ASSESSMENT REPORT

FEDERAL LANDS IN AND ADJACENT TO OREGON COAST PROVINCE

APPENDICES

July 1995

APPENDICES

FOREST-WIDE ASSESSMENT DATA
SIUSLAW NATIONAL FOREST
APRIL 5, 1995

DATA LAYER	TYPE	SOURCE	EXTENT OF DATA	CAPTURE SCALE
Study Area Boundary /gis/projects/forest_assess/vicinitymap/studybndry	polygon	Siuslaw-GIS	study area	1:24000
Ownership /gis/projects/forest_assess/vicinitymap/studyown	polygon	OSU-SSC-GIS	study area	1:100000
Streams /libraries/watershed -USFS /dems/demlat/scratch- BLM	line	USFS-BLM	study area	1:12000
Geology /gis/regional/orgeo	polygon	SSC-GIS	state	1:500000
Fire blocks (fire occurences) /gis/projects/forest_assess/firework/teensma/firereg bndry	polygon	blm-teensma data	study area	unk
Roads /gis/projects/forest_assess/vicinitymap/studyroads	line	SSC-GIS	study-areas maj.roads	1:500000
Fourth field watersheds (HUCS) /gis/projects/forest_assess/vicinitymap/studyhucs	polygon	R6	study area	1:100000
Fifth field watersheds /gis/projects/forest_assess/vicinitymap/studyfifth	polygon	Siuslaw -GIS	study area	1:24000
Landtype Associations /gis/input/geology/landassess/lta	polygon	Siuslaw -GIS	siuslaw national forest and slightly beyond	1:100000
Vegetation (Seral stages- sizeclass, age,dbh, species composition /dems/demlat/scratch/seralwork/combinedseral	polygon	Siuslaw-BLM	study area federal lands only	1:12000

SUMMARY OF THE GIS FOREST LIBRARY

LAYER	DESCRIPTION	TYPE	SCALE
CHUFINAL	Final Critical Habitat Units	polygon	1:100,000
CHUOLD	Original Critical Habitat Units	polygon	1:100,000
CVSPLOTS	Current Vegetation Survey plots	point	
DCA	Designated critical areas for Spotted Owl	polygon	1:126,720
HCA1	Category 1 HCA boundaries	polygon	1:126,720
HCA3	Category 3 HCA boundaries	polygon	1:12.000
LS	Land ownership	polygon	1:24,000
MA	Management areas from the Forest Plan	polygon	1:24,000
MSSPLOTS	1987 Managed Stand Survey plots	point	1:12,000
PA	Plant association information	polygons	1:24,000
PLSS	Public Land Survey System	poly,line	1:24,000
POALAXPTS	Poa laxiflora locations	point	1:12,000
QUARRIES	Rock resource inventory of quarries	points	1:24,000
RIVERS	Rivers and associated islands	poly,line	1:24,000
SIUOWLHAB	Spotted owl habitat	polygon	1:24,000
SIUHISTVEG	Historical vegetation information	polygon	
SOILS	Soil classification	polygon	1:78,000
SRI	Soil Resource Inventory landtypes	polygon	1:24,000
STREAMS	Streams	line	1:24,000
TOWNSHIP	Township Lines	polygons	1:24,000
VEGE	Vegetation information	polygons	1:12,000
VISUALS	Visual quality objectives	polygons	1:62,500
VREPLOTS	Vegetation Resource Exam plots	points	1:12,000
VRSPLOTS	Vegetation Resource Survey plots	point	1:12,000
VSEPLOTS	Vegetation Structure Exam plots	point	1:12,000
WATERSHED	Watershed boundaries	polygon	1:24,000

Land Ownership Acres for River Basins (4th field) and Watersheds (5th field)
for the Siuslaw Forestwide Assessment

RIVER BASINS and	Federal				Private**			Indian	Private and		
5th Field Watersheds	USFS	BLM	Total	State	Industry	Non-Ind.	Total	Lands	other**	Total	
WILSON-TRASK-NESTUCCA											
East Beaver	5,493	1,680	7,173	1,896					9,575	18,644	
Kilchis River	0	2,907	2,907	10,527					2,685	16,119	
Little Nestucca	18,731	201	18,932	818					17,892	37,642	
Lower Nestucca	43,068	12,410	55,478	4,208					31,454	91,140	
Lower NF Trask River	0	1,957	1,957	10,012					964	12,933	
Lower Trask River	0	2,265	2,265	3,888					6,624	12,777	
Neskowin	8,270	0	8,270	0					7,701	15,971	
Nestucca River	0	22,317	22,317	2,615					5,578	30,510	
Sandlake	7,077	46	7,123	0					9,861	16,984	
Three Rivers	20,042	0	20,042	0					4,300	24,342	
Tillamook	878	268	1,146	8					8,449	9,603	
Upper MF NF Trask	0	3,725	3,725	12,861					11,045	27,631	
Wilson River	0	3,094	3,094	13,382					1,732	18,208	
Subtotal	103,559	50,870	154,429	60,215					117,860	332,504	sum column
Ac. not in identified 5th fields	0	1,603	1,603	164,446					103,824	269,872	sum row
RIVER BASIN TOTAL	104,124	51,679	155,803	224,653	128,616	89,467	218,083	5	221,684	602,377	total above
YAMHILL*											
Willamina	1,065	43	1,108	0					9,603	10,711	
Yamhill	5,572	0	5,572	0					18,274	23,846	
Subtotal inside study area	6,637	43	6,680	0	17,600	3,668	21,268	6,714	27,877	34,557	sum column
Outside Study Area										454,175	difference
RIVER BASIN TOTAL										488,732	given

* --only a portion of river basin is in the FWA study area

**"Private" and "Private and other" column acres are not mutually exclusive.
They are defined as follows:
--"Private" does not include city and county lands
--"Private and other" includes city and county lands, lakes, Indian lands, etc.

Appendix B.1

5/8/95

Land Ownership Acres for River Basins (4th field) and Watersheds (5th field) for the Siuslaw Forestwide Assessment											
RIVER BASINS and	Federal				Private**			Indian	Private and		
5th Field Watersheds	USFS	BLM	Total	State	Industry	Non-Ind.	Total	Lands	other**	Total	
SILETZ-YAQUINA											
Big Elk	1	0	1	5,388					5,648	11,036	
Devils Lake	1,954	0	1,954	0					8,442	10,396	
Rock	0	1,373	1,373	6,720					19,529	27,622	
Salmon	9,633	3,050	12,683	159					34,688	47,530	
Schooner/Drift (Siletz)	18,234	2,278	20,512	0					17,547	38,059	
Siletz	4,318	487	4,805	0					16,125	20,930	
Toledo	3,577	40	3,617	0					2,993	6,610	
Upper Siletz	0	12,355	12,355	0					32,253	44,608	
Yaquina/Big Elk	16,258	2,512	18,770	2,679					16,403	37,852	
Subtotal	53,975	22,095	76,070	9,558					153,628	244,643	sum column
Ac. not in identified 5th fields	0	831	831	12,304					220,641	233,776	sum row
RIVER BASIN TOTAL	53,975	22,926	76,901	21,862	277,404	89,454	366,858	3,613	374,269	478,419	total above
UPPER WILLAMETTE*											
Marys Peak	8,133	666	8,799	326					6,715	15,840	
Tumtum	830	232	1,062	269					3,196	4,627	
Subtotal inside study area	8,963	898	9,861	595	6,176	1,726	7,902	0	9,911	20,367	sum column
Outside Study Area										1,177,975	difference
RIVER BASIN TOTAL										1,198,342	given

