Key 2002 Managed Timberland Statistics

Estimation of Required Rate of Return: Class II Rates

A. *Safe Rate of Return (5 Year T-Bill Rate)*

Year	Rate	W/A %	W/A Rate
2002	3.8150	33.33%	1.2717
2001	4.5500	26.67%	1.2133
2000	6.1600	20.00%	1.2320
1999	5.5408	13.33%	0.7388
1998	5.1500	6.67%	0.3433

4.799 %

B. **Nonliquidity Rate**
(12 Month T-Bills vs. 3 Month T-Bills)

Year	Rate	W/A %	W/A Rate
2002	0.3690	33.33%	0.1230
2001	0.0100	26.67%	0.0027
2000	(0.0400)	20.00%	(0.0080)
1999	0.4175	13.33%	0.0557
1998	0.0100	6.67%	0.0007

0.174 %

C. **Risk Rate (30 yr T-bills vs 5 yr T-bills)**

Year	Rate	W/A %	W/A Rate
2002	1.5666	33.33%	0.5222
2001	0.9400	26.67%	0.2507
2000	(0.2200)	20.00%	(0.0440)
1999	0.3250	13.33%	0.0433
1998	0.4290	6.67%	0.0286

0.801 %

D. **Management Factor** 0.500 %

E. **Property Tax Component**
(60% of Class II Rate)

Year	Rate	W/A %	W/A Rate
2002	0.744	33.33%	0.2480
2001	0.744	26.67%	0.1984
2000	0.738	20.00%	0.1476
1999	0.738	13.33%	0.0984
1998	0.732	6.67%	0.0488

0.741 %

F. **Inflation Rate:**
(Bureau of Labor Statistics)

Year	Rate	W/A %	W/A Rate
2002	2.400	33.33%	0.8000
2001	1.600	26.67%	0.4267
2000	3.400	20.00%	0.6800
1999	2.700	13.33%	0.3600
1998	1.600	6.67%	0.1067

(2.373) %

TOTAL REQUIRED RATE OF RETURN (REAL)	4.642 %
LESS: PROPERTY TAX COMPONENT	(0.741)
TOTAL DISCOUNT COMPONENT	3.901 %

2002 Stumpage Prices:

	Sawtimber	Pulpwood			
Stumpage Price Adjustment Fac	0.11%	1.01%			
		1.0392	1.0507	1.0623	1.0919

SAWTIMBER

Region	Current $/MBF	$/MBF at age 35	$/MBF at age 45	$/MBF at age 55	$/MBF at age 80
Region 1	249.37	259.15	262.01	264.91	272.29
Region 2	224.86	233.68	236.26	238.87	245.53
Region 3	294.23	305.77	309.15	312.57	321.28
Region 4	206.53	214.63	217.00	219.40	225.51
Region 5	181.67	188.80	190.89	193.00	198.38

PULPWOOD:

		1.4215	1.5718	1.7380	2.2343
Region	$/Cord	$/cd at age 35	$/cd at age 45	$/cd at age 55	$/cd at age 80
Region 1	9.62	13.67	15.12	16.72	21.49
Region 2	6.93	9.85	10.90	12.05	15.49
Region 3	6.53	9.29	10.27	11.35	14.59
Region 4	6.24	8.87	9.80	10.84	13.93
Region 5	5.27	7.49	8.29	9.16	11.78

2002 Management Costs:

Region	Median $/acre	Avg $/acre	$/acre (1)
1	$2.87	3.16	2.50
2	$2.55	3.38	2.50
3	$2.82	4.64	2.50
4	$2.38	3.39	2.50
5	$2.56	2.26	2.50
State	*$2.56*	*$3.57*	

Note: (1) Set at $2.50/acre

Tax Rates:

Effective Federal Income Tax Rate		20.83%
Effective WV State Income Tax Rate	(4.54% * (1-.2083)	3.59%
Effective WV Severance Tax Rate	(2.3% * (1-.2083))	1.82%

Yield (Volumes) (80 year rotation)

Timberland Productivity Grades	Site Index	Yield - MBF	Yield - Cords
Grade I	**75 or more**	**14.5**	**10.5**
Grade II	**65-74**	**9.7**	**14.9**
Grade III	**less than 65**	**4.5**	**18.5**

Key 2002 Managed Timberland Statistics

Estimation of Required Rate of Return: Class III Rates

A. *Safe Rate of Return (5 Year T-Bill Rate)*

Year	Rate	W/A %	W/A Rate
2002	3.8150	33.33%	1.2717
2001	4.5500	26.67%	1.2133
2000	6.1600	20.00%	1.2320
1999	5.5408	13.33%	0.7388
1998	5.1500	6.67%	0.3433

4.799 %

B. **Nonliquidity Rate**

(12 Month T-Bills vs. 3 Month T-Bills)

Year	Rate	W/A %	W/A Rate
2002	0.3690	33.33%	0.1230
2001	0.0100	26.67%	0.0027
2000	(0.0400)	20.00%	(0.0080)
1999	0.4175	13.33%	0.0557
1998	0.0100	6.67%	0.0007

0.174 %

C. **Risk Rate (30 yr T-bills vs 5 yr T-bills)**

Year	Rate	W/A %	W/A Rate
2002	1.5666	33.33%	0.5222
2001	0.9400	26.67%	0.2507
2000	(0.2200)	20.00%	(0.0440)
1999	0.3250	13.33%	0.0433
1998	0.4290	6.67%	0.0286

0.801 %

D. **Management Factor** 0.500 %

E. **Property Tax Component**

(60% of Class III Rate)

