APPENDIX I

Glossary of Terms

MB&G Glossary of Common Forestry Terms	
Term	**Definition**
Afforestation	Establishment of forest crops through artificial methods, such as planting or sowing on land where trees have never grown
Age Class	The estimated age of a stand of trees over a large enough area to be suitable for management
Aggregate	Crushed stone or angular rock used for building roads
Basal Area	The area in square feet of the diameter of trees in inches when measured at breast height, usually on one acre - basal area is often used to determine the density of the trees on an acre of forest land.
Block	A device through which a cable runs, sometimes called a pulley or sheave
Board Foof (Bf)	A unit volume measurement represented by a board one foot long, one foot wide and one inch thick
Broadcast burn	A method of burning all slash on a logged area
Brush removal	The process of removing the brush from an area, usually after logging, with either mechanical and chemical tools or controlled forest. The brush is removed to help insure successful regeneration.
Buck (Bucking)	To saw a felled tree into specific log lengths
Butt Log	The first log in a tree - just above the stump
Cable	Wire rope used for lines in yarding or skidding systems
Cable Logging	A yarding system employing winches in a fixed position
Cat	Slang for a crawler tractor used in logging and road-building - stemming from a caterpillar tractor
Clinometer	A handheld instrument for measuring heights, slopes and vertical angles
Clearcut	The removal of all merchantable trees from an area to be logged
Commercial Thinning (CT)	The process of controlling the density of trees on each acre by thinning (cutting down) some of the trees where logs of commercial value are realized
Compaction	The act of compressing the soil during logging with heavy equipment
Crown	The mass of the branches, limbs, leaves, and needles growing outward from the trunk of a tree
CTA	The harvest of commercial thinnings as defined in the current business plan
Cubic Foot or C.F	A unit of volume measurement represented by a cube one foot by one foot by one foot
Cull	A log that will not qualify for the lowest merchantable grade - also a worthless piece of equipment
Culvert	A large pipe that allows water to flow under a road, typically embedded so as to be surrounded by soil
DBH (Diameter at Breast Height)	The point where trees are measured for diameter, usually 4-½ feet up the stem of the tree as measured o the uphill side of the tree
Deforestation	The clearing of trees, transforming a forest into permanently cleared land
D-Tape (Diameter Tape)	A tape measure used for measuring the DBH
Gross Volume	A reference to the total estimated volume of wood in a tree or log, including rotten wood or grade defects
Hardwood	Any variety of broad-leaved, deciduous trees, and the wood from those trees
Harvesting	The felling, loading and transporting of timber products, which may include both clear cutting and selective cutting of timber
HRA	The harvest of wolf trees, hardwoods, and poorly stocked land as defined in the current business plan
Interplanting	Tree planting over an area that was planted earlier, so as to fill in the spaces where seedlings have died
Landing	A cleared area in the woods to which logs are yarded for loading onto trucks for shipment to a processing plant
Leave Trees	Trees left behind at a final harvest as required by the Forest Practices Act

