# Department of Forestry

Forest Conservation, Wildfire & Watershed Services (50103)

# **Service Area Background Information**

#### **Service Area Description**

This service area provides resource protection, cost share program services, forest fire and silvicultural water quality enforcement, resource inventory, resource information, aid to community grants, insect and disease investigation, applied research, certification for burning managers, riparian tax credit certification and forestry assistance to private forestland owners and Virginia's citizens, who own, manage, use, or enjoy the forest resources available in Virginia. This is DOF's largest service area and consists of the Divisions of Resource Protection, Resource Information and Forest Management. The DOF covers the entire Commonwealth with its employees, resources, and equipment placement. Products and services include:

- 1. Provide equipment and personnel involved in suppression and prevention of forest fires
- 2. Enforcing forest fire laws
- 3. Enforcing silvicultural practices affecting water quality
- 4. Promoting best management silvicultural practices to loggers and landowners to protect water quality
- 5. Provide forest management advice and service to forest landowners for improvement of forest stands
- 6. Collect, summarize, analyze, and report forest inventory data on the status and condition of forestland in Virginia.
- 6. Provide resource information, maps, aerial photographs and Geographical Information Systems (GIS) information to local governments, state agencies, and forest landowners
- 7. Enforce the forest seed tree laws
- 8. Monitor and report findings on the forest health of forest stands across Virginia to prevent or control insect and disease harmful to forests
- 9. Provide certified burning manager training to individuals involved in the controlled application of fire to reduce forest fuels
- 10. Provide timely and accurate forest resource information to help forest industry maintain a vibrant forest business in Virginia and continue to help businesses develop markets and products

#### **Service Area Alignment to Mission**

This service area directly aligns with the DOF's mission to protect and develop healthy, sustainable forest resources for Virginians. This service area directly supports six strategic goals of DOF:

- 1. Protect the citizens, their property, and the forest resource form wildfire
- 2. Protect, promote, and enhance forested watersheds, non-tidal wetlands, and riparian areas.
- 3. Conserve the forest land base.
- 4. Improve the stewardship, health and diversity of the forest resources.
- 5. Facilitate the development and implementation of a statewide forest policy.
- 6. Collect, maintain, and disseminate forest resource information.

This service area directly supports the following long -term objectives for Virginia:

- 1. Protect, conserve, and wisely develop our natural, historical, and cultural resources.
- 2. Protect the public's safety and security, ensuring a fair and effective system of justice and providing a prepared response to emergencies and disasters of all kinds.
- 3. Engage and inform citizens to ensure we serve their interests.
- 4. Be a national leader in the preservation and enhancement of our economy.

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#### Service Area Statutory Authority

Chapter 11, Article 4. § 10.1-1124 through §10.1 -1130 provides that DOF may enter agreements with counties and certain cities providing forest fire prevention and suppression to local governments and receive compensation.

Chapter 11, Article 5, §10.1 -1131 through § 10.1 - 1134 provides that DOF may offer forestry services, including technical advice, tree marking, management advice and general forestry advice, to landowners for fee or no charge.

Chapter 11, Article 6, §10.1 -135 -10.1 through §10.1 - 1150 provides authority for DOF to appoint and compensate forest wardens to assist with enforcement of forest laws, fire suppression and prevention.

Chapter 11, Article 6.1, §10.1 -1150.1 through 10.1 – 1150.6 authorizes the DOF to offer training and certification to individuals who use the application of fire to control forest fuels and wishes to become a certified burn manager.

Chapter 11, Article 9, §10.1 – 1162 through §10.1 – 1169 authorizes the DOF to enforce the seed tree laws in Virginia requiring reforestation or alternate plans following the harvests of specific types of trees.

Chapter 11, Article 11, §10.1 -1177 through §10.1 – 1181 makes the DOF responsible for investigating insect and disease infestations which affect stands of forest trees and to devise and demonstrate control measures to interested persons.

Chapter 11, Article 12, §10.1 -1181.1 through §10.1 - 1181.7 authorizes the DOF to inspect logging sites

Chapter 43, §15.2-4301 through §15.2 – 4314 provides a means for a mutual undertaking by landowners and localities to protect and enhance agricultural and forestal land as a viable segment of the Commonwealth's economy and as an economic and environmental resource of major importance. DOF is responsible for providing review of proposed property sites to the local government.

4.210 & 4.3B Chesapeake Bay Preservation Act

Federal law Title IV of Public Law 92-419 provides for state forestry organizations to organize, train, and equip local forest fire work forces.

Federal law 40 U.S.C. 483, 16 U.S.C. 2101 assigns responsibility to state forestry organizations to provide Federal Excess Personal Property to Fire Departments.

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

#### **Service Area Customer Base**

Customer(s)	Served	Potential
	0	0
Federal Land Management Agencies	4	4
Fire Departments	712	765
Forest Industry & Associated Businesses	6,500	15,000
General Public	200,000	7,000,000
Local Governments	100	100
Loggers	0	0
Other State Agencies	12	12
Private landowners	6,000	300,000

#### **Service Area Partners**

#### Local governments

Planning commissions interested in maintaining forest resources as a viable component of the local government planning process and needing accurate and timely forest resource information.