Land Ownership Acres for River Basins (4th field) and Watersheds (5th field)
for the Siuslaw Forestwide Assessment

RIVER BASINS and	Federal				Private**			Indian	Private and		
5th Field Watersheds	USFS	BLM	Total	State	Industry	Non-Ind.	Total	Lands	other**	Total	
ALSEA											
Alsea	37,691	2,177	39,868	205					15,715	55,788	
Alsea Frontal	0	4,818	4,818	0					9,940	14,758	
Beaver	10,244	56	10,300	158					11,138	21,596	
Berry	1,901	0	1,901	9					1,558	3,468	
Big/Rock/Cape	20,672	0	20,672	0					3,956	24,628	
Blodgett	7,929	41	7,970	60					5,776	13,806	
Drift (Alsea)	28,418	1,186	29,604	351					14,249	44,204	
Fall	3,355	5,789	9,144	4					10,120	19,268	
Five Rivers	33,395	0	33,395	0					5,651	39,046	
Lobster/Lobster_Cr	12,469	15,391	27,860	0					9,453	37,313	
Mercer	4,323	182	4,505	0					5,779	10,284	
North Fork Alsea	936	20,122	21,058	72					20,464	41,594	
Seal Rock	364	1	365	40					6,361	6,766	
South Fork Alsea	0	23,098	23,098	0					17,269	40,367	
Tenmile/Cummins	26,073	0	26,073	42					4,201	30,316	
Yachats	19,872	239	20,111	45					7,585	27,741	
Unlabeled 5th field	0	288	288	43					5,056	5,387	
RIVER BASIN TOTAL	207,642	73,388	281,030	1,029	82,298	69,115	151,413	0	154,271	436,330	sum column
										433,472	sum row
SIUSLAW											
Deadwood	27,039	5,514	32,553	1,224					6,484	40,261	
Esmo Whitt	0	13,839	13,839	964					11,903	26,706	
Knowles	0	308	308	631					2,697	3,636	
Indian	25,335	0	25,335	0					5,459	30,794	
Lower Lake (includes Lake)	149	15,871	16,020	4,165					12,889	33,074	
Lower Siuslaw	44,551	2,016	46,567	3,606					49,790	99,963	
Middle Siuslaw	0	29,037	29,037	572					32,350	61,959	
North Fork Siuslaw	31,605	83	31,688	0					9,256	40,944	
Upper Lake	0	14,462	14,462	637					16,463	31,562	
Upper Siuslaw	0	14,581	14,581	160					27,979	42,720	
Wildcat Creek	0	16,324	16,324	6,192					21,295	43,811	
Wolf Creek	0	15,468	15,468	1,327					21,095	37,890	
RIVER BASIN TOTAL	128,679	127,503	256,182	19,478	148,221	67,070	215,291	0	217,660	493,320	sum column

Land Ownership Acres for River Basins (4th field) and Watersheds (5th field)											
for the Siuslaw Forestwide Assessment											
RIVER BASINS and	Federal				Private**			Indian	Private and		
5th Field Watersheds	USFS	BLM	Total	State	Industry	Non-Ind.	Total	Lands	other**	Total	
										499,961	sum row
UMPQUA*											
Lower Umpqua	13,227	3,598	16,825	17,990					25,536	60,351	
North Fork Smith	25,146	3,545	28,691	334					14,866	43,891	
Smith	18,098	8,427	26,525	124					30,252	56,901	
West Fork Smith	800	10,146	10,946	0					6,399	17,345	
Subtotal inside study area	57,271	25,716	82,987	18,448	49,559	28,340	77,899	0	77,053	178,488	sum column
Outside study area										798,639	difference
RIVER BASIN TOTAL										977,127	given
SILTCOOS											
Cleawox/Carter	3,270	0	3,270	0					605	3,875	
Siltcoos	18,409	803	19,212	3,807					25,157	48,176	
Tahkenitch	7,559	358	7,917	2,135					17,271	27,323	
Threemile	633	0	633	0					1,316	1,949	
RIVER BASIN TOTAL	29,871	1,161	31,032	5,942	29,011	17,828	46,839	0	44,349	81,323	sum column
										83,813	sum row
COOS*											
Hauser	6,632	1,771	8,403	16					12,215	20,634	
Tenmile	2,123	0	2,123	23,615					29,557	56,296	
Umpqua Dunes	3,996	0	3,996	0					0	3,996	
Subtotal inside study area	12,751	1,771	14,522	23,631	17,193	24,929	42,122	0	41,772	79,925	sum column
Outside study area										379,196	difference
RIVER BASIN TOTAL										459,121	given
GRAND TOTAL for Study Area	609,913	305,085	914,998	315,638	756,078	391,597	1,147,675	10,332	1,168,846	2,405,106	sum column
										(study area total acres	
										for each river basin)	
										2,358,643	sum row

Appendix B.2

Forestwide Assessment Study Area		
List of Sixth Field Watersheds with their 5th and 4th field locations		
6th Field Watershed	5th Field Watershed	River Basin (4th Field)
AGENCY	YAMHILL	YAMHILL
ALDER/BUCK	THREE RIVERS	WILSON-TRASK-NESTUCCA
ALDER1	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
ALDER2	NORTH_FORK_ALSEA	ALSEA
ALPHA	DEADWOOD	SIUSLAW
ALSEA	ALSEA	ALSEA
ANDY	SANDLAKE	WILSON-TRASK-NESTUCCA
AUSTIN/MCKNIGHT	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA
BAILEY	MERCER	ALSEA
BALD MOUNTAIN FORK	NESTUCCA_RIVER	WILSON-TRASK-NESTUCCA
BARBER	LOWER SIUSLAW	SIUSLAW
BAYS	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
BAYVIEW	SEAL ROCK	ALSEA
BEAR CREEK	NESTUCCA_RIVER	WILSON-TRASK-NESTUCCA
BEAR/SKUNK	SILETZ	SILETZ-YAQUINA
BEAR1	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA
BEAR2	SALMON	SILETZ-YAQUINA
BEAR3	FIVE RIVERS	ALSEA
BEAR4	SILTCOOS	SILTCOOS
BEAVER	BEAVER	ALSEA
BERKSHIRE	LOWER SIUSLAW	SIUSLAW
BERRY	BERRY	ALSEA
BIBLE	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
BIG	BIG/ROCK/CAPE	ALSEA
BILLIE	NORTH FORK SIUSLAW	SIUSLAW
BLODGETT	BLODGETT	ALSEA
BOB	TENMILE/CUMMINS	ALSEA
BOULDER1	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
BOULDER2	DRIFT (ALSEA)	ALSEA
BUCK	DEADWOOD	SIUSLAW
BULL RUN	FALL	ALSEA
BURTON	WILLAMINA	YAMHILL
BUTLER	SMITH	UMPQUA
BUTTE/HAWKS	NESKOWIN	WILSON-TRASK-NESTUCCA
CAMP	LOBSTER	ALSEA
CANADA	WILLAMINA	YAMHILL
CANAL	ALSEA	ALSEA
CAPE	BIG/ROCK/CAPE	ALSEA
CASCADE	FIVE RIVERS	ALSEA
CATARACT	NORTH FORK SIUSLAW	SIUSLAW
CEDAR1	THREE RIVERS	WILSON-TRASK-NESTUCCA
CEDAR2	LOWER SIUSLAW	SIUSLAW
CHINA	BIG/ROCK/CAPE	ALSEA
CLARENCE	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
CLEAR	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
CLEAWOX	CLEAWOX/CARTER	SILTCOOS
CLIFF	NESKOWIN	WILSON-TRASK-NESTUCCA
COON	WEST FORK SMITH	UMPQUA
COUGAR	DRIFT (ALSEA)	ALSEA
COX ISLAND	LOWER SIUSLAW	SIUSLAW