Year	Rate	W/A %	W/A Rate
2002	1.350	33.33%	0.4500
2001	1.350	26.67%	0.3600
2000	1.350	20.00%	0.2700
1999	1.350	13.33%	0.1800
1998	1.332	6.67%	0.0888

1.349 %

F. **Inflation Rate:**

(Bureau of Labor Statistics)

Year	Rate	W/A %	W/A Rate
2002	2.400	33.33%	0.8000
2001	1.600	26.67%	0.4267
2000	3.400	20.00%	0.6800
1999	2.700	13.33%	0.3600
1998	1.600	6.67%	0.1067

(2.373) %

TOTAL REQUIRED RATE OF RETURN (REAL)	5.249 %
LESS: PROPERTY TAX COMPONENT	(1.349)
TOTAL DISCOUNT COMPONENT	3.901 %

2002 Stumpage Prices:

	Sawtimber	Pulpwood			
Stumpage Price Adjustment Facto	0.11%	1.01%			
		1.0392	1.0507	1.0623	1.0919

SAWTIMBER

Region	Current $/MBF	$/MBF at age 35	$/MBF at age 45	$/MBF at age 55	$/MBF at age 80
Region 1	249.37	259.15	262.01	264.91	272.29
Region 2	224.86	233.68	236.26	238.87	245.53
Region 3	294.23	305.77	309.15	312.57	321.28
Region 4	206.53	214.63	217.00	219.40	225.51
Region 5	181.67	188.80	190.89	193.00	198.38

PULPWOOD:

		1.4215	1.5718	1.7380	2.2343
Region	$/Cord	$/cd at age 35	$/cd at age 45	$/cd at age 55	$/cd at age 80
Region 1	9.62	13.67	15.12	16.72	21.49
Region 2	6.93	9.85	10.90	12.05	15.49
Region 3	6.53	9.29	10.27	11.35	14.59
Region 4	6.24	8.87	9.80	10.84	13.93
Region 5	5.27	7.49	8.29	9.16	11.78

2002 Management Costs:

Region	Median $/acre	Avg $/acre	$/acre (1)
1	$2.87	3.16	2.50
2	$2.55	3.38	2.50
3	$2.82	4.64	2.50
4	$2.38	3.39	2.50
5	$2.56	2.26	2.50
State	*$2.56*	*$3.57*	

Note: (1) Set at $2.50acre

Tax Rates:

Effective Federal Income Tax Rate		22.00%
Effective WV State Income Tax Rate	(8.40%*(1-22%))	6.55%
Effective WV Severance Tax Rate	(2.30%*(1-22%))	1.79%

Yield (Volumes) (80 year rotation)

Timberland Productivity Grades	Site Index	Yield - MBF	Yield - Cords
Grade I	75 or more	14.5	10.5
Grade II	65-74	9.7	14.9
Grade III	less than 65	4.5	18.5

Key 2002 Managed Timberland Statistics

Estimation of Required Rate of Return: Class IV Rates

A. ***Safe Rate of Return (5 Year T-Bill Rate)***

Year	Rate	W/A %	W/A Rate
2002	3.8150	33.33%	1.2717
2001	4.5500	26.67%	1.2133
2000	6.1600	20.00%	1.2320
1999	5.5408	13.33%	0.7388
1998	5.1500	6.67%	0.3433

4.799 %

B. **Nonliquidity Rate**

(12 Month T-Bills vs. 3 Month T-Bills)

Year	Rate	W/A %	W/A Rate
2002	0.3690	33.33%	0.1230
2001	0.0100	26.67%	0.0027
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1999	0.4175	13.33%	0.0557
1998	0.0100	6.67%	0.0007

0.174 %

C. **Risk Rate (30 yr T-bills vs 5 yr T-bills)**

Year	Rate	W/A %	W/A Rate
2002	1.5666	33.33%	0.5222
2001	0.9400	26.67%	0.2507
2000	(0.2200)	20.00%	(0.0440)
1999	0.3250	13.33%	0.0433
1998	0.4290	6.67%	0.0286

0.801 %

D. **Management Factor** 0.500 %

E. **Property Tax Component**

(60% of Class IV Rate)

Year	Rate	W/A %	W/A Rate
2002	1.776	33.33%	0.5920
2001	1.776	26.67%	0.4736
2000	1.764	20.00%	0.3528
1999	1.764	13.33%	0.2352
1998	1.764	6.67%	0.1176

1.771 %

F. **Inflation Rate:**

(Bureau of Labor Statistics)

Year	Rate	W/A %	W/A Rate
2002	2.400	33.33%	0.8000
2001	1.600	26.67%	0.4267
2000	3.400	20.00%	0.6800
1999	2.700	13.33%	0.3600
1998	1.600	6.67%	0.1067

(2.373) %

TOTAL REQUIRED RATE OF RETURN (REAL)	5.672 %
LESS: PROPERTY TAX COMPONENT	(1.771)
TOTAL DISCOUNT COMPONENT	3.901 %

2002 Stumpage Prices:

	Sawtimber	Pulpwood			
Stumpage Price Adjustment Facto	0.11%	1.01%			
		1.0392	1.0507	1.0623	1.0919

SAWTIMBER

Region	Current $/MBF	$/MBF at age 35	$/MBF at age 45	$/MBF at age 55	$/MBF at age 80
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State	*$2.56*	*$3.57*	

Note: (1) Set at $2.50/acre

Tax Rates:

Effective Federal Income Tax Rate		22.00%
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Effective WV Severance Tax Rate	(2.3%*(1-22%))	1.79%

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