#### **Service Area Partners**

#### **Public School system**

DOF makes presentations to young students about the importance of the forest and its protection. Schools provide time for DOF staff to attend the schools for the program presentations.

# **Service Area Partners**

#### **US Forest Service**

Cooperative agreements and consolidated grants for fire, forest health monitoring, Chesapeake Bay and other watersheds, and forest management.

## **Service Area Partners**

# **Voluntary Fire Departments**

Voluntary fire departments assist DOF with suppression of forest fires. DOF provides training, equipment and grant funds to assist fire departments.

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#### Service Area Products and Services

- Provide specialized forest fire fighting equipment such as bulldozers equipped for forest conditions and the trucks capable of transporting the bulldozers and other equipment.
- Forest landowners request and receive inspections, information and recommendations on forestry management for their property. DOF foresters and technicians are available to provide these inspections, reports and assistance to the 300,000 potential forest landowners.
- Forest landowners request federal and state cost share assistance for forestry practices on their
  property. DOF foresters and technicians provide the required inspections and approval of the
  landowner practices before the final cost share award is made to the landowner. DOF is often
  involved in the oversight and coordination of the project to insure the practice is implemented
  according to the approved plan. DOF staff makes the final inspection of the completed practice
  and approves the cost share payment or assist landowners to correct deficiencies.
- DOF coordinates regional tree planting contract and makes available forest seedlings for sale to
  forest landowners. This service insures the forest landowner receives tree planting service from
  reputable vendors at the lowest price. DOF supplies the tree seedlings from its nurseries
  insuring the highest quality, genetically superior seedling available for Virginia sites.
- DOF foresters and technicians inspect all harvest operations to ensure consistent enforcement of
  the Virginia Seed Tree Law. This law applies to certain species of pine and hardwood trees and
  was created to insure these valuable Virginia species are maintained in Virginia forests into the
  future.
- DOF Spatial Center can produce high quality GIS products showing current land conditions
  and species composition. Local government planners and administrators can use these
  products to make informed decisions about the county forest land base and its contribution.
  Employees of the DOF and other agencies use the GIS information to create higher quality
  maps and photographs of forest landowner customer tracts when making recommendations for
  forestry practices in reports and cost share assistance.
- The Forest Inventory Assessment team collects forest resource information from 20% of the forest inventory plots across Virginia each year. This rate of information collection allows DOF to complete an assessment every five years. The information includes estimated tree volume, species composition, age distribution, and size of Virginia's forest land base. The improved technology in satellite imagery allows DOF to document land pattern trends and changes in "real time" for policy and decision makers.
- Using the latest GIS tools, FORESTRIM and GPS units, DOF employees make sophisticated
  maps for their reports and add the latest layers of information available on the tract. The public
  can access FORESTRIM from DOF's website and use the tool to create maps of their property
  and secure forest information.
- DOF provides comprehensive insect and disease investigation and monitoring across Virginia.
   DOF is mandated to report infestations and recommend prevention or control measures to protect valuable species of forest trees. In the past, DOF has monitored species such as gypsy moth, pine bark beetle, oak wilt, chestnut blight and many other insects and diseases
- DOF conducts applied forest research to provide the best recommendations for forest practices in Virginia. The results are used by DOF staff in their recommendations to landowners, forest industry, and the general public to improve their forestland.

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# Department of Forestry

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## **Service Area Products and Services**

- Offer specialized training to fire fighters across the Commonwealth to maintain firefighter's knowledge and skills at the highest level and to ensure that firefighters operate safely to protect themselves and other people.
- Provide experienced all-risk incident management teams for the Commonwealth to provide assistance to Virginia Department of Emergency Management when disasters or emergencies occur.
- Prevention advertisement campaigns through radio, television, newspaper and multi-lingual media sources to make the public aware of forest fire open air fire law, dangerous forest conditions and safe use of the forest.
- DOF provides cost share assistance to private forest landowners for management practices to reduce the risks of southern pine beetle infestation including pre-commercial thinning and restoration of longleaf on acceptable sites.
- Increased the establishment of riparian forest buffer plantings in the Commonwealth's Chesapeake Bay and southern river watersheds
- Provide woodland home community wildfire hazard assessment and mitigation recommendations.
- Provide oversight of Virginia Dry Hydrant program, which currently installs 65 dry hydrants annually for local/community fire suppression needs.
- Acquire and provide federal excess personal property for loan to fire departments across the Commonwealth to increase suppression capabilities.
- Provide trained forest engineers with specialized knowledge of forest hydrology, watersheds, civil engineering, and best management practices
- Offer prescribed burning training and certification to burning managers.

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

#### **Factors Impacting Service Area Products and Services**

Many factors impact the largest service area for DOF. This service area has the greatest number of DOF employees engaged in its success. Employees properly trained and motivated to the delivery of the products and services are essential to its success. Resignations and retirements can impact products and services.

