wavy leaf grass has joined tree of heaven, kudzu, and a long list of other non-native invasive plants that are crowding out or killing a number of native tree species. Additionally, invasive pests are negatively impacting hundreds of thousands of trees. The hemlock wooly adelgid is killing a large proportion of the hemlock trees in Virginia, and the emerald ash borer is devastating the state's ash resource. Gypsy moth and the southern pine beetle are also serious threats to Virginia's forests.
- Despite the economic improvement, VDOF still needs to be aware of challenges and issues that affect our forests and forest industries. Timber harvesting is at record levels and these increased harvests are very positive to Virginia's private forestland owners and the economy. VDOF needs to continue to actively monitor our resource availability and sustainability to ensure that the citizens of Virginia continue to receive all the benefits they depend on from our forests.

**Forest Facts and Accomplishments**

| <b>Selected Facts</b>                             | <b>Value</b> | <b>FY 2019 Accomplishments</b>   | <b>Value</b> |
|---|--------------|--|--------------|
| Population  | 8,001,024    | Landowners Receiving Educational or Technical Assistance                             | 11,966       |
| Acres of Forest Land                              | 16,066,210   | Acres Covered by New or Revised Forest Stewardship Plans                             | 46,361       |
| Acres of Nonindustrial Private Forest Land        | 12,256,000   | Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans | 29,003       |
| Number of NIPF Landowners                         | 410,000      | Volunteer Fire Departments Assisted  | 200          |
| Acres of Federal Land Under State Fire Protection | 2,223,500    | State Fire Communities Assisted  | 1,350        |
| Acres of Private Land Under State Fire Protection | 13,222,900   | Coop Forest Health Acres Protected   | 97,215       |
| Number of Rural Fire Departments                  | 580          | Forest Legacy Project Acquisitions   | 0            |
| Cities and Towns                                  | 229          | Communities Provided Urban Forestry Program Assistance                               | 124          |
| Forest Based Employment                           | 107,900      | Population Living in Communities Provided Urban Forestry Program Assistance          | 6,600,887    |
| Economic Impact of Forestry (by rank)             | 3            | Urban Forestry Volunteer Assistance  | 40,173       |
| State Forestry Budget (All Sources)               | 34,513,853   |  |              |

**Program Highlights****Conservation Education**

VDOF provides conservation education programs statewide. Outreach ranges from pre-school children to adults via Master Naturalist chapters, landowner education and Project Learning Tree (PLT) facilitator training. VDOF hosts Camp Woods and Wildlife each summer for students ages 13 -16. Local VDOF work areas actively participate in Envirothons, high school career days and local festivals and events to provide forestry education to Virginians of all ages. VDOF Communication and Education staff collaborate with the Southern Group of State Foresters committees, the NASF and North American Forest Partnership, as well as others to establish robust outreach programs, messaging and to maximize educational resources. The Public Information Office maintains social media platforms (Facebook, Twitter, and Instagram) and an e-publication, Field Notes, to highlight forestry and conservation topics.

**Cooperative Fire Protection**

State Fire Assistance provides funding to support firefighting resources throughout Virginia. The main focus areas of Cooperative Fire Protection in the Commonwealth include training more than 900 firefighters in wildfire suppression and incident command; development of additional volunteer fire department capacity through federal property programs and Volunteer Fire Assistance grant funding; focused efforts on wildfire hazard mitigation in Virginia's highest risk woodland home communities; and wildfire prevention efforts that use both targeted public messaging, as well as law enforcement efforts, to reduce unwanted fire starts. Specific program areas include use of the Federal Excess Personal Property Program to assist Virginia in acquiring and placing fire equipment in rural communities throughout the state; the use of Volunteer Fire Assistance funding to provide much needed personal protective equipment, tools, and equipment to rural fire departments across the state; and focused efforts through the State Fire Assistance program to reduce the threat of wildfire damages in Virginia's highest risk communities.