Forestwide Assessment Study Area		
List of Sixth Field Watersheds with their 5th and 4th field locations		
6th Field Watershed	5th Field Watershed	River Basin (4th Field)
CRAB	FIVE RIVERS	ALSEA
CRAZY CREEK1	THREE RIVERS	WILSON-TRASK-NESTUCCA
CUMMINS	TENMILE/CUMMINS	ALSEA
DAHLIN	MERCER	ALSEA
DARKEY	ALSEA	ALSEA
DEER	SALMON	SILETZ-YAQUINA
DIGGER	ALSEA	ALSEA
DIVIDE/KARNOWSKY	LOWER SIUSLAW	SIUSLAW
DREW	NORTH FORK SIUSLAW	SIUSLAW
DRIFT	DRIFT (ALSEA)	ALSEA
EAD	YAMHILL	YAMHILL
EAST	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
EAST BEAVER	EAST BEAVER	WILSON-TRASK-NESTUCCA
ECHMAN	ALSEA	ALSEA
ECHO	LOWER UMPQUA	UMPQUA
ELK CREEK	NESTUCCA_RIVER	WILSON-TRASK-NESTUCCA
ELK1	FIVE RIVERS	ALSEA
ELK2	INDIAN	SIUSLAW
ELKHORN	BEAVER	ALSEA
ELMA	NORTH FORK SIUSLAW	SIUSLAW
ERICKSON	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
ESLICK	SMITH	UMPQUA
FAILOR	DEADWOOD	SIUSLAW
FALL	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA
FAN CREEK	NESTUCCA_RIVER	WILSON-TRASK-NESTUCCA
FARMER	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
FEAGLES	YAQUINA/BIGELK	SILETZ-YAQUINA
FIVEMILE	TAHKENITCH	SILTCOOS
FLORENCE	LOWER SIUSLAW	SIUSLAW
FOLAND	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
FRANKLIN	LOWER UMPQUA	UMPQUA
GEORGE	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
GOLD	DRIFT (ALSEA)	ALSEA
GOPHER	DRIFT (ALSEA)	ALSEA
GORDY/L. DRIFT	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
GRANT	YAQUINA/BIGELK	SILETZ-YAQUINA
GRASS	ALSEA	ALSEA
GREASY	MARYS PEAK	UPPER WILLAMETTE
GREEN CREEK	DEADWOOD	SIUSLAW
GREEN RIVER	FIVE RIVERS	ALSEA
GREENLEAF	LAKE	SIUSLAW
HADSALL	LOWER SIUSLAW	SIUSLAW
HAND	LOWER SIUSLAW	SIUSLAW
HARVEY	LOWER UMPQUA	UMPQUA
HATCHERY	ALSEA	ALSEA
HERMAN	INDIAN	SIUSLAW
HOFFMAN	LOWER SIUSLAW	SIUSLAW
HOMESTEAD	YAQUINA/BIGELK	SILETZ-YAQUINA
HOOD	LOWER SIUSLAW	SIUSLAW
HORN	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA

Forestwide Assessment Study Area		
List of Sixth Field Watersheds with their 5th and 4th field locations		
6th Field Watershed	5th Field Watershed	River Basin (4th Field)
HORSE	DRIFT (ALSEA)	ALSEA
JACKSON	SANDLAKE	WILSON-TRASK-NESTUCCA
JEWEL	SANDLAKE	WILSON-TRASK-NESTUCCA
JOHNSON	WEST FORK SMITH	UMPQUA
JOYCE	SMITH	UMPQUA
KENTUCKY	NORTH FORK SMITH	UMPQUA
KNOWLES	LOWER SIUSLAW	SIUSLAW
L. BEAVER CREEK	EAST BEAVER	WILSON-TRASK-NESTUCCA
L. BIG ELK	YAQUINA/BIGELK	SILETZ-YAQUINA
L. BUCK	FIVE RIVERS	ALSEA
L. FALL	FALL	ALSEA
L. FIDDLE	SILTCOOS	SILTCOOS
L. FIVE	FIVE RIVERS	ALSEA
L. FIVEMILE	TAHKENITCH	SILTCOOS
L. INDIAN	INDIAN	SIUSLAW
L. LITTLE NESTUCCA	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA
L. NESKOWIN	NESKOWIN	WILSON-TRASK-NESTUCCA
L. NESTUCCA RIVER	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
L. NORTH FORK SIUSLAW	NORTH FORK SIUSLAW	SIUSLAW
L. NORTH FORK SMITH	NORTH FORK SMITH	UMPQUA
L. SALMON RIVER	SALMON	SILETZ-YAQUINA
L. SCHOONER	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
L. SILETZ RIVER	SILETZ	SILETZ-YAQUINA
L. SWEET	LOWER SIUSLAW	SIUSLAW
L. THREE RIVERS	THREE RIVERS	WILSON-TRASK-NESTUCCA
L. WASSEN	SMITH	UMPQUA
L. YACHATS	YACHATS	ALSEA
LAKE CREEK	LOWER SIUSLAW	SIUSLAW
LAWSON	LOWER SIUSLAW	SIUSLAW
LENTLE	TAHKENITCH	SILTCOOS
LIMESTONE	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
LINCOLN CITY/DEVILS LAKE	DEVILS LAKE	SILETZ-YAQUINA
LINT	BLODGETT	ALSEA
LITTLE	BLODGETT	ALSEA
LITTLE ALPHA	DEADWOOD	SIUSLAW
LOBSTER	LOBSTER	ALSEA
LONG	INDIAN	SIUSLAW
LOUIE/BAXTER	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA
LYNDON	DRIFT (ALSEA)	ALSEA
M. BIG ELK	NORTH_FORK_ALSEA	SILETZ-YAQUINA
M. BIG ELK	YAQUINA/BIGELK	SILETZ-YAQUINA
M. DRIFT	DRIFT (ALSEA)	ALSEA
M. FIVE	FIVE RIVERS	ALSEA
M. NESTUCCA RIVER	EAST BEAVER	WILSON-TRASK-NESTUCCA
M. NESTUCCA RIVER	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
M. SALMON RIVER	SALMON	SILETZ-YAQUINA
MAPLE	SILTCOOS	SILTCOOS
MARIA	INDIAN	SIUSLAW
MARYS ROCK	MARYS PEAK	UPPER WILLAMETTE
MCGUIRE RESERVOIR	NESTUCCA_RIVER	WILSON-TRASK-NESTUCCA