Funding for cost share programs is an important factor which impacts the outcomes of this service area. Private landowners count on cost share reimbursement for 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.

Training employees to communicate appropriate forest resource assessment and recommendations in an effective and efficient manner which conveys the importance of forest resources and their value to Virginia can impact products and services.

Partners and cooperating organizations interest and capabilities to assist DOF with the message of the value and benefits of the forest resources can impact products and services.

#### **Anticipated Changes To Service Area Products and Services**

DOF expects to see increases for its services in all aspects of this service area. More forestland is being sold by forest products companies to private individuals. This means more forestland owners and smaller parcels of land. DOF anticipates more request for Forest Stewardship plans.

As logging continues, DOF anticipates more logging harvest inspections and assists with the water quality laws and procedures.

DOF expects increasing interest in riparian buffer plantings and applications for riparian buffer tax credit as interest in water quality grows.

The agency expects more conservation easements for working forests through the Forest Legacy program and from interested landowners who select DOF as the responsible holder for conservation easements.

#### Service Area Human Resources Summary

# Service Area Human Resources Overview

# Service Area Full-Time Equivalent (FTE) Position Summary

**Factors Impacting Service Area Human Resources** 

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# Department of Forestry

Forest Conservation, Wildfire & Watershed Services (50103)

## **Anticipated Changes in Service Area Human Resources**

## Service Area Financial Summary

Forestry Conservation, Wildfire and Watershed Services receives funding from General Fund Appropriations (75%), Special revenue funds (16%), and Federal grants (9%). The Special revenues in this service area are primarily from aerial release in which forestry incurs an offsetting expenditure for the practice. The majority of the funding in this service area is needed to fund salaries which continue to increase; thus reducing our discretionary spending. The reference to percentage of funding refers only to the base budget and not the changes to the base budget.

	Fiscal Year 2007		Fiscal Year 2008	
	General Fund	Nongeneral Fund	General Fund	Nongeneral Fund
Base Budget	\$15,078,704	\$4,899,598	\$15,078,704	\$4,899,598
Changes To Base	\$7,707,769	\$219,635	\$5,336,597	\$219,635
SERVICE AREA TOTAL	\$22,786,473	\$5,119,233	\$20,415,301	\$5,119,233

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# Department of Forestry

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# Service Area Objectives, Measures, and Strategies

## **Objective 50103.01**

## Reduce the forest land acres lost annually due to forest fires.

Protecting Virginia's forest resources from wildfires assures healthy trees are available in the future, while providing safety to people living in or near forestland. Property and people are safer and property losses are minimized with an effective DOF workforce and appropriate equipment. Forest fires damage trees, reduce wood supplies and cause large economic losses. Forest fires also destroy the scenic landscapes of the state, wildlife habitat environmental harm.

#### This Objective Supports the Following Agency Goals:

- Protect the citizens, their property, and the forest resource from wildfire.
- Protect, promote, and enhance forested watersheds, non-tidal wetlands, and riparian areas.
- Conserve the forest land base.
- Improve the stewardship, health, and diversity of the forest resources.
- Facilitate the development and implementation of a statewide forest policy.
- Collect, maintain, and disseminate forest resource information.

#### This Objective Has The Following Measure(s):

Measure 50103.01.01

Limit acres lost to less than .75 acres burned per 1000 acres protected

Measure Type: Output Measure Frequency: Annually

Measure Baseline: Average of .23 acres burned per 1000 acres protected in the Commonwealth

over the past 8 years.

Measure Target: Keep annual forest fires burned ratio to not greater than .75 acres burned per

1000 acres protected.

#### Measure Source and Calculation:

The number of forest acres burned annually is recorded in DOF information management system subsequent to each forest fire to which DOF responds. The number of acres actually burned each year is compared to the total acres protected in the Commonwealth, which is divided by 1000. The measure is a result of dividing the number of acres burned by this number.

#### Objective 50103.01 Has the Following Strategies:

- Annually identify high risk areas for wildfire prevention activities
- Develop a regional response plan for in-state emergency response and update annually.
- Establish one information coordinator per each of DOF's six regions.
- Have DOF public relations division meet with regional representatives from each region annually and provide training on effectively disseminating effective forest protection information.

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

Contact every volunteer fire department and conduct at least one regional training event annually.

#### **Objective 50103.10**

## Restore shortleaf and longleaf pine species into the Commonwealth's forest landscape.

DOF recommends tree planting and supervises tree planting operations across Virginia. Shortleaf and longleaf pine are native Virginia species which have not been widely planted. Shortleaf and longleaf pine are both excellent tree species for certain sites in Virginia. DOF will recommend and count the number of acres actually planted to shortleaf and longleaf pine.

The range of both species has been reduce substantially in size since replanting has not kept pace with harvests. The historical natural growing range of shortleaf and longleaf pine was much larger than the range today. DOF would like to increase these natural species back into Virginia. A diverse mixture of trees in the forest results in healthy forests.

