# TITLE 110 WEST VIRGINIA LEGISLATIVE RULE DEPARTMENT OF TAX AND REVENUE DIVISION OF TAX

#### SERIES 1H VALUATION OF TIMBERLAND AND MANAGED TIMBERLAND

#### '110-1H-1. General.

- 1.1. Scope. -- This legislative rule establishes the procedure for the classification and valuation of timberland and managed timberland.
  - 1.2. Authority. -- W. Va. Code ' '11-1C-5(a)(2)(B), 11-1C-11(c)(1) and 11\_1C\_11b(c).
  - 1.3. Filing Date. -- April 6, 1999.
  - 1.4. Effective Date. -- May 1, 1999.
- 1.5. Repeal of former rule. -- This legislative rule repeals and replaces WV 110 C.S.R.1H "Valuation of Timberland and Managed Timberland" filed April 15, 1992 and effective April 15, 1992.

#### '110-1H-2. Introduction.

- 2.1. The appraised value of managed timberland shall be determined on the basis of the potential of the land to produce future income according to its use and productive potential. Potential future net income is discounted to its present value utilizing a discounted cash flow; this is the appraised value. The ability of a stand of timber to produce wood products for sale or use depends primarily on the quality of the soil and certain topographic and climatic features which can be expressed as a site index. Site index is the principal criterion influencing the appraised value of managed timberland. These factors shall be reviewed annually by the Tax Commissioner for necessary updating of the method described in order to properly reflect future changes in the values of managed timberland.
- 2.2. The appraised value of timberland (woodland/wasteland) shall be determined on the basis of market comparable derived through analysis of sales prices of comparable timberland (forested) properties. Timberland appraisal value shall always be more than the appraised value of equivalent grades of properties being classified as managed timberland in the county. The appraised value of timberland shall be determined by the county assessor based upon the Timberland Classification Schedule found in Appendix 1 of this rule.
- 2.3. The county assessor shall collect and analyze market data, including sales of timberland, segregated into the classes contained in the previously referenced classification schedule. Based upon this market analysis, the county assessor shall select the value for each class of timberland that best reflects the market value of the property if exposed to the market for sale as timberland. The values by class thus selected shall be entered, by the assessor, into the respective county land pricing tables and shall be used by the assessor to estimate the appraised value of timberland for property tax purposes.

#### '110-1H-3. Definitions.

As used in this rule and unless the context clearly requires a different meaning, the following terms shall have the meaning ascribed in this section.

- 3.1. "Capitalization rate" means the rate used to convert an estimate of income into an estimate of present value. Details of the procedure for determining the capitalization rate are found in Section 12 of this rule.
- 3.2. "Certified managed timberland plan" means the managed timberland plan that is certified by the landowner when the landowner certifies that the property is maintained as managed timberland.
  - 3.3. "Cost" means a component of management costs and property taxes.
  - 3.4. "dbh" means the diameter of trees at breast height, which is 4.5' above ground level.
  - 3.5. "Division of Forestry" means the West Virginia Bureau of Commerce, Division of Forestry.
- 3.6. "Farm wood lot" means that portion of a farm in timber but may not include land used primarily for the growing of timber for commercial purposes except that Christmas trees, or nursery stock and woodland products, such as nuts or fruits harvested for human consumption, shall be considered farm products and not timber products.
- 3.7. "Harvest income per acre" means the expected after tax revenue and accrued interest for each harvesting interval. Interest is assumed to accrue at the rate of return from the period of harvest to the end of the 80 year rotation cycle.
  - 3.8. "MBF" means thousand board feet.
- 3.9. "Management cost" means the cost determined tri-annually by the Tax Commissioner to be the average annual cost of maintaining and protecting a producing forest. Maintenance costs may include costs of inventory, boundary survey, security, maps, and any other items as can be shown to have been necessary. Protection may include costs of protection against forest fires; harmful insect and tree diseases; costs of repair and replacement resulting from damages reported to appropriate police agencies, including all-terrain vehicles (ATV's) and other vehicular damages, and costs of replacing and replanting forest production and/or plantations destroyed or injured by deer or other wild animals whose populations exceed the maximum carrying capacity of the site. Management costs shall be determined as an average for the entire State or by regions, by Managed Timberlands Productivity Grades or by parcel acreage and shall be deducted from gross annual income per acre to obtain net annual income per acre.
- 3.10. "Managed Timberland" means surface real property, except farm woodlots, of not less than ten contiguous acres which is devoted primarily to forest use and which, in consideration of their size, has sufficient numbers of commercially valuable species of trees to constitute at least forty percent normal stocking of forest trees which are well distributed over the growing site, and that it is managed pursuant to a plan as defined in subsection 3.11 and appendix 2 of this rule.
- 3.11. "Managed Timberland Plan" means the planned timberland management program that conforms to the following standards established by the Division of Forestry in the plan:
  - 3.11.1. Includes the owner's multipurpose objectives for the property;
  - 3.11.2. Provides for the land:

- 3.11.2.a. to remain in at least 40% or greater forest cover of well distributed commercially important trees,
  - 3.11.2.b. to produce continuous crops of timber according to the site's productivity, and,
  - 3.11.2.c. to be monitored for and action taken against threats from injurious agencies;
- 3.11.3. Ensures that harvesting will be done in a manner that assures regeneration of the landowner's preferred species; and
- 3.11.4. Assures sustainability of forest resources and compliance with the Logging Sediment control Act, W. Va. Code '19-1B-1 et seq.
- 3.12. "Managed Timberland Productivity Grades" means timberland classified as Grade 1 (excellent to very good), Grade 2 (good to fair), or Grade 3 (poor), according to the table in Appendix 4 of this rule.
- 3.13. "Owner of surface less timber" means any person who owns an interest in the surface where the timber rights have been sold to someone else.
- 3.14. "Owner of Timber" means any person who owns an interest in timber, including a lessor or sublessor and an owner of a contract right to cut timber. The owner of timber must have a right to cut timber for sale on his, her or its own account for use in his, hers, or its trade or business in order to have property rights that are subject to ad valorem property taxes.
- 3.15. "Site Index" means a method of measuring the productivity of a site to grow trees. It is the height that average dominant and co-dominant trees will attain at a given age. For ad valorem property tax purposes, it is the height of upland oaks at fifty (50) years of age.
- 3.16. ASoil Productivity Data@ means those site index data derived from the United States Department of Agriculture Natural Resource Conservation Service (NRCS), formerly the Soil Conservation Service (SCS), Soil Survey Geographic Database (SSURGO). These data are digital representations of county soil surveys which are mapped at 1 inch = 2,000 feet.
- 3.16.1. In those counties where SSURGO data are not yet available, the best available information shall be used.
- 3.16.1.a. For Pocahontas County, the article by G.R. Trimble, Jr., AAn Equation for Predicting Oak Site Index Without Measuring Soil Depth@, Journal of Forestry, 62:325-327, shall be used.
- 3.16.1.b. For Wetzel, Doddridge, Braxton, Clay and Gilmer Counties, the article by L.R. Auchmoody and H. Clay Smith, AOak Soil-Site Relationships in Northern West Virginia@, (USDA Forest Service Research Paper NE 434, 1979) shall be used.
- 3.16.1.c. For Wayne, Lincoln, Boone, Logan, Mingo and McDowell Counties, unpublished results of research at West Virginia University (1983) shall be used.
- 3.16.1.d. For Webster county, the rates of 48% for Grade 1, 34% for Grade 2 and 18% for Grade 3 shall be used for all certified managed timberland parcels.

