

Predicting Likely Timber Purchases and Offer Levels - Fiscal Year 2008
February 7, 2008

Elements	Notation	Limited Lumber	Expanded Lumber	Medium Integrated	High Integrated
Demand					
A. Installed and operable mill capacity (MMBF, log scale)	a	284	284	284	284
B. Industry rate of capacity utilization	b	33%	45%	66%	70%
C. Share of industry raw material provided by the Tongass	c	62%	62%	62%	62%
D. Percent usable wood in average NF timber sale	d	53%	64%	92%	92%
E. Annual Tongass timber consumption (MMBF, theoretical)	$e=((a*b)*c)/d$	110	124	127	135
F. Standard deviation of lead time (years)	f	0.43	0.43	0.43	0.43
G. Average lead time (years)	g	0.51	0.51	0.51	0.51
H. Prob. of meeting consumption (one-tailed test for 99% at infinity)	h	2.33	2.33	2.33	2.33
I. Timber inventory requirements (MMBF)	$i=(e*g)+((e*h)*f)$	166	188	192	203
J. Volume under contract as of September 30, 2007 (MMBF)	j	114	114	114	114
K. Projected harvest (MMBF), FY 08 from PNW	k	50	66	139	139
L. Projected inventory shortfall (MMBF)	$l=i-j$	52	74	78	90
M. Low range of expected timber purchases (MMBF), FY 08	$m=\text{if } l < 0, k+l, \text{ else } k$	50	66	139	139
N. High range of expected timber purchases (MMBF), FY 08	$n=\text{if } l < 0, k, \text{ else } k+l$	102	141	217	229
O. Expected timber purchases, FY 08	$o=\text{median}(m:n)$	76	104	178	184
Offer					
P. Fall-down between volume offered and volume sold	p	30%	20%	15%	10%
Q. Required offered to meet VUC sell objectives (MMBF), FY 08	$q=o+(p*o)$	99	124	205	202