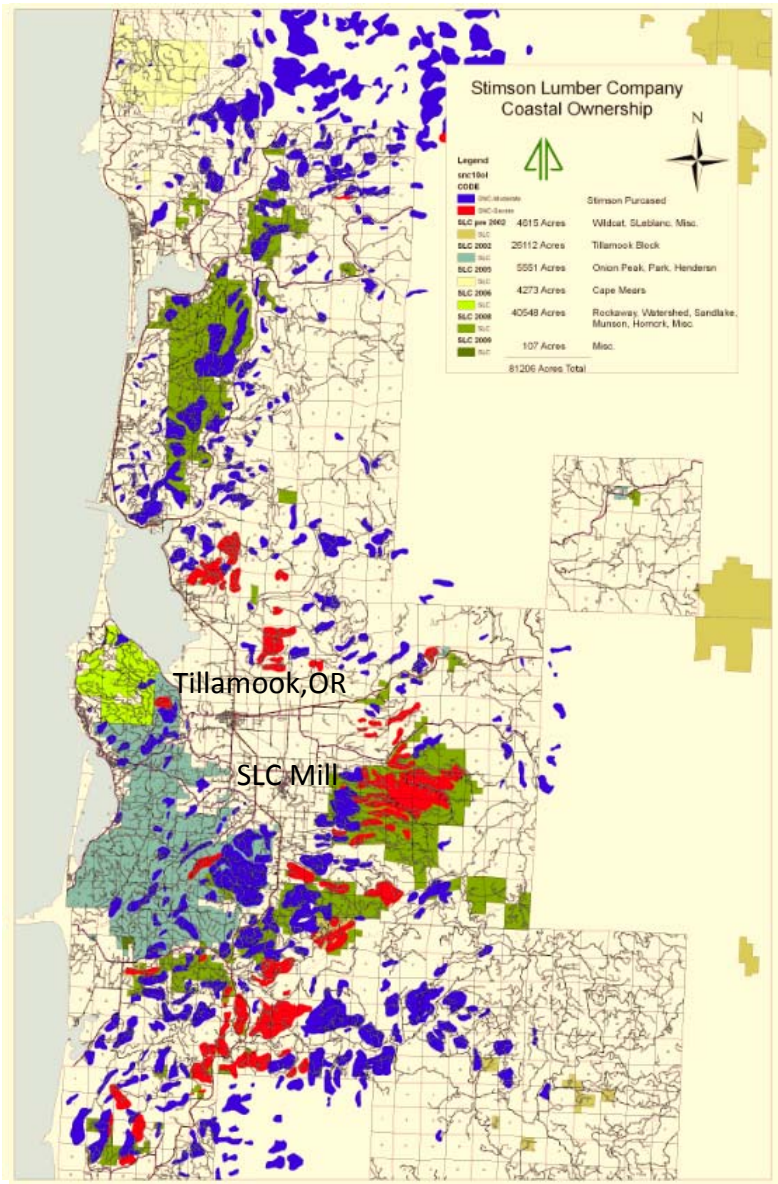
STIMSON LUMBER COMPANY

"A Tradition of Quality"

COAST TREE FARM –TILLAMOOK

STIMSON COASTAL PROPERTIES



Stimson Lumber Company Coastal Ownership

N

Legend

snc10ol

CODE

SNC-Moderate		Stimson Purcased
SNC-Severe		
SLC pre 2002	4615 Acres	Wildcat, SLeblanc, Misc.
SLC		
SLC 2002	26112 Acres	Tillamook Block
SLC		
SLC 2005	5551 Acres	Onion Peak, Park, Hendersn
SLC		
SLC 2006	4273 Acres	Cape Mears
SLC		
SLC 2008	40548 Acres	Rockaway, Watershed, Sandlake, Munson, Horncrk, Misc.
SLC		
SLC 2009	107 Acres	Misc.
SLC		
	81206 Acres Total	

SOUTH LABLANC BUSINESS PLAN 1995

SEVERE NEEDLE CAST IMPACTED TIMBER STAND

Age =	35 years	Net bf/ac =	9880
Trees/ac =	242	Net cf/ac =	2950
Dbh =	10.1 in	Logs/ac =	243
BA/ac =	134 sq ft	SI df 50 =	131
MAI=	282 bd ft/yr	SI wh 50 =	135