MB&G Glossary of Common Forestry Terms	
Term	**Definition**
LiDAR (Light Detection & Ranging)	LiDAR is an optical remote-sensing technique that uses pulsed laser light to densely sample the surface of the earth in the form of range measurements (variable distances) to the Earth. These light pulses—combined with other data recorded by the system— generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.
Mbf (Mcf)	One thousand board feet or cubic feet
Merchantable	A term which describes the trees or logs which will be yarded and hauled to a mill for commercial use. The standards for determining merchantable logs include the log diameter, the length and the percentage of sound material. These will vary by contract.
MMbf (MMcf)	One million board feet or cubic feet
Net Volume	A reference to the total estimated volume of wood in a tree or log excluding the rotten wood, grade defects or other factors which impact the volume of finished products actually recovered from a sawn log
ODF	Oregon Department of Forestry
Phenotype	A tree's external appearance, growth rate, chemical make-up, etc., as the tree is actually growing and affected by its environment
Phytotoxic	Toxic to plants
Plantation	A forest stand regenerated artificially by planting seedlings
PNW (Pacific Northwest)	An abbreviation commonly used when referring to western Washington, western Oregon, and small portions of northern California
Precommercial Thinning (PCT).	The process of controlling the density of trees on each acre by thinning (cutting down) at an early age some of the trees where no commercial products are realized. Also called spacing, stocking control and T.S.I.
Prescribed Burn	Deliberate use of fire under conditions where the area to be burned is predetermined and the intensity of the fire is controlled
Progeny Test	An experiment, usually replicated, to compare the offspring of different parents
Pruning	The removal of branches from the lower 16 feet of the tree stem so as to improve the eventual grade of the lower log by eliminating the knots
Pulp Log	A log that does not meet the one-third merchantability standard for a sawn log but contains a minimum of 50-percent sound wood fiber by volume
Regen	Slang for regeneration. Tree planting or seeding to ensure the growth of another tree crop once an area has been logged or rehabilitated
Rehab	Slang for rehabilitation. Removing heavy brush, cull trees and hardwood trees with little commercial value to prepare the area for tree planting and eventual commercial productivity.
Releasing	Removing brush or plant competition in a regenerated area with either mechanical or chemical methods so as to allow the tree seedlings to grow faster
Reprod	Slang term for reproduction - the small seedlings planted or occurring naturally following the harvest of an existing stands.
Riparian Area	An area of land adjacent to a stream, river, lake, or wetland
RMA or SMZ	Riparian management area or Streamside Management Zone – Strip of land along a stream managed to protect unique habitats and to provide shade to the stream
Road Brushing	A mechanical procedure of cutting the brush along forest roads so as to prevent the brush from overgrowing the road or limiting visibility
Rotation	The length of time to grow a stand of trees to achieve a specific product type or size
Salvage	Harvesting of patches or individual trees that are nearly or recently dead because of insect attacks, wind damage, old age, or disease
Sawlog	A log that is large enough and of suitable quality to be sawn into lumber
Sawlog Grades_–	These are generalized minimum specifications that apply to most species, except Red Cedar:
No. 2 Sawmill:	Gross diameter – 12 inches, inside bark
	Gross length – 12 feet

MB&G Glossary of Common Forestry Terms	
Term	**Definition**
	Minimum volume – 60 bd. ft. net scale
	Surface – Sound, tight knots, not to exceed 2-1/2" in diameter
No. 3 Sawmill:	Gross Diameter – 6 inches, inside bark
	Gross Length – 12 feet
	Minimum Volume – 50 bd. ft net scale
	Surface – sound, tight knots not to exceed 3" in diameter
No. 4 Sawmill:	Gross Diameter – 5 inches, inside bark
	Gross Length – 12 feet
	Minimum Volume – 10 bd. ft. net scale
Special Mill:	Gross diameter – 16 inches, inside bark
	Gross Length – 17 feet; 16 feet for Ponderosa pine and Sugar pine
	Surface – Sound, tight knots and knot indicators not to exceed 1-1/2" in diameter, numbering not more than an average of one per foot of log length
	Annual Ring Count – 6 per inch.
Scaling	A measuring and inspection process where the gross and net volume and the grade of logs is determined
Scarification	A mechanical process, usually with a cat, which exposes bare mineral soil on a logged or rehabilitated area so as to allow successful tree planting.
Seedling Stock Classes	1-0 – A seedling grown either in a bare-root or container nursery for one growing season. The first number is the number of growing seasons in the sowing bed and the second number is the number of growing seasons in a transplant bed. A 2-0 is a seedling grown either in a bare-root or container nursery for two growing seasons.
	2-1 – Also called a transplant. It is a seedling sown in a bare-root nursery bed at the rate of 50 to the square foot. It is grown for two (2) seasons and then transplanted at the rate of 15 to the square foot. This transplanting stimulates root development and lateral shoot development. It produces a very large seedling to plant in areas with a harsh environment.
	2-0-3 – A seedling grown for two (2) seasons in a bare-root nursery, not for transplanting, and grown at the density of 30 to the square foot.
	Plug – A 1-0 seedlings grown in a container and usually in a greenhouse environment.
	Styro 2, 4, 4A, 5, 7, 8, etc. – Styro refers to the material styrofoam used as a mold for container seedlings. The number refers to the cubic inch capacity of the cavity in the styroblock.
Seed Zone	A geographic area delineated on Western Forests Tree Seed Council's Tree Seed Zone Map - used to identify source and origin of field-collected tree seed.
Selective Harvest	periodic removal of individual or small clusters of trees within a larger stand
Silviculture	The practice of controlling the establishment, growth, composition, health, and quality of forests to meet diverse needs and values
Site Index	An expression of the relative productive capacity of forestland based on the total height of trees at a given age - Douglas-fir has five (5) different site classes, "I" being the best and "V" being the poorest.
Skidding	The process of moving logs from where the tree was cut to a landing - also called yarding
Slash	The cull material, limbs, and tops left on the ground after an area is logged
Snag	A standing dead tree from which all the leaves or needles and most of the branches have fallen
Softwood	Trees with needles - the actual hardness of the wood varies widely from species to species
Spur Road	A secondary road branching off a main line road usually serving one or two settings
Stand	A manageable group of trees that occupies a specific area and often is of uniform age, species and condition
Stocking	The quantity of trees growing on a forest acre, usually expressed as a percent of what a natural forest would produce. One objective of forest management is to obtain an optimal stocking over time as the stand grows through thinning.