#### This Objective Supports the Following Agency Goals:

• Improve the stewardship, health, and diversity of the forest resources.

#### This Objective Has The Following Measure(s):

Measure 50103.10.01

## Regenerate Shortleaf and Longleaf Pine onto Natural Range in Virginia

Measure Type: Output Measure Frequency: Annually

Measure Baseline: DOF used the annual average planting of longleaf and shortleaf planting from

2003 to 2005. The average over the 3 years was 296 acres.

**Measure Target:** The target is the planting of shortleaf and longleaf pine on 500 acres of suitable

land by July 1 2006.

#### **Measure Source and Calculation:**

DOF staff enter tree planting accomplishments into the DOF information management system. DOF will count plantings of shortleaf and longleaf pine from nursery seedling sales to determine the total accumulative acres planted.

## Objective 50103.10 Has the Following Strategies:

- Train DOF field staff on the characteristics of shortleaf and longleaf pine species.
- Develop appropriate marketing information, including information related to historic sites and incentives.
- Provide seedlings for 4H Educational groups and vocational agriculture classes to plant in group projects.
- Identify restoration sites to be planted and contact the owners with information about the desirability of planting shortleaf and longleaf pine plantings.

#### **Objective 50103.11**

#### Provide more forest stewardship plans to forest landowners in the Commonwealth.

DOF provides technical forest resource management assistance to private forest landowner to manage for wildlife, healthy forest resources, water quality, recreation, fire protection, non timber products, and forest timber products. DOF provides assessments and recommendations through forest stewardship plans completed by DOF employees and private forestry consultants.

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#### This Objective Supports the Following Agency Goals:

- Protect the citizens, their property, and the forest resource from wildfire.
- Protect, promote, and enhance forested watersheds, non-tidal wetlands, and riparian areas.
- Improve the stewardship, health, and diversity of the forest resources.
- Collect, maintain, and disseminate forest resource information.

## This Objective Has The Following Measure(s):

Measure 50103.11.01

Forest Stewardship Plans

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: DOF has accomplished 600 forest stewardship plans in 1990s. Conditions in

the 1990s are similar to 2005 funding. The baseline is difficult to establish since

federal grant supports the stewardship plan.

Measure Target: Complete 575 forest stewardship plans by September 15, 2005.

#### **Measure Source and Calculation:**

DOF staff and forest consultants develop forest stewardship plans to provide a comprehensive understanding of the forest resource and its uses to forest landowners. The document includes forestry, wildlife, recreation, water quality, conservation and topics which help the landowner reach their stated goals. The plan serves as a basis for the baseline condition of the forest and future uses, with recommendations for implementation of practices to achieve the landowner's goals. The number of stewardship plans written by DOF employees and private forestry consultants are entered into the DOF information system and counted annually.

## Objective 50103.11 Has the Following Strategies:

- Assign foresters the responsibility and accountability of completing a number of stewardship plans, which taken together will successfully accomplish the measure at the end of the measurement period.
- Allocate \$100,000 for forestry consultants to complete a portion of the Stewardship plan goals.
- Determine the regional breakdown for new plan completion or updates.
- Coordinate with partners to market Forest Stewardship plan completion.

#### **Objective 50103.12**

Increase DOF participation in the Commonwealth's local planning process for forestry resources by providing pertinent conservation information to county planners.

DOF must reach county planners and decision makers if Virginia is to make progress in conserving its forestland. DOF develops, collects and analyzes forest resource information on a routine basis. The staff at DOF must make this information available to local governments to help find ways to conserve more forestland.

#### **This Objective Supports the Following Agency Goals:**

• Conserve the forest land base.

#### This Objective Has The Following Measure(s):

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

#### Measure 50103.12.01

Provide forest data to County Planners in 50% of counties by 2005 and the remaining 50% of counties by

Measure Type: Outcome Measure Frequency: Annually

**Measure Baseline:** This is a new measure. DOF will measure its first result in 2005 and the

timeframe is aligned with employee evaluation. Director of Forest Resources will secure a report on accomplishments annually from the Regional Foresters.

Measure Target: Reach 50% of county planners and provide timely forest resource information in

2005 in accordance with employee Expand complete the task in the remaining

50% of regional counties by 2006.

#### **Measure Source and Calculation:**

DOF must reach county planners and decision makers if Virginia is to make progress in conserving its forestland. DOF develops, collects and analyzes forest resource information on a routine basis. The staff at DOF must make this information available to local governments to help find ways to conserve more forestland.

#### Objective 50103.12 Has the Following Strategies:

- Determine county visit schedule to County Planners
- Develop county specific forest information for County Planners and Planning Districts' presentation.
- Make presentations and deliver in those presentation forest resource information in the county to County Planners
- Make presentations and deliver in those presentations forest resource information pertinent to the Planning Districts.