Forestwide Assessment Study Area		
List of Sixth Field Watersheds with their 5th and 4th field locations		
6th Field Watershed	5th Field Watershed	River Basin (4th Field)
MCLEOD	NORTH FORK SIUSLAW	SIUSLAW
MILES	SANDLAKE	WILSON-TRASK-NESTUCCA
MILL	TOLEDO	SILETZ-YAQUINA
MILLS	TILLAMOOK	WILSON-TRASK-NESTUCCA
MISERY	DEADWOOD	SIUSLAW
MOON	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
MORRIS	NORTH FORK SIUSLAW	SIUSLAW
MUNSON	TILLAMOOK	WILSON-TRASK-NESTUCCA
MURPHY	SMITH	UMPQUA
NESTUCCA BAY	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
NIAGARA	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
NORTH	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
NORTH BEAR	DEADWOOD	SIUSLAW
NORTH BEAVER1	EAST BEAVER	WILSON-TRASK-NESTUCCA
NORTH BEAVER2	BEAVER	ALSEA
NORTH FORK SCHOONER	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
NORTH INDIAN	INDIAN	SIUSLAW
NORTH PANTHER	DEADWOOD	SIUSLAW
NORTH SPIT	SEAL ROCK	ALSEA
NORTH YACHATS	YACHATS	ALSEA
OTTER	SMITH	UMPQUA
PANTHER1	SALMON	SILETZ-YAQUINA
PANTHER2	DEADWOOD	SIUSLAW
PEACH	NORTH FORK SMITH	UMPQUA
PERPETUA	TENMILE/CUMMINS	ALSEA
PIERCE/KITTEN	YAMHILL	YAMHILL
POLLARD	THREE RIVERS	WILSON-TRASK-NESTUCCA
PORTER	NORTH FORK SIUSLAW	SIUSLAW
POWDER	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
PREACHER	LOBSTER	ALSEA
QUARRY	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
RENEKE	SANDLAKE	WILSON-TRASK-NESTUCCA
RISLEY	ALSEA	ALSEA
ROCK1	DEVILS LAKE	SILETZ-YAQUINA
ROCK2	BIG/ROCK/CAPE	ALSEA
ROCK3	DEADWOOD	SIUSLAW
ROGERS	INDIAN	SIUSLAW
ROVER CAPE	SANDLAKE	WILSON-TRASK-NESTUCCA
RUSSEL	NORTH FORK SIUSLAW	SIUSLAW
SALMON	SALMON	SILETZ-YAQUINA
SAM	NORTH FORK SIUSLAW	SIUSLAW
SAMPSON	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
SAND	SANDLAKE	WILSON-TRASK-NESTUCCA
SAND LAKE	SANDLAKE	WILSON-TRASK-NESTUCCA
SAND LAKE SPIT	SANDLAKE	WILSON-TRASK-NESTUCCA
SCHOOL	YACHATS	ALSEA
SCOTT	ALSEA	ALSEA
SEAL ROCK	SEAL ROCK	ALSEA
SHEEP	NORTH FORK SMITH	SIUSLAW
SHEEP	NORTH FORK SMITH	UMPQUA

Forestwide Assessment Study Area		
List of Sixth Field Watersheds with their 5th and 4th field locations		
6th Field Watershed	5th Field Watershed	River Basin (4th Field)
SHULTZ	SILTCOOS	SILTCOOS
SIBOCO	LOWER SIUSLAW	SIUSLAW
SILETZ	SILETZ	SILETZ-YAQUINA
SKUNK	FALL	ALSEA
SLICKROCK1	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
SLICKROCK1	NESTUCCA_RIVER	WILSON-TRASK-NESTUCCA
SLICKROCK2	SALMON	SILETZ-YAQUINA
SLICKROCK2	UPPER_SILETZ	SILETZ-YAQUINA
SLIVER	LOBSTER	ALSEA
SMITH	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
SMITH FALLS	WEST FORK SMITH	UMPQUA
SOURGRASS	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA
SOUTH FORK LITTLE NESTUCCA	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA
SOUTH FORK SCHOONER	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
SPENCER	WEST FORK SMITH	UMPQUA
SPOUT	YAQUINA/BIGELK	SILETZ-YAQUINA
SQUAW	TENMILE/CUMMINS	ALSEA
STEELIE	NORTH FORK SMITH	UMPQUA
STILLWELL/HIACK	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA
STUMP	YACHATS	ALSEA
SUDAN	ALSEA	ALSEA
SULPHUR	NORTH FORK SMITH	UMPQUA
TABLE	DRIFT (ALSEA)	ALSEA
TAHKENITCH	TAHKENITCH	SILTCOOS
TENMILE	TENMILE/CUMMINS	ALSEA
TESTAMENT	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
THOMPSON	LOWER SIUSLAW	SIUSLAW
THREEMILE	THREEMILE	SILTCOOS
TIDEWATER	ALSEA	ALSEA
TIGER	EAST BEAVER	WILSON-TRASK-NESTUCCA
TILDEN	LOWER SIUSLAW	SIUSLAW
TONY	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
TREAT/ALDER BROOK	SALMON	SILETZ-YAQUINA
TROUT1	SALMON	SILETZ-YAQUINA
TROUT2	DRIFT (ALSEA)	ALSEA
U. ALSEA	ALSEA	ALSEA
U. BIG	BIG/ROCK/CAPE	ALSEA
U. BIG ELK	YAQUINA/BIGELK	SILETZ-YAQUINA
U. BUCK	FIVE RIVERS	ALSEA
U. CEDAR	SILETZ	SILETZ-YAQUINA
U. DEADWOOD	DEADWOOD	SIUSLAW
U. DIVIDE	LOWER SIUSLAW	SIUSLAW
U. DRIFT1	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
U. DRIFT2	DRIFT (ALSEA)	ALSEA
U. FIDDLE	SILTCOOS	SILTCOOS
U. FIVE	FIVE RIVERS	ALSEA
U. GREENLEAF	LAKE	SIUSLAW
U. INDIAN	INDIAN	SIUSLAW
U. KNOWLES	LOWER SIUSLAW	SIUSLAW
U. LITTLE NESTUCCA RIVER	LITTLE NESTUCCA	WILSON-TRASK-NESTUCCA

Forestwide Assessment Study Area		
List of Sixth Field Watersheds with their 5th and 4th field locations		
6th Field Watershed	5th Field Watershed	River Basin (4th Field)
U. LOBSTER	LOBSTER	ALSEA
U. MALKEY	TUMTUM	UPPER WILLAMETTE
U. NESKOWIN	NESKOWIN	WILSON-TRASK-NESTUCCA
U. NESTUCCA RIVER	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
U. PARKER	NORTH_FORK_ALSEA	ALSEA
U. SALMON RIVER	SALMON	SILETZ-YAQUINA
U. SHOT POUCH	TUMTUM	UPPER WILLAMETTE
U. TENMILE	TENMILE/CUMMINS	ALSEA
U. THREE RIVERS	THREE RIVERS	WILSON-TRASK-NESTUCCA
U. TILLAMOOK RIVER	TILLAMOOK	WILSON-TRASK-NESTUCCA
U. WASSEN	SMITH	UMPQUA
U. YACHATS	YACHATS	ALSEA
UNCLE	NORTH FORK SIUSLAW	SIUSLAW
VINGIE	BLODGETT	ALSEA
WALDPORT	BLODGETT	ALSEA
WALKER	LOWER SIUSLAW	SIUSLAW
WALKER CREEK	NESTUCCA_RIVER	WILSON-TRASK-NESTUCCA
WASSEN	SMITH	UMPQUA
WASSEN LAKE	SMITH	UMPQUA
WEISS	SMITH	UMPQUA
WEST	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
WEST BRANCH	NORTH FORK SMITH	UMPQUA
WEST DEADWOOD	DEADWOOD	SIUSLAW
WEST SCOTT	ALSEA	ALSEA
WHEELOCK	DRIFT (ALSEA)	ALSEA
WIDOW	SALMON	SILETZ-YAQUINA
WILDCAT	SCHOONER/DRIFT (SILETZ)	SILETZ-YAQUINA
WILHELM	NORTH FORK SIUSLAW	SIUSLAW
WOAHINK	SILTCOOS	SILTCOOS
WOLFE	LOWER NESTUCCA	WILSON-TRASK-NESTUCCA
WOODS	MARYS PEAK	UPPER WILLAMETTE
YACHATS	YACHATS	ALSEA
YAQUINA	TOLEDO	SILETZ-YAQUINA
YEW	NORTH_FORK_ALSEA	ALSEA
YONCALLA	YAMHILL	YAMHILL

