FRCS Assumptions:

Other Assumptions

$$MaxManualTreeVol, ft3 = 150 \tag{1}$$

$$MaxMechTreeVol, ft3 = 80 \tag{2}$$

$$MoistureContentFraction, wet\ basis = 0.50 \tag{3}$$

$$LogLength, ft = 32 \tag{4}$$

$$LoadWeight, green\ tons\ (logs) = 25 \tag{5}$$

$$LoadWeight, green\ tons\ (chips) = 25 \tag{6}$$

$$CTLTrailSpacing, ft = 50 \tag{7}$$

$$HardwoodCostPremium, fraction = 0.20 \tag{8}$$

$$ResidueRecoveryFraction\ for\ WT\ systems = 0.80 \tag{9}$$

$$ResidueRecoveryFraction\ for\ CTL = 0.50 \tag{10}$$

$$AvgTreeSizeLimit4Chipping = 80 \tag{11}$$

$$AvgTreeSizeLimit4Processing = 80 \tag{12}$$

$$AvgTreeSizeLimit4ManualFellLimbBuck = 250 \tag{13}$$

$$AvgTreeSizeLimit4loading = 250 \tag{14}$$

$$AvgTreeSize4GrappleSkiddingOfBunchedTrees = 250 \tag{15}$$

Tree Volume

Chip Trees <= 80 ft3

Small Log Trees <= 80 ft3

Large Log Trees > 80 ft3

Wood Density

For chip trees, small log trees or large log trees, if the wood density is not specified by a user, it is assumed as 50 lb/ft3.

Hardwood fraction

For chip trees, small log trees or large log trees, if the hardwood fraction is not specified by a user, then it is assumed as 0.

Logs Per Tree

Logs per chip tree was assumed as 1.