- 3.16.1.e. For all counties not listed in the foregoing paragraphs 3.16.1.a through 3.16.1.d of this rule, the primary source of information shall be maps created by the Soil Survey, published by United States Department of Agriculture Natural Resource Conservation Service.
- 3.17. "Stumpage Price" means the market value of standing trees (on the stump) prior to felling and removal, and is expressed in dollars per unit of volume (MBF or cords). For appraisal purposes, real stumpage price will be adjusted to real price increases over various harvest periods during the 80 year rotation cycle. The real price increase shall be determined from the projected saw timber and pulpwood prices described in the most recent United States Forest Service Bulletin R.P.A. Timber Assessment Update and shall be calculated by the Tax Commissioner from reports based upon 16 inch (dbh) logs as prepared by the Division of Forestry and other available sources. A five-year weighted moving average shall be computed in order to minimize the effects of short-term fluctuations. Stumpage prices shall be computed for each stumpage price region in order to reflect regional differences in markets, topography, and accessibility.
- 3.18. "Stumpage Price Region" means a geographical region of the State, usually consisting of several counties, in which conditions of the timber, timber markets, topography, and accessibility are sufficiently similar to result in similar stumpage prices at any given time. The counties involved in each stumpage price region have been identified by the Division of Forestry and are found in Appendix 3 of this rule.
- 3.19. "Timber" means trees of any marketable species, whether planted or of natural growth, standing or down, located on public or privately owned land, which are suitable for commercial or industrial use.
- 3.20. "Timberland (Woodland/Wasteland)" means any surface real property, except farm woodlots of not less than ten contiguous acres, which is primarily in forest and which has, in consideration of their size, sufficient numbers of commercially-valuable species of trees to constitute at least forty percent (40%) normal stocking of forest trees, as shown Appendix 2 of this rule, which are well distributed over the growing site. Additionally, land that has been recently harvested of merchantable timber and is growing into or being planted as a new forest may be classified as timberland.

#### '110-1H-4. Classification of Timberland and Managed Timberland.

- 4.1. Managed Timberland. -- For property to qualify for managed timberland valuation, the owner of the surface real property identified on the county tax mapping system shall annually certify in writing to the Division of Forestry that the property satisfies the requirements of managed timberland, as defined in Section 3 of this rule, and enter into a contract with the Division of Forestry to use the real estate in a planned program of multiple purpose forest management, including erosion control during timbering operations, as specified in the West Virginia Forest Practices Standards and the West Virginia Silvicultural Nonpoint Source Management Program, and as explained in Section 13 of this rule. Multipurpose forest management contemplates the periodic selection of timber on the property for harvesting as an integral part of silvicultural management practices. The silvicultural manipulation subjects the property to periodic commercial use that may have an effect on the property's classification for property tax purposes. Therefore, in recognition of the silvicultural manipulation, the following guidelines shall be observed by the Division of Forestry when classifying managed timberland for property tax purposes.
- 4.1.1. Property containing managed timberland, which may have been properly taxed as Class II property prior to the managed timberland application, shall remain as Class II property unless there is some other event or change in the use of the property that disqualifies it from being taxed as Class II property.

- 4.1.2. Property containing managed timberland, which may have been properly taxed as Class III or Class IV property prior to the managed timberland application, shall be taxed as Class III or Class IV property depending upon location.
- 4.2. Timberland. -- Timberland shall be taxed as Class II, Class III, or Class IV property in accordance with provisions of West Virginia Code ' 11-8-5. In order for timberland to be taxed as Class II property, the timberland shall be used and occupied by the owner exclusively for residential purposes. (This section does not apply to farm woodlots B See, Valuation of Farmland and Structures Situated Thereon For Ad Valorem Property Tax Purposes, 110 C.S.R. 1H, ' 110-1H-5.)
- 4.3. Surface less timber -- Property where the owner of the surface does not include the timber rights is not eligible for managed timberland classification and shall be valued by the assessor.
- 4.4. Timber -- Property where the owner of the timber rights does not include the surface, is not eligible for managed timberland classification and shall be valued by the assessor.

#### '110-1H-5. Valuation of Farm Wood Lots.

Farm wood lots shall be included in the valuation of farm property under W. Va. Code

' 11-1A-10, except when the farm wood lot is a separate parcel or tract entered in the land books, and/or except when the primary use of the farm wood lot is in commercial forestry or in a managed timberland contract.