WE KNOW WHAT WORKS ON THE COAST. ESTABLISH THIS…

Established = 2005

Trees/ac = WH=384, SS=62, RC =11, DF =7

Total = 464 tpa

PCT TO CREATE…

Age =	16 years	BA/ac =	60 sqft
Trees/ac =	380	Net cf/ac =	63 cuft
DBH =	5.4 in	SI wh 50 =	112

AND GROW THIS…

Age =	30 years	Gross bf/ac =	18598
Trees/ac =	426	Net bf/ac =	16205
DBH =	10.1 in	Gross cf/ac =	5645
BA/ac =	253 sqft	3s volume =	16719 (90%)
Logs/ac =	305	4s volume =	1880 (10%)
MAI =	540 bd ft/yr	SI wh 50 =	112

HEMLOCK MONOCULTURE ???
POSSIBLE SOLUTIONS TO PROBLEM SITES

Sitka Spruce

Western Red Cedar

Noble Fir

Red Alder

Douglas-fir?

SITKA SPRUCE and the WHITE PINE WEEVIL

(*Pisodes strobi)*

Weevil resistant seed from British Columbia Canada

- Qualicum 64% resistant (Vancouver Island)
- Haney 64% resistant (BC mainland)

Tillamook Native Seed is only 24% resistant but is among the fastest growing Sitka Spruce on the Pacific Coast.

IMPROVED SITKA SPRUCE

Flensborg Spruce – Denmark

Progeny site seed collected from Washington State in 1965. 18 years after establishment the genetic volume gain was measured at +30%. This corresponds to +24% over a 50 year rotation age.

- Plant 10-30% coastal influence
- Superior growth rates
- Increased stand stability
- Chemical tolerance
- Browse Resistance
- Smaller/Cheaper seedlings
- Low seedling mortality

Noble Fir

- Plant 10-30%, < 2000 ft. elevation
- Frost checking
- Poor elevation adaptability
- High elevation High Volume tree
- Increased stand stability
- Adapted to harsh climates/sites
- Low browse

Western Red Cedar

- Plant 10-20%, microsite < 1500ft elevation.
- Slow to start
- Animal Damage
- Larger/more expensive planting stock required
- Lower log volume at rotation
- High log Value

RED ALDER PLANTATIONS

Red Alder

- Planting 0%
- Minimal Alder site acres in ownership
- Small market
- Difficult to manage in mixed stands
- Species doesn’t fit our core business plan
- Attractive log prices
- Short rotations

PLANTING PLAN

COASTAL SEEDLING ZONES

Zone 1) Coastal Zone
Elevation: 0 to 1500 feet
Aspect: West
Weather: Mild climate with minimal snow loads. Trees are annually subject to storms that have winds in excess of 80 mph. Occasional 100+ mph wind storms.
Species: WH 50-70%, SS 20-30%, WRC 10-20%
Microsite: None