#### **Objective 50103.13**

#### Increase forest landowner awareness of and participation in the forest riparian tax credits.

Landowners who choose to leave riparian buffer strips, adjacent to harvested timber, are eligible to receive Virginia tax credit incentives. This incentive is a voluntary action which can lead to the elimination of sediment pollution in waterways and cleaner water quality from logging operations conducted on tracts where riparian buffers are kept intact.

## This Objective Supports the Following Agency Goals:

• Protect, promote, and enhance forested watersheds, non-tidal wetlands, and riparian areas.

# This Objective Has The Following Measure(s):

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

#### Measure 50103.13.01

Increase landowner participation in the Virginia riparian tax credits

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: The baseline was measured in the period between 2002 to 2004. The average

annual number of applications during this period wa 17.

Measure Target: Increase the number of participating landowners in the Virginia riparian buffer

tax credit by 25% over the baseline year by July 1, 2007.

#### **Measure Source and Calculation:**

The number of landowners participating in the forest riparian credit in Virginia is small compared to the number of silvicultural operations which occur in Virginia annually. The riparian buffer data base is maintained by an employee and summarized annually.

#### Objective 50103.13 Has the Following Strategies:

- Utilize forest management planning and landowner contact process to educate forest landowners on riparian forest based tax credit.
- Develop a request for proposal media package and release for the riparian forest based tax credit.
- Train the forest community on the riparian forest based tax credit.
- Streamline procedures and clarify riparian forest base tax credit.

## **Objective 50103.14**

Create conservation model funding mechanism to identify strategic forests, agricultural land and open spaces, provide conservation annuity funding sources and match funding sources with landowners.

The conservation funding model would be administered by DOF to conserve forests, agricultural lands, and other open space. Currently, 20,000 acres of forestland and 23,000 acres of agricultural land are being converted to other uses annually. The Model would identify private and public conservation organizations, project potential conservation funding contributions, and provide for an annuity income stream for private landowner conservation commitments. A Geographic Information System (GIS) would be used to identify important strategic properties to conserve. The model would also determine the public financial values of the resources each property delivers to Virginia's citizens.

The model would identify partnerships through various Resource Value Groups (RVG). Various RVGs include water quality, air quality, wildlife (game and non-game), tourism, greenspace, carbon sequestration, forest products, historic values, etc. Many partners exist within each RVG and would include corporate, nongovernmental organizations (NGOs), and, possibly, county and Federal government partners. The model would develop a funding mechanism that is flexible enough to bring in additional partners over time.

## This Objective Supports the Following Agency Goals:

• Conserve the forest land base.

# This Objective Has The Following Measure(s):

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

#### Measure 50103.14.01

#### Create a Conservation Funding Model

Measure Type: Output Measure Frequency: Other

**Measure Baseline:** This is a new measure. No known comprehensive conservation annuity

funding model exists now. Funding the model will depend upon approval of a

decision package submitted in 2005. If funded, baseline data would be

available by July 1, 2007.

Measure Target: The conservation funding model should be fully developed and operational by

July 1, 2007.

#### **Measure Source and Calculation:**

DOF would request proposals, select a contractor and award the contract. The conservation model should be fully developed, fully operational and in use by July 1, 2007.

#### Objective 50103.14 Has the Following Strategies:

- Solicit a Request for Proposal to develop a conservation funding model to be administered by the DOF.
- Contract with a university or another organization to construct the model.
- Identify all forests, agricultural lands and open spaces in Virginia considered strategic for conservation agreements.
- Identify sources of funding through private and public organizations.
- Implement a process to educate and help landowners take advantage of the various sources of funding for promises to conserve their land.
- Develop the internal organization and administration to offer and oversee an annuity stream of income to landowners who committed to conserving their lands.

#### **Objective 50103.15**

#### Develop a forest policy statement.

The purpose for having a Forest Policy Statement for Virginia:

Elevate the commitment to Article XI Section 1 and Section 2 of the Virginia Constitution as it relates to Forests and Forest Resources.

Define long-term strategies and focus for the use of Virginia's Forest Resources.

To add clarity and further define a purpose for having a Virginia Department of Forestry.

To promote outcome-based stewardship of our Forest Resources.

Identify and elevate the importance of "working forests" to Virginia's economy and environment. Utilize and emphasize the need for cooperative support from other agencies, private organizations, and policy makers.

Serve as the fundamental framework for decisions regarding forest issues including education and research.

To address the overall health and condition of Virginia's forest resources.

To clarify and add, that the science of Forestry is both an art (skill), and the business of managing forested landscapes to sustain a desired balance of values and environmental services from those landscapes.

#### This Objective Supports the Following Agency Goals:

• Facilitate the development and implementation of a statewide forest policy.

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#### Forest Conservation, Wildfire & Watershed Services (50103)

## This Objective Has The Following Measure(s):

#### Measure 50103.15.01

Develop a forest policy statement.

Measure Type: Outcome Measure Frequency: Other

Measure Baseline: New measure, baseline data not available. Baseline will be established by

work completed in FY 06.

Measure Target: Create a forest policy statement ready for introduction to the 2007 General

Assembly.