#### '110-1H-6. Timberland Improvements.

Improvements such as roads and service buildings that are a required (usual) part of timber management operations is not subject to an additional market value appraisal over and above the appraisal of the managed timberland. Improvements that are not a necessary part of the timber management operations, such as dwellings, cottages, hunting camps, other recreational facilities, and associated real estate are subject to additional market value appraisals. Additionally, haul roads, strip and/or mountaintop removal mines, plant facilities, powerline and gas/oil pipeline rights-of-way, and gas/oil well pads shall not be valued as managed timberland.

#### '110-1H-7. Appraised Value of Timberland.

The appraised value per acre of timberland shall be determined based upon market comparables and shall be estimated by the county assessor. There are at least five (5) various timberland rates based on the timberland classification schedule described in Appendix 1 of this rule. Assessors shall tri-annually review and grade these non-managed timberland properties in order to assign the proper rate per acre to the property. The rate per acre shall be established by the assessor in conformity with requirements of subsection 2.2 of this rule.

#### '110-1H-8. Valuation of Less Than 10 Acres.

A parcel, or contiguous parcels, of timberland totaling less than ten (10) acres shall not be considered for classification as managed timberland and shall be valued by the county assessor based upon market comparables.

#### '110-1H-9. Harvest Volumes Per Acre.

Harvest Volumes per acre shall be based on site index and the ability of the site to yield timber measured in thousands of board feet (MBF) per acre (Scribner rule) or cords per acre with harvest intervals at thirty-five (35), fifty-five (55) and eighty (80) years for Grade 1 and Grade 2 soils, and at forty-five (45) and eighty (80) years for Grade 3 soil.

#### '110-1H-10. Appraised Value Per Acre of Managed Timberland.

The appraised value per acre of managed timberland is the present worth of \$1.00 times the difference between the future value of the harvest income less the future value of the management cost less a property tax adjustment for Class II, and a blend of Class III and Class IV tax rates for Class III and Class IV properties. However, the appraised value for any grade of managed timberland will not be less than \$25 per acre. In no case may managed timberland values for class III and IV property be lower than \$225 per acre for Grade 1; \$150 per acre for Grade 2; \$75 per acre for Grade 3; and class II properties may not be lower than \$200 per acre for Grade 1; \$140 per acre for Grade 2; and \$50 per acre for Grade 3.

#### '110-1H-11. Procedure for Determining Value Per Acre of Managed Timberland.

The following is a step-by-step procedure for determining the appraised value per acre of managed timberland.

- 11.1. The Tax Commissioner shall enter the surface ownership maps (typically 1 inch = 400 feet or 1 inch = 800 feet) into a Geographic Information System (GIS). The GIS shall be used to register the surface ownership parcels to the same geographic coordinate system and scale as that of the soil productivity data (SSURGO). This process allows the calculation of the area of each soil productivity grade in each parcel.
- 11.1.1. In those counties where the GIS is not yet available, the soil productivity maps addressed in paragraphs 3.16.1.a through 3.16.1.e of this rule shall be utilized. These maps are the soil grades identified on USGS 7.5 minute topographical quadrangle sheets (1 inch = 200 feet). The West Virginia county surface ownership maps (commonly 1 inch = 400 feet of 1 inch = 800 feet) were reduced to 1 inch = 200 feet. The reduced scale surface maps were overlayed on the productivity grade maps and the grade boundaries were transferred, allowing the determination of the area at each grade for each ownership parcel.
- 11.2. Average stumpage price (5 year weighted moving average) is determined by stumpage price reports from the Division of Forestry and other available sources.
- 11.3. Total harvest income per acre over a rotation cycle of thirty-five (35) years, fifty-five (55) years and eighty (80) years for Grade 1 and 2 soils, and forty-five (45) years and eighty (80) years for Grade 3 soils shall be determined by the accumulated periodic harvest income plus accrued interest on the net income less state and federal tax payments.
- 11.4. End of rotation (80 year) total management costs per acre shall be determined by the accumulated after tax management cost and accrued interest on those costs.
- 11.5. Appraised value per acre for managed timberland shall be determined by first deducting the end of rotation total management costs; second, calculating the present worth of that difference; and third, adjusting that value by the annual ad valorem property tax rate (either Class II or a blended Class III/IV).
- 11.6. The GIS (when available) shall be used to calculate the appraised value of managed timberland property on an annual basis. Until the GIS is available, soil grade calculations will be made from data described in paragraphs 3.16.1.a through 3.16.1.e and subdivision 11.1.1 of this rule. The appraised value of each managed timberland property shall be calculated using the formula found in Appendix 6 of this rule.