Appendix B.3 Administratively Withdrawn Lands (BLM)

In Salem District, BLM:

Elk Creek, ACEC
Grass Mtn., ACEC/RNA
High Pk.-Moon Cr., ACEC/RNA
Little Grass Mtn., ACEC, ONA
Little Sink, ACEC/RNA
Marys Peak, ACEC/ONA
Nestucca River, ACEC
Saddleback Mtn., ACEC/RNA
Sheridan Peak, ACEC
Valley-of-the-Giants, ACEC/ONA
Walker Flat, ACEC

In Eugene District, BLM:

Lake Creek Falls, ACEC/ONA
Heceta Sand Dunes, ACEC/ONA

ACEC = Area of Critical Environmental Concern
RNA = Research Natural Area
ONA = Outstanding Natural Area

Appendix C.1 LANDTYPE ASSOCIATIONS

The Study Area is divided into several components called Landtype Associations (LTAs) that have distinct physical and climatic characteristics. Each Landtype Association (LTA) is composed of various Soil Resource Inventory Mapping Units, or Landtypes that were described in the Siuslaw National Forest Soil Resource Inventory. The landtypes that make up each LTA are generally similar in geology, landform, soils, and hydrologic response. It is those similarities that guided the delineation of each LTA.

Though a wide spectrum of conditions exist between and across LTAs, four distinct physiographic categories and five climatic/productivity zones can be described. These general categories are useful for making Province-wide comparisons and analyses of 4th field watersheds. Detailed descriptions of each LTA are most useful for comparing physical conditions of 5th field watersheds. Each category of LTAs, as well as each LTA is categorized according to predominant landform, soil characteristics, erosion processes, general biologic productivity, and hydrology.

PHYSIOGRAPHIC CATEGORIES FOR LANDTYPE ASSOCIATIONS

I) STEEP, HIGHLY DISSECTED BEDROCK DOMINATED RIDGE SYSTEMS.

Characteristics: Hard, impermeable to slowly permeable sandstone or basalt bedrock; steep, short, angular, even faceted slopes; V-shaped ridge crests and stream channel bottoms; one to six foot deep, low cohesion, gravelly loam and clay loam soils; low to moderate water holding capacity (droughty mid to upper side slopes are common); high ratio of intermittent to perennial streams (perennial system typically begins at the lower end of second order or beginning of third order streams - often far below the ridge crest). Dominant hillslope erosion process is debris avalanche occasionally causing debris torrents where stream angles are obtuse.

LTAs/descriptions: 2P, 2PSR1, 2PSR2, 3B, 3C, 3C1, 3E1, 3F, 3F1, 3M, 3V, 4F, FG.

2P, 2PSR1, 2PSR2, 3V - Soils range from moderately deep to very deep where local areas of soft volcanic sedimentary rock occur. Steepest, most unstable soils/slopes are on upper portions of spur ridges that extend from long, broad backbone ridge systems. Debris slides are the primary hillslope erosion processes. Soils range from gravelly loams to to clay where softer bedrock occurs. By central Coast Range standards, soils are moderately productive and have moderate to very high water holding capacities. Soil moisture does not limit plant growth or survival.

3B - Soils range from shallow on upper ridge crests to moderately deep in concave slope positions. Scattered ancient earthflow terrain occurs often in lower south west facing slope positions where soils are very deep. Steepest, most unstable slopes are on middle to upper portions of narrow spur ridge systems. Debris slides and debris

torrents are the primary hillslope erosion processes. Soils are usually gravelly loam to clay loam. Compared to other central Coast Range soils, these soils are moderately productive to very productive and have high waterholding capacities. Soil moisture rarely limits plant growth or survival.

3C - Soils are moderately deep on ridge systems to very deep where few scattered areas of ancient earthflows occur. Steepest, most unstable slopes are on upper portions of long ridge systems. Debris slides are the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 3C are moderately productive to very productive. They have moderate water holding capacities. Soil moisture limits plant growth or survival on steep south slopes less than 2 years in 20.

3C1 - Soils are moderately deep throughout most of the areas underlain by bedrock. River terraces and few ancient earthflows occur have deep loam to clay loam soils. Steepest, most unstable slopes are on upper portions of long ridge systems. Debris slides are the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to clay where deeper soils occur. By central Coast range standards, soils are moderately productive to very productive. Soil moisture limits plant growth or survival on steep south slopes less than 2 years in 20.

3E1 - Soils are moderately deep on ridge systems to very deep where few scattered ancient earthflows occur. Steepest, most unstable slopes are on spur ridges below the gently rounded broad ridge systems that dominate the landscape. Debris slides are the primary hillslope erosion processes. Local deep seated landslides occur where earthflow terrain is incised by streams. Soils range from gravelly loams on steep slopes to clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 3E1 are moderately productive to very productive. They have moderate to high water holding capacities. Soil moisture rarely limits plant growth or survival.

3F & 3F1 - These LTAs transition the extremely steep, and extremely dissected terrain south of the Siuslaw River to the steep, moderately dissected backbone ridge systems to the north. Soils are moderately deep on main ridge systems to shallow on spur ridge crests. There are very deep soils where scattered areas of ancient earthflows occur. Steepest, most unstable slopes are on middle to upper portions of the spur ridge systems. Debris slides and debris torrents are the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to gravelly clay loams where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 3C are moderately productive. They have low to moderate water holding capacities. Soil moisture frequently limits plant growth or survival on all but north slopes.

3M, 3V - Soils are deep on ridge systems to very deep in concave middle and lower slope positions. Steepest, most unstable slopes are

on middle to upper portions of spur ridge systems. Backbone ridge crests are generally broad, and gently sloping. Debris slides and debris torrents are the primary hillslope erosion processes. Soils range from gravelly clay loams on steep slopes to clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 3M, and 3V are very productive. They have very high water holding capacities. Soil moisture probably never limits plant growth or survival.

4F & 4G - Soils are very shallow to moderately deep on flat to convex ridge slopes and moderately deep to deep in concave slope positions. Steepest, most unstable slopes are on upper portions of short, even faceted ridge systems. Debris slides and debris torrents are the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to gravelly clay loams where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTAs 4f and 4g are moderately productive. They have low water holding capacities. Soil moisture limits plant growth or survival on all but north slopes in most summers.