#### **Measure Source and Calculation:**

DOF will use public interest groups and forest experts to assess needs, define an appropriate policy framework and develop a forest policy statement.

#### Measure 50103.15.02

#### Submit Forest Policy Statement to General Assembly

Measure Type: Outcome Measure Frequency: Other

Measure Baseline: New measure, no baseline data is available.

Measure Target: Forest policy statement for the Commonwealth approved as public policy by the

Virginia General Assembly and the Governor by July 1, 2007.

#### **Measure Source and Calculation:**

The forest policy statement prepared for the July 1, 2006 target date will be forwarded to the Legislative Services for consideration by the General Assembly in the 2007 session.

#### Objective 50103.15 Has the Following Strategies:

- Submit to Legislative Services for consideration by the 2007 General Assembly.
- Defend the forest policy statement before policy makers as necessary to explain and assist with the acceptance of the policy.

#### **Objective 50103.02**

#### Increase complete compliance with best management practices on forest harvest sites.

Protection of the Commonwealth's waterways is important to everyone. Sediment from any activity deteriorates the quality of water used by Virginians for the domestic and recreational uses. DOF provides training and technical assistance to forest landowners, loggers, forestry consultants and other contractors to assure that best management practices are installed when any silvicultural activity is undertaken on forest sites. The use of best management practices on silvicultural operations reduces sediment into the waterways.

## This Objective Supports the Following Agency Goals:

• Protect, promote, and enhance forested watersheds, non-tidal wetlands, and riparian areas.

#### This Objective Has The Following Measure(s):

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

#### Measure 50103.02.01

90% of audited silvicultural operations will show no evidence of active or potential sediment pollution l

Measure Type: Output Measure Frequency: Quarterly

**Measure Baseline:** The most recent results from the November 2004 audit show that full

compliance with best management practices occurred on 10% of the audited

tracts.

Measure Target: The target is for full best management compliance on 8% or more of the audited

tracts by January 1 2008. DOF hopes to see a trend indicating greater compliance

all best management practices.

#### **Measure Source and Calculation:**

The agency uses a team of trained water quality silvicultural professional foresters to visit, examine and evaluate tract information following tree harvests. Samples of total annual logging harvests are selected for the auditing team to measure. Each team member measures the use of best management practices and records the information. The team summarizes and reports their findings to DOF personnel, cooperators, legislators, and the public. Each audit is compared to the previous audit findings to determine trends.

#### Objective 50103.02 Has the Following Strategies:

- Develop written best management practices tract scorecard on all final harvests
- Assist in water quality and best management practices / Sharp Logger Training opportunities for forest community and the DOF.
- Continue cooperation with the south eastern states on uniform best management practices monitoring protocol.

#### **Objective 50103.03**

Decrease the amount of potential and active sediment pollution going into waterways from silvicultural activities, such as tree harvests.

DOF inspects all logging operations in the State, enforces the silvicultural water quality law, and provides recommendations for best management practices on harvest sites. DOF audits logging sites to determine if the practices installed have eliminated sediment pollution.

#### This Objective Supports the Following Agency Goals:

• Protect, promote, and enhance forested watersheds, non-tidal wetlands, and riparian areas.

#### This Objective Has The Following Measure(s):

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

#### Measure 50103.03.01

Reducing active and potential sediment in waterways from silvicultural activities.

Measure Type: Output Measure Frequency: Quarterly

**Measure Baseline:** The objective of this baseline is to determine a trend. The most recent numbers

from November 2004 show that sites where the potential for sedmentation existed was 14% of the audited sites and that active sedimentation occurred on

14% of the audited sites

**Measure Target:** The target is for 10 % or less of the audited silvicultural operations to show any

evidence of active or potential sediment.

#### **Measure Source and Calculation:**

The agency uses a team of auditors to visit, examine and collect tract information following tree harvests. Samples of total annual logging harvests are selected for the auditing team to measure. Each team member collects data independent of the other and records their findings. All data is summarized, reported and compared to the previous quarterly results. The information is analyzed and reported to agency personnel, industry, and cooperators.

## Objective 50103.03 Has the Following Strategies:

- Improve problem recognition by the forestry community and DOF inspectors through training.
- Develop and implement a uniform enforcement review methodology.
- Incorporate review information into water quality program improvement.

#### **Objective 50103.04**

# Increase the establishment of riparian forest buffer plantings in the Commonwealth's Chesapeake Bay and Southern River watersheds.

Protecting the Chesapeake Bay and Virginia's watersheds is critical to Virginia's environment, economy, fisheries, and recreation. Planting trees along non – forested riparian areas is an important step to preventing sediment pollution into Virginia's waterways.

#### This Objective Supports the Following Agency Goals:

• Protect, promote, and enhance forested watersheds, non-tidal wetlands, and riparian areas.

#### This Objective Has The Following Measure(s):

#### Measure 50103.04.01

This measure counts the exact miles of tree planting along riparian areas established each year.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: DOF has measured 1432 miles and 974 miles of riparian plantings in the

Chesapeake Bay and Southern Rivers watersheds, respectively.