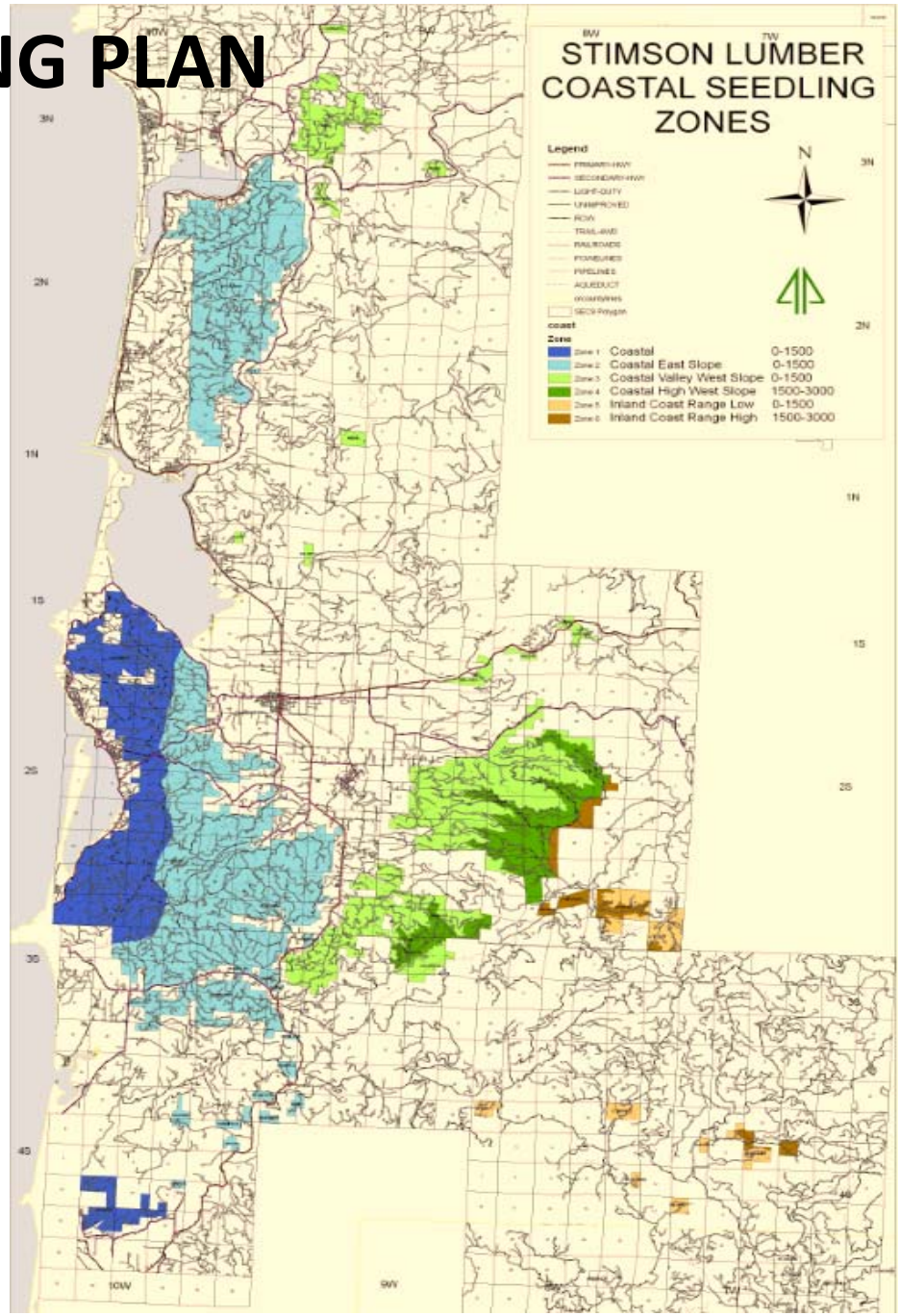
Zone 2) Coastal Zone East Slopes
Elevation: 0 to 1500 feet
Aspect: East
Weather: Mild climate with minimal snow loads. Trees are annually subject to storms that have winds up to 80 mph.
Species: WH 60-80%, SS 10-20%, WRC 10-20%
Microsite: There is some opportunity to incorporate Needle Cast resistant Douglas-fir into the mix on east slopes of Rockaway.

Zone 3) Coastal Valley West Slopes
Elevation: 0 to 1500 feet
Aspect: West
Weather: Moderate climate with light snow loads. South aspects can be very droughty one out of four years.
Species: WH 70-90%, WRC 10-30%
Microsite: There is some opportunity to incorporate Needle Cast resistant Douglas-fir into the species mix on Camp 4 Tract.

Zone 4) Coastal High West Slopes
Elevation: 1500 to 3000 feet
Aspect: West
Weather: Moderate to severe climate conditions with heavy snow loads. Trees are subject to annual coastal storms and dry desiccating east wind events during the summer and winter seasons.
Species: WH 70-90%, NF 10-30%
Microsite: Noble Fir should be pushed into elevations above 2000 ft.

Zone 5) Inland Coast Range Low
Elevation: 0 to 1500 feet
Aspect: All
Weather: Moderate climate conditions with light and possibly heavy snow loads. Trees are subject to annual coastal storms and dry desiccating east wind events in the summer and winter seasons.
Species: DF 40-60%, WH 30-50%, WRC 5-15%
Microsite: Future possibility of planting 100% DF with a Needle Caste Resistant seedling.

Zone 6) Inland Coast Range High
Elevation: 1500 to 3000 feet
Aspect: All
Weather: Moderate to severe climate conditions with heavy snow loads. Trees are subject to winter storms and dry desiccating east wind events in the summer and winter seasons.
Species: DF 40-60%, WH 30-50%, NF 5-15%
Microsite : Noble Fir should be pushed into elevations above 2000 ft. There is the future possibility of planting 100% DF with a Needle Caste Resistant seedling.



PRE-COMMERCIAL THINNING MULTI-SPECIES STANDS

STIMSON LUMBER
COASTAL THINNING SPECIFICATIONS 2010

Western Hemlock/Sitka Spruce stands thin to 400 trees per acre or 10'x10' spacing.
Douglas-fir stands thin to 300 trees per acre or 12'x12' spacing.