11.6.1. Those acreages involved in a managed timberland application where the use of the property is not for managed timberland purposes (e.g., homesite, pasture, tillable, recreation, stripmine, etc.) shall not be classified as managed timberland and shall be appraised by the county assessor.

#### '110-1H-12. Capitalization Rate.

The average statewide capitalization rate (based on a 5-year weighted moving average of various components) for managed timberland shall be determined annually by the Tax Commissioner through the use of generally accepted methods of determining those rates. The rate shall be based on the assumption of a discounted cash flow model based upon harvest intervals reflected in Appendix 4 of this rule. The capitalization rate used to value managed timberland shall be developed considering the following:

- 12.1. Discount Component. -- The summation technique shall be used in developing a discount component of the capitalization rate. The five subcomponents of the discount component are:
- 12.1.1. Safe Rate. -- The safe rate shall reflect a rate of return that an investor could expect on an investment of minimal risk. This rate shall be developed through weighted averages of interest rates offered on five-year United States Treasury Bills for the five years immediately preceding the appraisal date.
- 12.1.2. Nonliquidity . -- The nonliquidity rate shall be developed through an annual review to determine a reasonable estimate of time that timberland, when exposed for sale, remains on the market before being sold. The time thus determined shall be used to identify United States Treasury Bills with similar time differentials in excess of thirteen-week Treasury Bills. The interest differential between these securities shall be used to represent the nonliquidity rate. For example, if it is determined that a tract of timberland remains on the market for an average of nine months (39 weeks) before being sold, the nonliquidity rate shall be derived by subtracting the rate on 13-week Treasury Bills from the rate on one year Treasury Bills. This review shall consider the weighted average of these differences for a five year period immediately preceding the appraisal date.
- 12.1.3. Risk Rate. -- The relative degree of risk of an investment in timberland shall be developed through an annual review of thirty-year United States Treasury Bills less five-year United States Treasury Bills. The review shall consider the weighted averages of debt and equity components of these differences for a five-year period immediately preceding the appraisal date.
- 12.1.4. Management Rate. -- The management rate represents the cost of managing the investment, not the cost of managing the timberland. Historically, the management rate has been one-half of one percent (0.5%); therefore, this rate shall be considered the industry standard for current applications.
- 12.1.5. Inflation Rate (negative). -- Nominal interest rates, including the "safe rate" mentioned in subdivision 12.1.1 of this rule, are higher than real rates by an amount representing expectation of future inflation. However, net annual income from timberland is to be estimated assuming level future prices (no inflation). Therefore, the capitalization rate must be a real rate, net of expectation of inflation. The inflation rate shall be established through a weighted average analysis of the most recent five calendar year's urban consumer price index as determined by the United States Department of Labor, Bureau of Labor Statistics.
- 12.1.6. Discount Component. -- In determining the discount component of the capitalization rate, the Tax Commissioner shall take the sum of the safe rate, the nonliquidity rate, the risk rate, and the management rate, and shall deduct from this sum the inflation rate.

12.2. Property Tax Component. -- The property tax component shall be derived by multiplying the assessment rate by the statewide five year weighted average of tax rates on Class II and on a blended rate for Class III and Class IV properties. The discounted property tax rates shall be deducted from the discounted difference between total harvest income and end of rotation management costs.

