



FORESTRY LAND USE

Overview and Update

Buckingham County Land Use Work Session

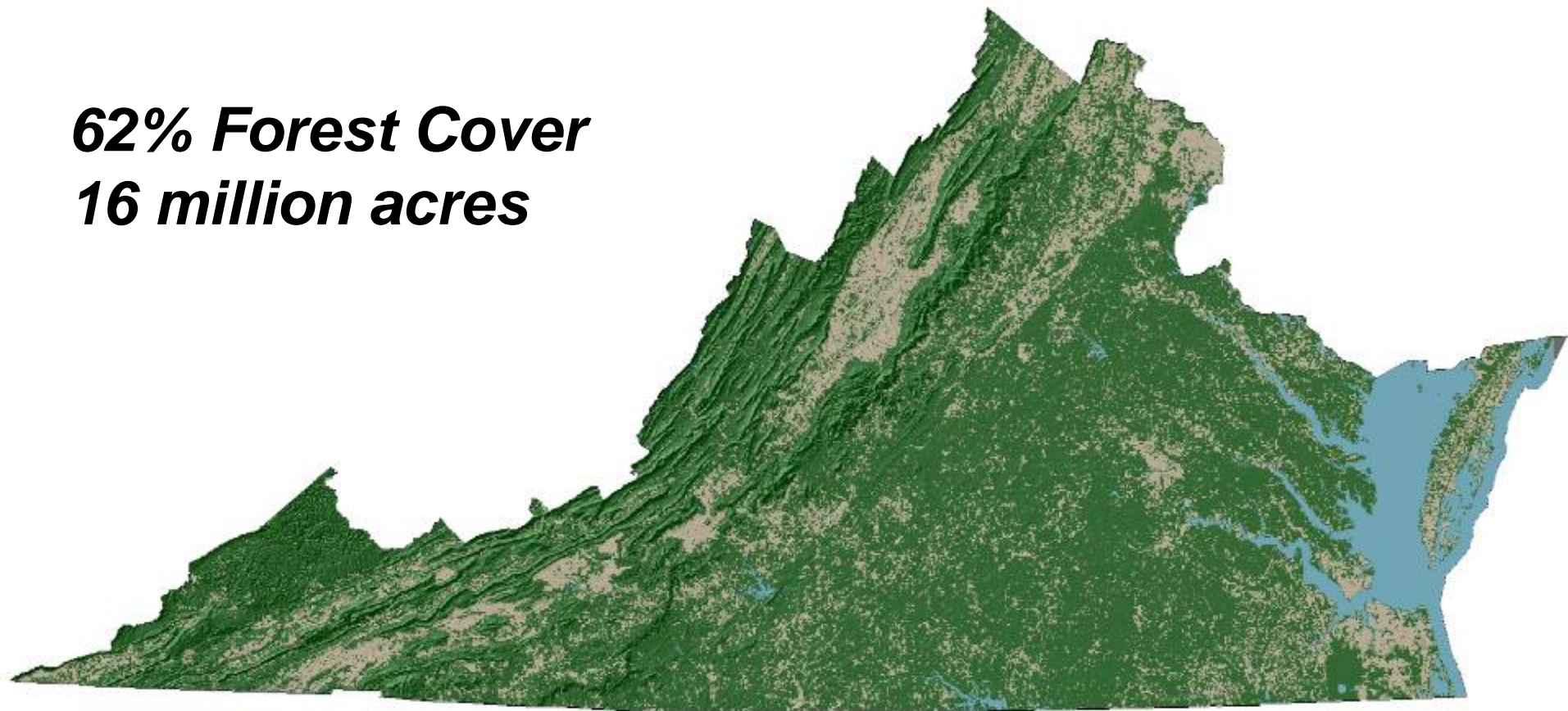
September 18, 2017

Dean Cumbia
Forest Resource Management Branch
Virginia Department of Forestry



Virginia Forest Cover

62% Forest Cover
16 million acres





Virginia Forestland Provides

- Economic Benefit:
\$21 Billion/year
- Jobs – 108,000
- Lumber
- Paper
- Wood for Energy
- Recreation
- Wildlife habitat
- Clean water
- Cleaner air
- Improved quality of life