**Measure Target:** Establish an additional 3200 and 600 miles of riparian forest buffer in the

Chesapeake Bay and Southern Rivers watersheds by December 1, 2010.

## **Measure Source and Calculation:**

DOF staff work with landowners to plant trees along riparian areas in Virginia. DOF counts the actual miles planted on riparian areas in the Chesapeake Bay watershed and the Southern Rivers watershed. This information is entered into DOF information management system.

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

## Objective 50103.04 Has the Following Strategies:

- Serve as technical advisors for the riparian forest buffer program.
- Using the harvest inspection process, GiS and ForestRim, identify landowners with restoration opportunities.
- Work with conservation partners through the Riparian Working Group to identify program gaps and opportunities.
- Annually give hardwood seedling needs and estimates of quantities to Forestry Centers. Forecast future demands.
- Get Conservation Reserve Enhancement Program estimates from NRCS for future years.

## **Objective 50103.05**

# Complete artificial forest regeneration with desirable tree species to provide future forest crops.

DOF recommends tree planting and supervises tree planting operations across Virginia. Artificial regeneration of pine and hardwoods through tree planting are necessary to assure healthy, desirable forests in the future. Forest landowners hold the key to future forest crops and this goal assures DOF staff identifies and recommends appropriate pine and hardwood regeneration where it is appropriate and within the landowners goals.

#### This Objective Supports the Following Agency Goals:

• Improve the stewardship, health, and diversity of the forest resources.

#### This Objective Has The Following Measure(s):

Measure 50103.05.01

Artificial Regeneration

Measure Type: Output Measure Frequency: Annually

Measure Baseline: DOF has counted an annual average of 76,850 trees planted over a three period

from 2002 -2004.

**Measure Target:** The target annual tree planting is 76,000 acres.

#### **Measure Source and Calculation:**

DOF accounts for all tree planting on private forest landowner property and enters the information into the DOF information management system. DOF counts all tree planting completed annually in Virginia in which it may

## Objective 50103.05 Has the Following Strategies:

- Develop consistent regionally based planting contracts.
- Analyze harvesting data to identify potential regeneration sites.
- Provide seed and seedlings to meet reforestation needs in Virginia.
- Report accurate natural and artificial pine regeneration accomplisments.
- Develop a promotional campaign on artificial pine regeneration on abandoned lands.

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# Department of Forestry

Forest Conservation, Wildfire & Watershed Services (50103)

## **Objective 50103.06**

# Decrease the susceptibility of pine stands in the Commonwealth to southern pine beetle infestations.

Epidemics of southern pine beetle (SPB) are the major forest health threat to the commercially and ecological important pine forests of the Commonwealth. The pine resource supplies roughly half of the wood used by forest industries in the state. Overstocked natural and planted pine stands have the greatest susceptibility to the insect, and pre-commercial thinning can greatly reduce the risk of losses to SPB. DOF promotes pre-commercial thinning through the provision of technical assistance and cost-share assistance.

#### This Objective Supports the Following Agency Goals:

• Improve the stewardship, health, and diversity of the forest resources.

#### This Objective Has The Following Measure(s):

Measure 50103.06.01

Southern Pine Beetle

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: 8,000 acres of pre-commercial thinning have been enrolled into the grant for

FY2004/2005)

Measure Target: 16,000 acres of pre-commercial thinning is the target grant enrollment in the

biennium

#### **Measure Source and Calculation:**

Pre-commercial thinning projects receiving cost-share have approved cost-share agreements with maps, both of which are entered into the DOF information system.

#### Objective 50103.06 Has the Following Strategies:

- Advertise the cost share program to private forest landowners and DOF employees to inform the
  public about the southern pine beetle threat and cost share assistance available to reimburse one half
  of the cost of pre-commercial thinning.
- DOF foresters visits each applicant's site, assesses whether the site meets the qualifications, and assists the landowner with submittal, and Forest Health team approves the cost share application.
- DOF field staff assist landowners with arranging for pre-commercial thinning and approving the practice was completed in accordance with the federal guidelines.
- Encourage the planting of longleaf pine, which is resistant to southern pine bark beetle, on appropriate sites. This practice is more expensive than establishment of loblolly pine and qualifies for the federal grant.

#### **Objective 50103.07**

# Advance the knowledge base of best silvicultural practices applicable to private, non-industrial forest lands in the Commonwealth.

Sustainable management of private forest lands requires knowledge and practices that differ in many respects from the practices used to manage public and industrial forests. DOF is in a unique position to conduct practical research to develop slivicultural knowledge and practices tailored to the private family-owned forests of the Commonwealth. This technology can be directly transferred to the forest landowner via DOF's technical assistance programs and research demonstration areas.

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# Department of Forestry

Forest Conservation, Wildfire & Watershed Services (50103)

# This Objective Supports the Following Agency Goals:

• Improve the stewardship, health, and diversity of the forest resources.