**Economic Action**

The VDOF is actively involved with partners and other stakeholders to look for new markets to improve utilization of our forest resources. The VDOF continues to maintain one of the most active traditional economic development programs in the southern region. Examples of this include work with Virginia Tech and other partners on emerging markets for low-grade and underutilized wood including biomass energy, urban wood utilization, Cross-Laminated Timber (CLT) production and specialty forest products. To help with forest management on small forest acreages and urban/suburban forests, VDOF and partners created workshops to address the lack of service providers that work in these areas. A database of forestry service providers focused in these areas has also been developed. To diversify forest-based economic development in the state, workshops and research are being conducted on specialty forest products and developing potential uses for Ailanthus and other invasive species to assist with control efforts. An updated economic study was recently completed that highlights the importance of forestry and the forest industry in Virginia. VDOF is promoting forest industry and products domestically and internationally through membership in or partnering with agencies and groups such as the Virginia Economic Development Partnership, Virginia Department of Ag and Consumer Services, the Virginia Biomass Energy Group, the Virginia Forestry and Forest Products associations, Virginia Loggers Association, the Southern Group of State Foresters Services, Utilization & Marketing Committee, and state universities.

**Forest Health Protection**

Southern pine beetle (SPB) populations continue to be low. The SPB prevention program (in cooperation with the USFS Forest Health Protection Program) completed its 15th year in 2019. Since its inception, over 60,000 acres of prevention thinning have been conducted to lower the risk of infestation in the state's pine belt. Gypsy moth is a recurring pest but damage was limited to less than 9,000 acres in southwest Virginia this year. The emerald ash borer is a major threat to the ash resource and has been confirmed in 80 counties. The Commonwealth's hemlock trees continue their decline due to the hemlock woolly adelgid. The release of biological control agents of the emerald ash borer and the hemlock woolly adelgid offers long-term hope of preserving ash and hemlock trees across the landscape. A new pest, the spotted lanternfly, was first discovered in Virginia in 2018. This invasive insect feeds on over

70 host plants and is a threat to multiple industries. Currently, the area of infestation includes the city of Winchester, and Frederick and Clarke counties. In addition, wavyleaf grass has joined the long list of non-native invasive plant species that are negatively impacting the state's forest resources.

### **Forest Legacy**

The VDOF currently has two active Forest Legacy acquisition grant awards (Nottoway Pinelands Project and James River Headwaters Project) and one new pending acquisition award (Roanoke River Working Forest Project).

Roanoke River Working Forest Project is a pending FY20 project in Charlotte County, undertaken in partnership with The Conservation Fund, to acquire approximately 2,500 acres of land to become a new state forest. This property is currently VDOF's highest priority for acquisition of a new state forest. The new state forest will be managed for sustainable, multiple-uses, including public access for hunting, hiking and other recreation, logging, and conservation of 600+ acres of sensitive wetland habitat.

Nottoway Pinelands is a FY18 project in Sussex County, undertaken in partnership with The Nature Conservancy, to acquire land adjacent to VDOF's Big Woods State Forest and to purchase a conservation easement at the confluence of the Nottoway River and Austin Branch. Progress made during the reporting period includes: initiation and completion of all due diligence activities for the conservation easement tract, negotiation and drafting of all conservation easement documentation, and the easement tract is expected to close in the first half of CY20.

James River Headwaters is a FY19 project in Highland County to purchase a conservation easement on 1,658-acres of the upper slopes of Jack Mountain. Progress made during the reporting period includes: initial drafting of conservation easement deed, completion of mapping, verification of existing surveys, and completion of property inspection fieldwork.

### **Forest Stewardship**

The Forest Stewardship program continues to equip and support VDOF field foresters to help private landowners plan and improve management of their lands. Consistent and steady plan preparation and implementation of recommended practices are the hallmark of these efforts.

The benefits derived from a forest stewardship plan extend far beyond those enjoyed by the landowners. Every citizen enjoys clean air, clean water, wildlife habitat, soil and water conservation, aesthetics, and recreational opportunities afforded to them by healthy, sustainable forests. VDOF continues to nurture a strong partnership with Virginia Tech, through Stewardship funding, to provide outreach information and training events to forest landowners. Significant events have included forest landowner retreats, outreach to real estate professionals, bus tours, electronic newsletters, and various online and in-person workshops.