#### '110-1H-13. Application for Certification and Valuation as Managed Timberland.

In order to qualify, under the provisions of this rule, for managed timberland valuation purposes, the owner of the timberland shall, on or before the first day of July, enter into a contract with the Division of Forestry. The contract shall state that the real estate is being used in a planned program of timber management and erosion control practices intended to enhance the growth of commercially desirable species through generally accepted silvicultural practices and the use of Best Management Practices as specified in the West Virginia Forest Practice Standards and the West Virginia Nonpoint Source Management Program. The contract shall be assignable with the sale of the land when the land is sold to be used for managed timberland purposes. Annually, on or before September 1, the owner shall file an application for certification as managed timberland with the Division of Forestry. The application shall include either (a) a commitment to maintain and protect timberland certified as managed timberland by demonstrating land-use objectives to include resource management and soil and water protection; or (b) a written plan prepared by a professional forester. Falsification of certification or failure to follow a professionally prepared plan shall result in loss of valuation as managed timberland. In any event, the following information shall be provided:

- 13.1. The county, district, map, parcel number, deed book surface acreage and actual surveyed surface acreage, if available, for each parcel that is to be valued as managed timberland;
- 13.1.1. The amount of acreage in each parcel that should be classified as managed timberland. For those properties where managed timberland acreage is different than deed acreage, information identifying the use of the non-managed acreage is required;
- 13.1.2. The signature of owner (including all fractional interests) acknowledging that the contract with the Division of Forestry has been annually reviewed and approved and that the property is being managed in accordance with the Best Management Practices for forestry as outlined in the West Virginia Forest Practice Standards and the Best Management Practices for water quality as outlined in the West Virginia Nonpoint Source Management Program. If a written plan is provided in accordance with Section 13 of this rule, that plan shall be approved and signed by a registered timber management forester.
- 13.2. The Division of Forestry shall, on or before October 1 of each year, provide the State Tax Commission with a copy of the certifications and reports and provide a list of those properties certified as managed timberland and those denied certification. After the October 1 report is filed, the Division of Forestry has until January 15 of the next calendar year to review any applications questioned by the State Tax Commission or county officials.
- 13.3. The property owner whose managed timberland application was denied or who has been refused certification pending demonstration of specific facts may, on or before November 1 of the assessment year, file an appeal of the denial or file the requested data with the Director of the Division of Forestry. On or before the following December 1, the Division of Forestry shall advise the Tax Commissioner of any changes of application denials.

## '110-1H-14. Summary of Method of Determining Appraised Value.

The formula to be used in determining the appraised value of property categorized as managed timberland is found in Appendix 5 of this rule.

#### **APPENDIX 1**

## **Timberland Classification Schedule**

#### Class "A"

This land is adaptable for use as forest property. It may be adaptable to other profitable uses. There is a stand of trees of commercial species, the size being from fourteen (14) to twenty (20) inches d.b.h. and above.

#### Class "B"

This land is also adaptable for use as forest property. It may be adaptable for other profitable uses. There is a stand of trees of commercial species, the size being from ten (10) to fourteen (14) inches d.b.h.

## Class "C"

This land is adaptable for use as forest property. There is a stand of trees of commercial species, the size being from six (6) to ten (10) inches d.b.h.

#### Class "D"

This land is adaptable for use as forest property. There is a stand of trees of commercial species, the size being from four (4) to six (6) inches d.b.h.

#### Class "E"

This land is adaptable for use as forest property. There are trees of commercial species less than four (4) inches d.b.h. This class of timberland also includes clear cut property and property subjected to total harvest where the remaining commercial species are less than four (4) inches d.b.h.