II) GENTLE TO STEEP BEDROCK DOMINATED RIDGES AND VALLEYS.

Characteristics: hard, highly fractured moderately permeable to impermeable sandstone or basalt bedrock; gentle to moderately steep, slightly to moderately dissected, flat to convex slopes; rounded ridge crests and U-shaped valleys intermixed with steep, long, concave slopes and steep V-shaped stream channels; three to greater than six foot deep cohesive, gravely clay loam soils; moderate water holding capacity; intermediate ratio of intermittent to perennial streams (perennial system typically begins in second order streams)

LTAs/descriptions: 2M, 2M1, 3A, 3D, 3E, 3K, 4A, 4R

2M & 2M1 - Soils are moderately deep on ridge systems to very deep on lower concave side slopes. Few steep unstable slopes are on spur ridges below the gently rounded broad ridge systems that dominate the landscape. Though infrequent, debris slides are the primary hillslope erosion processes. Soils range from gravelly clay loams on steep slopes to gravelly clay and clay loams where deeper soils occur. Compared to other soils in the central Coast Range, soils in these LTAs are very highly productive. They have moderate to high water holding capacities. Soil moisture probably never limits plant growth or survival.

3A - Soils are deep on ridge systems to very deep where scattered ancient earthflows occur. Steepest, most unstable slopes are on short spur ridges. Though infrequent, debris slides are the primary hillslope erosion processes. Local deep seated landslides may occur where earthflow terrain is incised by streams. Soils range from gravelly loams on steep slopes to clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 3A is moderately productive to very productive. They have moderate water

holding capacities. Soil moisture rarely limits plant growth or survival on steep south slopes.

3D - Soils are moderately deep on ridge systems to deep on lower side slopes and where scattered ancient earthflows occur. Steepest, most unstable slopes are on spur ridges below the gently rounded broad ridge systems that dominate the landscape. Though infrequent, debris slides are the primary hillslope erosion processes. Local deep seated landslides occasionally occur where earthflow terrain is incised by streams. Soils range from gravelly loams on steep slopes to clay loams where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 3D are moderately productive to productive. They have moderate to high water holding capacities. Soil moisture rarely limits plant growth or survival.

3E, 3K - Soils are moderately deep on spur ridge systems to very deep on broad, backbone ridges. Steepest, most unstable slopes are on spur ridges below the gently rounded broad ridge systems that dominate the landscape. Though infrequent, debris slides are the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 3E, and 3K are moderately productive to productive. They have moderate water holding capacities. Soil moisture may limit plant growth or survival on steep south slopes.

4A - Soils are moderately deep to deep on ridge systems to very deep where scattered ancient earthflows occur. Steepest, most unstable slopes are on upper sideslopes and ridges. Though infrequent, debris slides are the primary hillslope erosion processes. Local deep seated landslides occasionally occur where earthflow terrain is incised by streams. Soils range from gravelly clay loams on steep slopes to clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 4A are moderately productive to very productive. They have moderate to high water holding capacities. Soil moisture rarely limits plant growth or survival.

4R - Soils are moderately deep on spur ridge systems to very deep on dominant broad ridge crests and toeslopes. Steepest, most unstable slopes are on spur ridges below the gently rounded broad ridges. Debris slides, though infrequent, are the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to clay loams where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 4R are moderately productive to productive. They have moderate water holding capacities. Soil moisture may limit plant growth or survival on steep south slopes.

III) HUMMOCKY, MODERATE TO HIGH RELIEF, DEEPLY INCISED HILLS AND VALLEYS.

Characteristics: Soft, highly fractured, very permeable volcanic breccia, siltstone, and finely bedded volcanic sedimentary bedrock; lower elevations are characterized by uneven, hummocky convex slopes, very deep unconsolidated ancient earthflow debris that form deep, high cohesion, clay/clay loam soils that are deeply incised by streams;

very high waterholding capacity; very low ratio of intermittent to perennial streams (perennial system often begin in first order streams near ridge crest). Higher elevations are often dominated by broad, broken to continuous bedrock controlled ridge systems.

LTAs/descriptions: 2B, 2C, 2PSR3, 2T, 2T1, 3Q, 3S, 3T

2B, 2C, 3S - Soils are deep to very deep on hummocky, incised ancient earthflows and moderately deep on remnant bedrock ridge systems. Hummocky terrain dominates on about half of the LTA. Unstable soils are on lower midslopes above incised channels and on upper midslopes that are earthflow escarpment faces. Slumps and small earthflows are the primary hillslope erosion processes. Soils range from gravelly clay loams on steep slopes to gravelly clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 2B are very productive. They have high to very high water holding capacities. Soil moisture is limiting only on upper south facing bedrock sideslopes.

2PSR3, 3Q - Soils are deep to very deep on hummocky, incised ancient earthflows and moderately deep on remnant bedrock ridge systems. Hummocky terraine occurs on little more than one third of the LTA. Unstable soils are on lower midslopes above incised channels and on upper midslopes that are earthflow escarpment faces. Unstable soils also may occur on steep headwalls on the upper backbone ridge systems that dominate the higher elevations. Slumps and small earthflows are the primary hillslope erosion processes at lower elevations. Debris slides occur infrequently at higher elevations. Soils range from gravelly clay loams on steep slopes to gravelly clay where soils are very deep. Compared to other soils in the central Coast Range, soils in LTA 2PSR3 are moderately productive. They have high to very high water holding capacities. Soil moisture is rarely limiting.

2T, 2T1 Soils are deep to very deep on hummocky, incised ancient earthflows and moderately deep on low, rounded remnant bedrock ridge systems. Hummocky terrain occurs on about one half of the LTA. Unstable soils are on lower slopes above incised channels. Slumps are the primary hillslope erosion processes. Soils range from gravelly clay loams to gravelly clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 2T, and 2T1 are moderately productive. They have high to very high water holding capacities. Soil moisture is rarely limiting.

3T - Soils are deep to very deep on hummocky, incised ancient earthflows and moderately deep on bedrock ridge systems. Hummocky terrain occurs on about one-fourth of the LTA. Unstable soils are on lower midslopes above incised channels and on upper midslopes that are ancient earthflow escarpment faces. Although earthflow terrain is the minor landform, slumps and small earthflows are the primary hillslope erosion processes. Soils range from gravelly clay loams on steep slopes to gravelly clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTA 3T are very productive. They have moderately high to high water holding

capacities. Soil moisture is limiting only on upper south facing bedrock sideslopes.

IV) ROLLING, LOW RELIEF, GENTLE TO MODERATELY SLOPING HILLS AND VALLEYS.

Characteristics: very soft, highly fractured, highly permeable bedrock; gentle, convex slopes with occasional moderately steep, concave slopes below higher ridge systems composed of hard, igneous intrusive and volcanic rocks; greater than 6 foot deep cohesive, clay to clay loam soils; very high water holding capacity; widely dispersed stream system with very low ratio of intermittent to perennial streams (perennial system typically begin in first and second order streams.