MB&G Glossary of Common Forestry Terms	
Term	**Definition**
Stumpage	This term references the dollar value of standing timber. It is usually based on a board foot or cubic foot measure. This is the value of the sold timber after all the logging and mill delivery costs have been paid.
Sustainable Forestry Initiative (SFI)	A U.S.-based organization that provides sustainability certification for private forest landowners. It is supported by the American Forest and Paper Association (AF&PA). All members of AF&PA must meet the standards established under SFI. At this time, SFI uses performance-based standards in which the certifier (landowner) identifies broad system components. General requirements are set by SFI.
Sustained Yield	A management objective which limits the annual harvest level to equal the long-term growth capability of the forest property
Taper	The gradual reduction in the diameter of a tree stem between the butt and log top. For a tree of given height, the less the taper, the greater the wood volume.
Timber Stand Improvement (TSI)	Usually used in the same way as Precommercial Thinning and Spacing - see Precommercial Thinning (PCT)
Undercut	A notch cut in a tree just above the ground to control the direction of fall
Understory	The shrubs and plants growing beneath the main canopy of a forest
Windfall, Windthrow or Blowdown	A tree which has been uprooted or broken off by the wind
Yarding (skidding)	A system of power-operated winches used to move logs from where they are cut to the landing
Young Growth	Trees that are under 150 years old, which may have grown in either natural or managed conditions, but which have wider growth rings and less heartwood

APPENDIX II

Soils

Forestland Planting and Harvesting

Clatsop County, Oregon

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		Ft	*Yrs*	*Cu Ft/Acre/Yr*	
3F:					
Ascar	Douglas-fir	146	100	153	Douglas-fir
	Douglas-fir	111	50	156	red alder
	western hemlock	148	100	234	Sitka spruce
	western hemlock	105	50	241	western hemlock
Rock outcrop	---	---	---	---	---
10C:					
Chitwood	Sitka spruce	132	100	186	Douglas-fir
					Sitka spruce
					western hemlock
28:					
Dystrudepts	---	---	---	---	---
Humaquepts, isomesic	---	---	---	---	---
32D:					
Klootchie	Douglas-fir	116	50	172	Douglas-fir
	Sitka spruce	159	100	243	Sitka spruce
	western hemlock	155	100	243	western hemlock
33E:					
Klootchie	Douglas-fir	120	50	175	Douglas-fir
	Douglas-fir	159	100	169	red alder
	western hemlock	163	100	260	Sitka spruce
	western hemlock	115	50	260	western hemlock
Necanicum	Douglas-fir	155	100	164	Douglas-fir
	Douglas-fir	111	50	156	red alder
	western hemlock	149	100	236	Sitka spruce
	western hemlock	104	50	239	western hemlock
34E:					
Klootchie, bouldery	Douglas-fir	116	50	172	Douglas-fir
	Sitka spruce	159	100	243	Sitka spruce
	western hemlock	155	100	243	western hemlock
Necanicum, bouldery	Douglas-fir	119	50	172	Douglas-fir
	red alder	93	50	100	Sitka spruce
	Sitka spruce	155	100	229	western hemlock
	western hemlock	138	100	214	
35B:					