THINNING WILL BE FOR BEST 300 - 400 TREES PER ACRE

1) LOOK UP. Evaluate the entire tree!

2) NEVER MAKE AN OPENING BIGGER. Leave edge trees uncut.

3) DO NOT CUT 5"+ Western Hemlock, Red Cedar, Sitka Spruce
   DO NOT CUT 7"+ Douglas-fir, Alder

4) TREES FORKED BELOW STUMP HEIGHT = TWO TREES
   TREES FORKED ABOVE STUMP HEIGHT = DEFECTIVE TREE

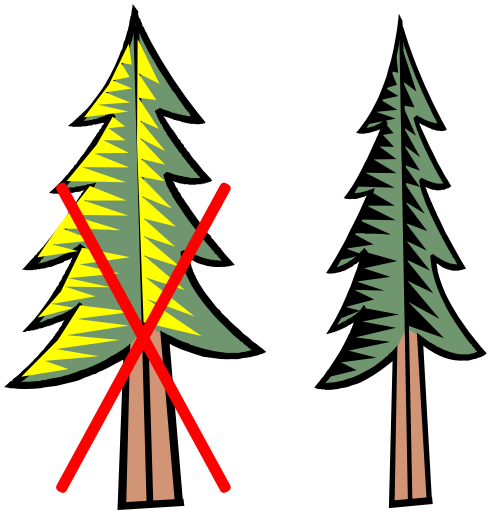
5) REMOVE DEFECTIVE TREES WHENEVER POSSIBLE. Leave trees should always be the most vigorous, straight and have the least amount of defect.

6) TREE QUALITY ALWAYS OVERRULES SPACING. Unequal spacing, ex: 5x20, 7x14, 9x11 are all acceptable for 10 x 10 spacing = 400 tpa.

7) SWISS NEELE CASTE (D - RULE). The diameter of a Swiss Needle Caste infected DF minus a designated number of inches (D - #) will be evaluated against the diameter of an alternate species (WH, SS, RC, RA).

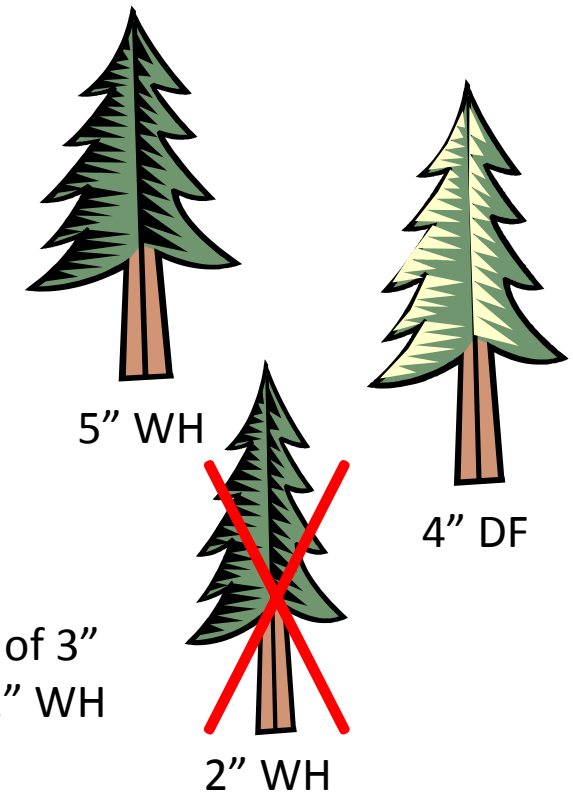
PRE-COMMERCIAL THINNING (D-RULE)

7) SWISS NEELE CASTE (D - RULE). The diameter of a Swiss Needle Caste infected DF minus a designated number of inches (D - #) will be evaluated against the diameter of an alternate species (WH, SS, RC, RA).



5” DF 3” WH

Example #1 : D-3 area
DF 5” minus 3 = Effective DF diameter of 2”
Compare the effective 2” DF to the 3” WH
and the WH is retained.



5” WH 4” DF

Example #2 : D-1 area
DF 4” minus 1 = Effective DF diameter of 3”
Compare the effective 3” DF to the ” 2” WH
and the DF is retained.

2” WH

IS THERE MORE TO LEARN ABOUT DOUGLAS-FIR ?

- Current genetic studies show degrees of tolerance in selected DF families but NO RESISTANCE.
- Sites exist on most coastal ownerships where a DF component would be a positive investment.

“AND WE ARE HAPPY WITH THIS PLAN”

QUESTIONS?