LTAs/descriptions: 2H, 2N, 2P2, 2Q, 2S, 2Z, 2Y, 2Z, 3H, 3L, 3W, 3Z, 4J, 4X

2N, 2P2 - Soils are deep to very deep on hummocky, gently rolling valley fill and scattered areas of ancient earthflow terrain. Soils are moderately deep to deep on bedrock ridge systems at the higher elevations. Unstable soils are not common. They may occur on lower midslopes above incised channels and on upper midslopes that are ancient escarpment faces. Although earthflow terrain is not common, slumps and small earthflows are the primary hillslope erosion processes. Soils range from gravelly clay loams on steep slopes to gravelly clay where deeper soils occur. Compared to other soils in the central Coast Range, soils in LTAs 23N and 2P2 are very productive. They have high to very high water holding capacities. Soil moisture probably never limits plant growth.

2Q, - Soils are moderately deep to deep on moderately steep hills and narrow valley bottoms. Soils are deep in lower slopes and valley bottoms to moderately deep on bedrock ridge systems at the higher elevations. Unstable soils are not common. They may occur on lower midslopes above incised channels and occasionally on upper convex sideslopes. Although earthflow terrain is not common, slumps and small earthflows are the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to gravelly clay loams on lower slope positions. Compared to other soils in the central Coast Range, soils in LTAs 2Q and 2T1 are very productive. They have moderately high to high water holding capacities. Soil moisture rarely limits plant growth.

2S, 2H, 3H, 3W - Soils are moderately deep to deep on gently rolling gentle to moderately steep hills and broad valleys adjacent to the Willamette River Valley. Soils are moderately deep in lower slopes and valley bottoms to moderately deep on bedrock ridge systems at the higher elevations. Unstable soils are not common, but may occur on lower midslopes above incised channels and on upper convex sideslopes. Earthflow terrain is not common. Slumps and fluvial channel erosion are the primary hillslope erosion processes. Soils range from gravelly clay loams on steeper slopes to gravelly clays on lower slope positions. Compared to other soils in the central Coast Range, soils in LTAs 2S, 2H, 3H and 3W are moderately productive. They have moderately high to high water holding capacities. Soil

moisture limits plant growth on south facing upper sideslopes most years.

2Z, 2Y, 3Z, 4X - Soils are deep to very deep on low relief, gently rolling hills and wide valleys. LTA 4X is dominated by open sand, deflation plains and vegetated sand dunes. Soils are deep in lower slopes and valley bottoms to moderately deep on bedrock ridge systems at the higher elevations. Unstable soils are not common. They may occur on lower midslopes above incised channels. Although ancient earthflow terrain is common, slumps and small earthflows are uncommon. Fluvial erosion in channels is the primary hillslope erosion processes. Wind erosion is extensive on open sand areas. Soils range from clay loams to gravelly clay loams to sandy loams. Compared to other soils in the central Coast Range, soils in LTAs 2Z and 3Z are very productive. LTA 4X is moderately productive where soil water is sufficient to allow plant growth. Water holding capacities are high in all LTAs. Soil moisture probably never limits plant growth except during dry summers in the eastern portion of LTA 2Y, and on areas of open sand and high relief in LTA 4X.

3L - Soils are deep to very deep on gently rolling hills and broad, undulating valleys. Soils are moderately deep on ridges to very deep on valley bottoms. Unstable soils are not common. They may occur on lower midslopes above incised channels and rarely on upper convex sideslopes. Fluvial erosion in channels is the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to gravelly clay loams on lower slope and valley positions. Compared to other soils in the central Coast Range, soils in LTA 3L is moderately productive. They have moderately high water holding capacities. Soil moisture may limit plant growth during dry summers, and in all summers on south slopes.

4J - Soils are moderately deep to deep on short, steep, low relief densely dissected hills and narrow valley bottoms. Soils are deep in lower slopes and valley bottoms to moderately deep on bedrock ridge systems. Unstable soils may occur on lower midslopes above incised channels and on upper convex sideslopes. Earthflow terrain is not common. Fluvial erosion and small debris flows are the primary hillslope erosion processes. Soils range from gravelly loams on steep slopes to gravelly clay loams on lower slope positions. Compared to other soils in the central Coast Range, soils in LTA 4J is moderately productive. They have moderately high holding capacities. Soil moisture is limiting on south slopes most years.

LANDTYPE ASSOCIATIONS IN SOIL MOISTURE/CLIMATE ZONES

1) Coastal Fog Zone

LTAs - 2M, 2M1, 2N, 2Q, 2P2, 2T*, 2Z, 3A, 3M, 3T*, 3Z, 4A, 4X

* - 2T and 3T extend across Coastal and Coast Crest climatic sub-categories.

2) Northern Interior Zone

LTAs - 2B, 2P, 2PSR1, 2C, 2T*

* - 2T extends across Coastal and Coast Crest climatic sub-categories.

3) Central Interior Zone

LTAs - 2PSR2, 2PSR3, 2T1, 3A, 3B, 3C, 3C1, 3C2, 3D, 3E, 3E1, 3K, 3L, 3Q, 3T*, 3V.

* - 3T extends across Coastal and Coast Crest climatic sub-categories.

4) Southern Interior Zone

LTAs - 3F, 3F1, 4F, 4G, 4R

* - 2T and 3T extend across Coastal and Coast Crest climatic sub-categories.

5) Valley Margin Zone

LTAs - 2H, 2S, 2Y, 3H, 3S, 3W, 4J

Appendix C.2

Soil Moisture Zones, Fire Blocks and LTAs by 5th Field Watersheds			
RIVER BASINS and	Soil Moisture	Predominant	Predom. LTAs
5th Field Watersheds	Zone	Fire Blocks	
WILSON-TRASK-NESTUCCA			
East Beaver	West - F, East - CN	1,2	2P, 2Z
Kilchis River	CN	2	2P
Little Nestucca	West - F, East - V	1,3,4	2T, 2Q
Lower Nestucca	West-F, East-CN	1,2,3	2C, 2N
Lower NF Trask River	CN	2	2PSR1
Lower Trask River	CN	2	2P
Neskowin	F	1	2M
Nestucca River	CN	3	2C
Sand Lake	F, East-CN	1	
Three Rivers	West-F, CN	1,3	2B
Tillamook	F, East-CN	1,2	2Z, 2P
Upper MF NF Trask	CN, East-V	2	2PSR1
Wilson River	CN	2	2P
YAMHILL*			
Willamina	CN	3	2T
Yamhill	CN	3	2T
SILETZ-YAQUINA			
Big Elk	CC	5	3V
Devils Lake	F	1	2Z, 2P2
Rock	CC	5	3V
Salmon	West-F, East-CC	1,5	2P2, 2T1
Schooner/Drift (Siletz)	West-F, CC	1,5	2PSR2, 2T1
Siletz	West-F, East-CC	1,5	2PSR2, 3Z
Toledo	CC	5	3D
Upper Siletz	CC	5	2T1, 2PSR2
Yaquina/Big Elk	CC	5,6	3V, 3E
UPPER WILLAMETTE*			
Marys Peak	CC	6,7	3Q, 3S
Tumtum	CC	5,7	3Q, 3W, 3S
* – only a portion of the river basin is in the FWA study area			