Forestland Planting and Harvesting

Clatsop County, Oregon

Map symbol and soil name	Potential productivity				Trees to manage
	Common trees	Site index	Site index base age	Volume of wood fiber (CMAI)	
		Ft	*Yrs*	*Cu Ft/Acre/Yr*	
35B:					
Knappa	Douglas-fir	133	50	200	Douglas-fir
	western hemlock	168	100	272	Sitka spruce
					western hemlock
38F:					
Laderly	Douglas-fir	113	50	160	Douglas-fir
	Douglas-fir	149	100	157	red alder
					western hemlock
Rock outcrop	---	---	---	---	---
45A:					
Mues	---	---	---	---	---
50E:					
Necanicum	Douglas-fir	155	100	164	---
	Douglas-fir	111	50	156	
	western hemlock	149	100	236	
	western hemlock	104	50	239	
Ascar	Douglas-fir	146	100	153	---
	Douglas-fir	111	50	156	
	western hemlock	105	50	241	
	western hemlock	148	100	234	
51A:					
Nehalem, occasional flooding	---	---	---	---	---
58D:					
Skipanon	Douglas-fir	167	100	178	---
	Douglas-fir	127	50	188	
	western hemlock	159	100	252	
	western hemlock	112	50	254	
58E:					
Skipanon	Douglas-fir	167	100	178	---
	Douglas-fir	127	50	188	
	western hemlock	112	50	254	
	western hemlock	159	100	252	
66:					
Tropofluvents	---	---	---	---	---
W:					
Water	---	---	---	---	---

Hazard of Erosion and Suitability for Roads on Forestland (OR)

Clatsop County, Oregon

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations. This report shows only the major soils in each map unit]

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface) (OR)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3F:							
Ascar	50	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
Rock outcrop	40	Not rated		Not rated		Not rated	
10C:							
Chitwood	85	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Low strength	0.50
						Slope	0.50
28:							
Dystrudepts	45	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Low strength	0.50
						Slope	0.50
Humaquepts, isomesic	40	Slight		Slight		Poorly suited	
						Ponding	1.00
						Wetness	1.00
						Low strength	0.50
32D:							
Klootchie	85	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
33E:							
Klootchie	55	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	1.00
Necanicum	30	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
34E:							
Klootchie, bouldery	50	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Necanicum, bouldery	30	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00

Hazard of Erosion and Suitability for Roads on Forestland (OR)

Clatsop County, Oregon

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface) (OR)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
35B:							
Knappa	85	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Low strength	1.00
38F:							
Laderly	40	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
45A:							
Mues	85	Slight		Slight		Moderately suited	
						Low strength	0.50
50E:							
Necanicum	45	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
Ascar	30	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
51A:							
Nehalem, occasional flooding	80	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
58D:							
Skipanon	80	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
58E:							
Skipanon	80	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
66:							
Tropofluvents	80	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
W:							
Water	100	Not rated		Not rated		Not rated	

Forestland Planting and Harvesting

Clatsop County, Oregon

The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The columns that identify the rating class and limiting features show no more than five limitations for any given soil. The soil may have additional limitations

Map unit: 3F - Ascar-Rock outcrop complex, 60 to 90 percent slopes

Component: Ascar (50%)

The Ascar component makes up 50 percent of the map unit. Slopes are 60 to 90 percent. This component is on mountains, mountain slopes. The parent material consists of colluvium derived from igneous rock. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Rock outcrop (40%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

Map unit: 10C - Chitwood silt loam, 7 to 15 percent slopes

Component: Chitwood (85%)

The Chitwood component makes up 85 percent of the map unit. Slopes are 7 to 15 percent. This component is on terraces. The parent material consists of alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria.

Map unit: 28 - Humitropepts-Tropaquepts complex, 0 to 20 percent slopes

Component: Dystrudepts (45%)

The Dystrudepts component makes up 45 percent of the map unit. Slopes are 0 to 20 percent. This component is on stream terraces, river valleys. The parent material consists of alluvium derived from sedimentary rock. Depth to a root restrictive layer, strongly contrasting textural stratification, is 40 to 63 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Map unit: 28 - Humitropepts-Tropaquepts complex, 0 to 20 percent slopes

Component: Humaquepts, isomesic (40%)

The Humaquepts component makes up 40 percent of the map unit. Slopes are 0 to 7 percent. This component is on stream terraces, river valleys. The parent material consists of alluvium derived from igneous and sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 4e. This soil meets hydric criteria.