#### This Objective Has The Following Measure(s):

Measure 50103.07.01

Silvicultural practices knowledge base

Measure Type: Outcome Measure Frequency: Annually

**Measure Baseline:** DOF has decades of research baseline data for many types of forest research.

Each year install 6 or more new plots, perform scheduled measurements, and

report on 3 or more studies.

**Measure Target:** Expand research into areas of hardwood management, bio-solids application to

forestland, and pre-commercial thinning, while maintaining baseline

productivity.

### **Measure Source and Calculation:**

The Forest Resource Information Director and Research Manager, in cooperation with the other agency personnel, will identify and implement research projects, plans, measurements and reports.

## Objective 50103.07 Has the Following Strategies:

- Develop research projects to meet practical forest management problems which apply to wider landowner base.
- Implement research projects to achieve appropriate data results in time to address emerging issues and problems.
- Publish results of research so that employees, other technical experts, and landowners can use and apply the information.
- Provide demonstration and training opportunities to employees, other technical experts, and landowners.

## **Objective 50103.08**

Establish an information system that integrates spatial and statistical data, streamlines workflows within the agency, and provides informed access to this information to both internal and external customers.

DOF will establish an Integrated Forest Resource Information System (IFRIS) to manage both forest resource and operations support information, including the spatial location of resources and activities. The integrated system will track employee time, leave, and accomplishments, customer information, and location, extent, and description of forestry activities or events. IFRIS will help DOF streamline workflows, increase effectiveness of agency programs, and produce significant cost-savings. The availability of forest resource information to internal customers will increase the effectiveness of the forest protection and management assistance services of the agency. Availability of the information to external customers will provide powerful planning tools for individual forest landowners, local governments, and other state agencies, that will provide for more informed protection and conservation of forest land and resources and the protection of water quality.

#### This Objective Supports the Following Agency Goals:

• Protect the citizens, their property, and the forest resource from wildfire.

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

- Protect, promote, and enhance forested watersheds, non-tidal wetlands, and riparian areas.
- Conserve the forest land base.
- Improve the stewardship, health, and diversity of the forest resources.
- Facilitate the development and implementation of a statewide forest policy.
- Collect, maintain, and disseminate forest resource information.
- Manage agency resources to effectively and efficiently accomplish the strategic initiatives.

#### This Objective Has The Following Measure(s):

#### Measure 50103.08.01

#### Integrated Forest Resource Information System

Measure Type: Outcome Measure Frequency: Other

Measure Baseline: This is a new measure. Phase I - Agency Performance Tracking of IFRIS will be

complete by July 1, 2006.

Measure Target: Phase II - Wildfire Reporting and Water Quality Law Enforcement will be

complete by July 1, 2007. Complete Phase III - Full Integration of spatial and

statistical data into IFRIS by July 1, 2008

#### **Measure Source and Calculation:**

DOF will calculate its success by the completion of three measures. Phase II and Phase III must be fully developed, fully operational, and users must be fully trained.

#### Objective 50103.08 Has the Following Strategies:

- Incorporate agency-specific core business functions in IFRIS
- Incorporate the use of GPS-enabled field data collection devices
- Seek funding to develop cost-share tracking capability in IFRIS
- Maintain ForestRIM web application providing spatial resource information to landowners and the general public
- Seek funding to develop a Forest Spatial Decision Support System
- Provide training and support to staff to maximize effective use of new technology

## **Objective 50103.09**

Advance the depth and breadth of forest resource information available to the general public, public decision makers, forestry professionals and private forestry landowners.

Sustainable management of the Commonwealth's extensive forest resources requires easy access by all stakeholders to high - quality and relevant information about resource extent, resource condition, environmental integrity, and the resource's major issues, threats and opportunities.

#### This Objective Supports the Following Agency Goals:

• Improve the stewardship, health, and diversity of the forest resources.

#### This Objective Has The Following Measure(s):

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# Department of Forestry

#### Forest Conservation, Wildfire & Watershed Services (50103)

# Measure 50103.09.01

Forest Inventory

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: DOF will measure each year one of the five national FIA Phase 2 and Phase 3

inventory plot panels.

**Measure Target:** Complete scheduled FIA panel assessment baseline targets. Also, develop

value - added forest inventory products, including a year 2004 forest cover map

from satellite imagery, and develop methods to monitor harvests and

disturbances with satellite.

#### **Measure Source and Calculation:**

Assess the annual forest Inventory Assessment panel and deliver the plot measurements to US Forest Service Southern Research Service Center all FIA data for the unit for independent Quality Assessment/Quality Control audits. Develop and publish all spatial datasets of forest cover and harvest or other disturbances to the forest.

#### Objective 50103.09 Has the Following Strategies:

- Organize and equip FIA team to collect and enter the Forest data for each phase meeting the time table for timely USFS analysis.
- Develop methods to monitor forest harvests and disturbances with satellite imagery.
- Webmaster to maintain and improve the public's ability to retrieve information from DOF website.
- IT and DOF Webmaster to maintain and improve the employee's access and use of the IT hardware and software to handle high speed information needs.

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