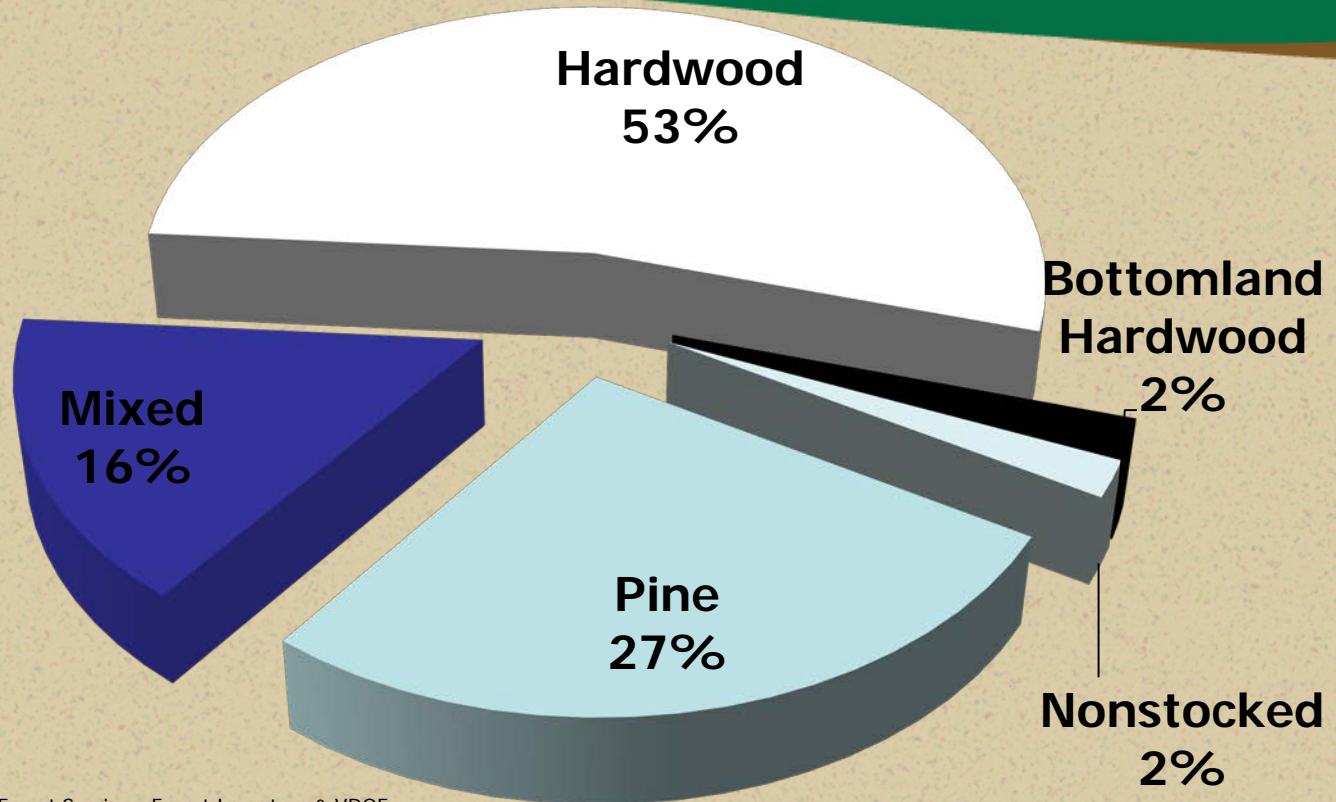


Buckingham County Forest Facts

- Approximately 86% Forested
 - 322,000 acres
- Majority is privately owned – 95%



Buckingham County Forest Types



Source: US Forest Service - Forest Inventory & VDOF



Buckingham County Timber Activity

- 2016 Timber harvests
 - ◆ 144 Harvest Sites
 - ◆ 9,989 Acres (#2 in Virginia)
- Av. annual harvest value: \$12.8 million
- Total economic impact: \$64 million
- Employment: >500



Land Use- The Role of the State Forester

- Serve on the State Land Evaluation and Advisory Committee (SLEAC).
- To provide a state of uniform standards to determine if real estate is devoted to forest use.
- When requested, to render opinions regarding qualification.
- Provide to SLEAC a range of suggested forest use values.



Land Use Focus: Timber Management

- 4VAC10-20-30A... “the real estate is being used in a planned program of timber management and soil conservation practices..” that:
 - 1. Enhance the growth of **commercially desirable species**
 - 2. Reduce or prevent soil erosion
 - Intent by owner shown by a signed commitment or by submitting a plan prepared by a professional forester.



Qualifications for Forest Land Use

- 20 acres of Productive forest land, capable of producing a timber crop
- Well distributed, commercially valuable trees of any size
- Sufficient to compose at least 40% normal stocking of trees
- Recently harvested area being regenerated into a new forest qualify



Forest Land Use Values

- Estimated the potential of the site to produce a forest crop
- Based on that potential, **not** based upon the current crop of timber
- Determine the present value of future timber crops



Trees to Lumber or other Products





Tree Volume vs. Entire Forest Yield





Forest Value Modeling

- VDOF uses forest growth and yield models for volume determination
- A forestry financial analysis tool is used to calculate value, based upon the chosen parameters.
- Projection is run three times based upon three soil quality types – Fair, Good, Excellent



Forest Value Modeling

- Present Value of Future costs and revenues of timber stand

Factors that influence:

- Forest type (pine vs. hardwood)
- Timber value (“stumpage price”)
- Reforestation costs
- Time - Forest management/Harvest regimes
- Financial Parameters, interest rate, inflation, annuals cost, taxes



Management & Harvest Regimes

Pine
Shorter time



Hardwood
Longer time





Composite Forest

- Determine ratio of acreage by forest type – pine or hardwood





Determining the Value

- The value of the series of annualized costs and revenues, discounted to one point in time, or capitalized, gives the estimated forest use value.
- Suggested per acre 2018 Values:

	<u>Campbell</u>	<u>Cumberland</u>
◆ Excellent Site	\$537	\$525
◆ Good Site	\$463	\$453
◆ Fair Site	\$325	\$317

QUESTIONS



Keeping our Forests
Working...and Growing



Reference: The Economic Impact of Virginia's Agriculture and Forest Industries

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