Map unit: 32D - Klootchie silt loam, 3 to 30 percent slopes

Component: Klootchie (85%)

The Klootchie component makes up 85 percent of the map unit. Slopes are 3 to 30 percent. This component is on mountain slopes. The parent material consists of colluvium derived from basalt. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Map unit: 33E - Klootchie-Necanicum complex, 30 to 60 percent slopes

Component: Klootchie (55%)

The Klootchie component makes up 55 percent of the map unit. Slopes are 30 to 60 percent. This component is on mountains, mountain slopes. The parent material consists of colluvium and residuum derived from igneous rock and tuff. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Necanicum (30%)

The Necanicum component makes up 30 percent of the map unit. Slopes are 30 to 60 percent. This component is on mountains, mountain slopes. The parent material consists of colluvium derived from igneous rock and tuff. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Map unit: 34E - Klootchie-Necanicum complex, 30 to 60 percent slopes, bouldery

Component: Klootchie, bouldery (50%)

The Klootchie, bouldery component makes up 50 percent of the map unit. Slopes are 30 to 60 percent. This component is on mountain slopes. The parent material consists of colluvium derived from basalt. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Necanicum, bouldery (30%)

The Necanicum, bouldery component makes up 30 percent of the map unit. Slopes are 30 to 60 percent. This component is on mountain slopes. The parent material consists of colluvium derived from basalt. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Map unit: 35B - Knappa silt loam, 0 to 7 percent slopes

Component: Knappa (85%)

The Knappa component makes up 85 percent of the map unit. Slopes are 0 to 7 percent. This component is on terraces. The parent material consists of alluvium derived dominantly from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 2e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Map unit: 38F - Laderly-Rock outcrop complex, 60 to 90 percent slopes

Component: Laderly (40%)

The Laderly component makes up 40 percent of the map unit. Slopes are 60 to 90 percent. This component is on mountain slopes, mountains. The parent material consists of colluvium derived from igneous rock. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Rock outcrop (35%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

Map unit: 45A - Mues medial silt loam, 0 to 3 percent slopes

Component: Mues (85%)

The Mues component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on stream terraces, river valleys. The parent material consists of silty alluvium over consolidated gravelly alluvium derived from igneous and sedimentary rock. Depth to a root restrictive layer, strongly contrasting textural stratification, is 25 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 25 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Map unit: 50E - Necanicum-Ascar complex, 30 to 60 percent slopes

Component: Necanicum (45%)

The Necanicum component makes up 45 percent of the map unit. Slopes are 30 to 60 percent. This component is on mountains, mountain slopes. The parent material consists of colluvium derived from igneous rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Ascar (30%)

The Ascar component makes up 30 percent of the map unit. Slopes are 30 to 60 percent. This component is on mountains, mountain slopes. The parent material consists of colluvium derived from igneous rock. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

Map unit: 51A - Nehalem silt loam, 0 to 3 percent slopes

Component: Nehalem, occasional flooding (80%)

The Nehalem component makes up 80 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains, river valleys. The parent material consists of alluvium derived from igneous and sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 2w. Irrigated land capability classification is 2w. This soil does not meet hydric criteria.

Forestland Planting and Harvesting

Clatsop County, Oregon

Map unit: 58D - Skipanon gravelly medial silt loam, 3 to 30 percent slopes

Component: Skipanon (80%)

The Skipanon component makes up 80 percent of the map unit. Slopes are 3 to 30 percent. This component is on mountains, hillslopes, mountain slopes. The parent material consists of mass movement deposits derived from a mixture of igneous and sedimentary rock types overlying sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Map unit: 58E - Skipanon gravelly medial silt loam, 30 to 60 percent slopes

Component: Skipanon (80%)

The Skipanon component makes up 80 percent of the map unit. Slopes are 30 to 60 percent. This component is on mountains, hillslopes, mountain slopes. The parent material consists of mass movement deposits derived from a mixture of igneous and sedimentary rock types overlying sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Map unit: 66 - Tropofluvents, 0 to 3 percent slopes

Component: Tropofluvents (80%)

The Tropofluvents component makes up 80 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of stratified alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 72 inches during January, February, March, April, October, November, December. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 6w. This soil does not meet hydric criteria.

Map unit: W - Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.