FORESTRY LAND USE
Overview and Update

Buckingham County
Land Use Work Session
September 18, 2017

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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

- Hardwood: 53%
- Pine: 27%
- Mixed: 16%
- Bottomland Hardwood: 2%
- Nonstocked: 2%

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.
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:

<table>
<thead>
<tr>
<th>Site</th>
<th>Campbell</th>
<th>Cumberland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent Site</td>
<td>$537</td>
<td>$525</td>
</tr>
<tr>
<td>Good Site</td>
<td>$463</td>
<td>$453</td>
</tr>
<tr>
<td>Fair Site</td>
<td>$325</td>
<td>$317</td>
</tr>
</tbody>
</table>
QUESTIONS

Keeping our Forests Working...and Growing
Reference: The Economic Impact of Virginia’s Agriculture and Forest Industries
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