#### **APPENDIX 2**

### Minimum Number of Trees Required Per Acre to Determine 30 Square Feet of Tree Basel Area of 40% Stocking for Classification as Forest Land

D.B.H. Range	D.B.H. in 2@ Classes	Basel Area Per Tree		er ere	Per 1/5 A	cre	Per 1/10 .	Acre
up to 2.9@	Seedlings		40	00	80		40	
3.0-4.9@	4	0.0873		400		80		40
5.0-6.9@Y	7. 6	0.1964	153	31		15		
7.0-8.9@	У 8	0.3491	86	17		9		
9.0-10.9@	10	0.5454	55		11		6	
11.0-12.9@	12	0.7854	38	}	8		4	
13.0-14.9@	14	1.0690	28	;	6		3	
15.0@+	16+	1.3983	21		4		2	

#### NOTE:

- (a) Area 1/5 acre, circle, diameter 105'4@; square 93.4@ per side
- (b) Area 1/10 acre; circle, diameter 74'6@; square 66'
- (c) Number of seedlings present may qualify on a percentage basis; Example, 100 seedlings would be equivalent of 7.5 square feet of basal area ( $25\% \times 30 7.5$ )
- (d) Seedlings per acre are based on total pine and hardwood stems. Where intensive pine management is practiced a minimum of 250 well distributed pine seedlings will qualify.

## APPENDIX 3

## **Stumpage Price Regions**

Region 1	Region 2	Region 3	Region 4	Region 5
Brooke	Braxton	Barbour	Berkeley	Boone
Cabell	Calhoun	Greenbrier	Grant	Fayette
Hancock	Clay	Monroe	Hampshire	Kanawha
Jackson	Doddridge	Nicholas	Hardy	Lincoln
Marshall	Gilmer	Pendleton	Jefferson	Logan
Mason	Harrison	Pocahontas	Mineral	McDowell
Ohio	Lewis	Preston	Morgan	Mercer
Pleasants	Marion	Randolph	_	Mingo
Putnam	Monongalia	Tucker		Raleigh
Tyler	Ritchie	Upshur		Summers
Wetzel	Roane	Webster		Wayne
Wood	Taylor			Wyoming
	Wirt			

APPENDIX 4

## TABLE OF HARVEST VOLUMES PER ACRE WITH HARVEST INTERVALS OVER AN 80 YEAR ROTATION CYCLE

Grade 1	35 Years	55 Years	80 Years	<u>Total</u>
Site Index (75 or more) (Very Good to Excellent)	4.6 Cords 1.5 MBFs	2.6 Cords 4.4 MBFs	3.3 Cords 8.6 MBFs	10.5 Cords 14.5 MBFs
Grade 2				
Site Index (65-74) (Fair to Good)	3.3 Cords 1.0 MBFs	7.0 Cords 3.2 MBFs	4.6 Cords 5.5 MBFs	14.9 Cords 9.7 MBFs
		45 Years	80 Years	<u>Total</u>
Grade 3				
Site Index (less than 65) (Poor)		3.1 Cords .8 MBFs	15.4 Cords 3.7 MBFs	18.5 Cords 4.5 MBFs

Scribner rule. Schnur, G. Luther. UNITED STATES DEPARTMENT OF AGRICULTURE Tech. Bul. No. 560. 1937. The Tax Commissioner may adopt a different timber scale and revise yields as standards of timber utilization change or as new information becomes available on timber yields of forest stands.

#### **APPENDIX 5**

#### For Class II Parcels:

Appraised Value Per Acre = [[Present worth of 1] x [(Future value of Harvest Income) - (Future value of management costs)]] less discounted property tax Class II rate.

#### For Class III & IV Parcels:

Same formula except the discounted property tax rate for Class III and Class IV properties is used.

Until the present natural resource and county computer systems can be programmed to change appraisals based on tax classifications or until a new computerized appraisal system can be put into effect, the property tax discount shall be a blended rate including both Class II and Class III rates.

#### **APPENDIX 6**

AV = (P1V1) + (P2V2) + (P3V3)

where

AV = Property Appraised Value

P1 = Total Acreage of Parcel in Soil Productivity Grade 1

P2 = Total Acreage of Parcel in Soil Productivity Grade 2

P3 = Total Acreage of Parcel in Soil Productivity Grade 3

V1 = Value of Soil Productivity Grade 1

V2 = Value of Soil Productivity Grade 2

V3 = Value of Soil Productivity Grade 3