### **Landowner Assistance**

VDOF continues to provide information, recommendations, and technical assistance to landowners in managing their forest resources. VDOF field foresters and technicians work closely on developing practice plans and providing guidance in implementation of these plans. This is often done in concert with forestry service contractors and consulting foresters. VDOF operates two seedling nurseries, with a capacity of more than 30 million seedlings, used to support very active reforestation and conservation programs. In some areas, VDOF provides state-sponsored planting and herbicide spraying contracts, in which many private sites are aggregated to bring economies of scale and contractor access to private landowners. VDOF is focusing on pine sustainability in southern Virginia, with two dedicated pine resource specialists working with new and experienced staff foresters to foster existing practice consistency and promoting innovations. VDOF is also developing a hardwood initiative strategy, which will focus on training, demonstration and outreach. VDOF is working closely with the USDA, state, and private partners to reinvigorate the Conservation Reserve Enhancement Program and riparian forest buffer establishment in general. Buffers play a key role in water quality, habitat and agricultural conservation. Significant activity with federal, state, and private partners is taking place in southeast Virginia with efforts to restore the nearly extinct longleaf pine ecosystems. Additionally, there is growing interest and activity in restoring shortleaf pine.

### **Urban and Community Forestry**

The VDOF, through a partnership with the US Forest Service, provides communities with technical, financial, and educational support so they may plant, protect, and maintain community trees and forests. In FY19, VDOF's program provided assistance to 130 communities including 58 with the Tree City USA designation. VDOF assisted with planning assistance for several under-served communities through the VA Tech Community Design Assistance Center. VDOF and the VA Urban Forest Council (VUFC) provided educational opportunities at multiple venues across the state. The VUFC maintains a scholarship program for 2-year, undergraduate and graduate level students in natural resource fields. VDOF sponsors the VA Natural Resources Leadership Institute, which takes participants through a year-long process of investigation into various environmental issues and leadership training. VDOF continues its leadership with the UFST program by training state personnel in protocols of evaluating tree damage following major natural disasters. The UFSTs have responded to multiple events during the past year to assist communities in recovery after tree damage caused by natural disasters. VDOF continues to assist the International Society of Arboriculture (ISA) in promoting the Certified Arborist Program by hosting two training programs each year and providing scholarship funding through the local MAC-ISA chapter. VDOF has engaged 38 communities in the process of establishing urban tree canopy goals to help meet Virginia's Chesapeake Bay Agreement commitments. Also, VDOF continues to support the evaluation of utility-friendly tree cultivars under its Municipal Tree Restoration Program to encourage the planting of trees under power lines that will not cause interference. Through the VA Trees for Clean Water grant program, communities and non-profits all across VA have received grant cost-share funding for tree planting.

### **Water Quality**

VDOF has been involved with the protection of our forested watersheds since the early 1970's with the development of our first set of Forestry Best Management Practices (BMPs) for water quality. The Department utilizes the fifth edition of those guidelines, which came out in 2011. The backbone for the Department's water quality effort is the harvest inspection program, which began in the mid-80's. This program has provided for one-on-one contact between VDOF and the harvest operators and is a welcomed opportunity to educate the operators on BMPs and the latest water quality protection techniques. In fiscal year FY19, VDOF field personnel conducted 17,986 field inspections on 4,404 timber harvest sites (4.1 inspections per site) across Virginia on 198,306 acres. Another main focus of the VDOF water quality program is logger education. This occurred through training that the agency sponsored and recently, through VDOF participation in the SFI program, has enabled VDOF to assist in training 9,713 harvesting professionals in 326 programs related to water quality protection. For FY19, there were 22 training programs offered reaching a total of 441 individuals. Four of these courses were in the core area (99 attendees) and the remaining 18 courses were for logger continuing education (342 attendees). Results from the calendar year 2018 data show that BMP harvest median implementation rate on 240 randomly selected tracts is 94 percent (the harvest median score is the best judge of central tendency of the tract score). The audit results also showed that 99 percent of the sites visited had no active sedimentation present after the close-out of the operation. Calendar year 2019 BMP Implementation data is currently being analyzed and will be available in February 2020.



**Ken Arney**, Deputy Regional Forester

Phone: 404-347-4178

Email: [ken.arney@usda.gov](mailto:ken.arney@usda.gov)

---