Soil Moisture Zones, Fire Blocks and LTAs by 5th Field Watersheds			
RIVER BASINS and 5th Field Watersheds	Soil Moisture Zone	Predominant Fire Blocks	Predom. LTAs
ALSEA			
Alsea	CC	5,6	3C1, 3C, 3D, 3E
Alsea Frontal	CC	7	
Beaver	West-F, East-CC	1,5	3D, 3Z
Berry	F	1	3T, 3Z
Big/Rock/Cape	F, East-CC	1,6	3T, 3M
Blodgett	F	1	3Z
Drift (Alsea)	CC	5,6	3D, 3E1
Fall	CC	6	3E
Five Rivers	CC	6	3C, 3C1
Lobster/Lobster_Cr	CC, South-CS	6,7,8	3C, 3L, 3F
Mercer	West-F, East-CC	1,6	3A, 3Z
North Fork Alsea	CC	6,7	3Q, 3H, 3E
Seal Rock	F	1	3Z
South Fork Alsea	CC, CS	7,8	3L, 3H, 3F
Tenmile/Cummins	West-F, East-CC	1,6	3M, 3T
Yachats	West-F, East-CC	1,6	3C
Unlabed 5th field	F	1	
SIUSLAW			
Deadwood	West-CC, East-CS	6,8	3C, 3F
Esmo Whitt	CS, East-V	8,4	4F, 4G
Knowles	CS	8	4F, 3F
Indian	CC	6	3B, 3C
Lower Lake (includes Lake)	CS	8	3F
Lower Siuslaw	CS	8	3F, 4F
Middle Siuslaw	V	4	
North Fork Siuslaw	CC	6	3B, 3A
Upper Lake	CS	8	3F
Upper Siuslaw	V	4	
Wildcat Creek	North-CS, South-V	8,4	3F, 4J
Wolf Creek	V	4	4J
UMPQUA*			
Lower Umpqua	F, CS	1,8	4G, 4A
North Fork Smith	CS	8	4G, 4R
Smith	CS	8	4G, 4F
West Fork Smith	CS	8	4G
SILTCOOS			
Cleawox/Carter	F	1	4X
Siltcoos	West-F, East-CS	1,8	4F, 4A, 4X
Tahkenitch	F, East-CS	1,8	4F, 4A, 4X
Threemile	F	1	4A
COOS*			
Hauser			
Tenmile			
Umpqua Dunes			4X

Appendix C.3 An Overview of Plant Association Groups of the Siuslaw National Forest

Twenty-three Plant Associations (PAs) have been identified on the Hebo, Waldport, Alsea, and Mapleton Districts of the Siuslaw National Forest (Hemstrom and Logan, 1986). These twenty-three associations are named for plant communities that will dominate a site given hypothetical climax conditions. A combination of unique environmental conditions will often accompany a particular PA. Information describing these conditions can be obtained in formats such as digital elevation models. Such data can provide a framework for 'modeling' PAs, i.e. using a geographic information system (GIS) to predict the PA at a given location, based on known environmental conditions such as elevation, topographic moisture, and other variables. Frequently, however, different PAs will occur even though the environmental conditions appear similar at the scale of the data available in the GIS. Thus, the PAs must be reclassified into groups that can be accurately distinguished within the GIS. Plant Association Groups (PAGs) are the result.

There are eleven PAGs that cover the Siuslaw. Like PAs, PAGs are either of the Picea sitchensis (Sitka spruce) or Tsuga heterophylla (western hemlock) series. Within these series, PAGs are described by variables such as characteristic soil moisture, depth and composition, slope, slope position, aspect, and elevation, precipitation, and temperature. Table 1 lists the eleven PAGs, ordered from wetter to drier types, and the PAs that comprise each PAG. (see Hemstrom and Logan, 1986 for descriptions of taxa abbreviations). Note also that PAG names listed below correspond to Forest Wide Assessment Map # C-5: "Plant Association Groups".

Table 1. Plant association groups

Plant Assoc. Group	Plant Associations
a.) Picea sitchensis Series:	
Devil's Club (POP)	PISI/OPHO
Salmonberry (PRU)	PISI/RUSP
Oxalis, Swordfern (PPO)	PISI/OXOR, PISI/POMU
Salmonberry, Salal (PRG)	PISI/RUSP-GASH
Huckleberry (PMV)	PISI/MEFE-VAPA
Salal (PGA)	PISI/GASH
b.) Tsuga heterophylla Series:	
Salmonberry, Devil's Club(TRU)	TSHE/OPHO, TSHE/RUSP, TSHE/RUSP-ACCI
Oxalis, Swordfern (TPO)	TSHE/OXOR, TSHE/POMU, TSHE/ACCI-POMU
Salmonberry, Salal (TRG)	TSHE/RUSP-GASH
Salal (TGA)	TSHE/BENE, TSHE/BENE-GASH, TSHE/GASH, TSHE/ACCI-GASH
Rhododendron (TRH)	TSHE/RHMA-BENE, TSHE/RHMA-VAOV2, TSHE/RHMA-GASH, TSHE/RHMA-POMU, TSHE/VAOV2

Brief Descriptions of Plant Association Group Characteristics

a. Picea sitchensis Series:

Devil's Club (POP)--swampy, northern
Very moist soils, poorly drained, even swampy. Strong maritime climatic influences. More common in northern regions of the Siuslaw National Forest.

Salmonberry (PRU)--wet, but well drained sites
Abundant soil moisture, but well drained. Strong maritime climatic influences. Tends toward more northern regions, relatively gentle topography.

Oxalis, Swordfern (PPO)--mesic, deep soils, northern
Moist, but well drained soils with high organic content, gentle topography. More common in northern regions of the Siuslaw, and on north facing aspects.

Salmonberry, Salal (PRG)--mesic/well-drained, coastal, ridgetop
Thin well-drained soils on ridges/topographic rises near the coast. Drier than PRU, but not as dry as PGA.

Huckleberry (PMV)--moist transition, eastern edge of PISI zone
Relatively dry soils, gentle topography, lower to middle slopes, occurs often at the transition zone between PISI and TSHE types.

Salal (PGA)--well-drained, southwest facing
Well drained shallow soils, often southwest facing, relatively uniform temperatures, occurs in central/western region of the Siuslaw.

b. Tsuga heterophylla Series:

Salmonberry, Devil's Club (TRU)--wet, warm, inland
Abundant soil moisture, usually occurs at mid to lower slope positions, including riparian. Very moist soils, deep and rich in organic content. Commonly encountered on warm inland sites on the Alsea District.

Oxalis (TPO)--mesic, shaded, steeper slopes
Moist but well-drained soils, relatively steep slopes, can occur in riparian zones, most common on the Hebo and Alsea Ranger Districts.

Salmonberry, Salal (TRG)--an intermediate PAG, falling between TRU and TGA
Occurs in hummocky topography or near ridges. Soils are thinner and more moist than TRU, but not as dry as TGA. Temperatures, slope position, etc. also fall between TRU and TGA, and so might tend to occur geographically adjacent to one or both of these other PAGs, as well. Most common on the Waldport Ranger District.

Salal (TGA)--mesic/well-drained, warm, ridgetops
More common at higher elevations, at top of slopes and on ridgetops. Relatively dry, warm sites. Most likely encountered on Alsea and Mapleton Districts.

Rhododendron (TRH)--dry, warm, southern
Very dry, steep, ridgetop, south or southwest facing sites. High temperatures, and high summer moisture-stress. Most prevalent on the Mapleton district.

References:
Hemstrom, M.A. and S.E. Logan. 1986. Plant Association and Management Guide, Siuslaw National Forest. USDA Forest Service, Pacific Northwest Region, #R6-Ecol 220-1986a.

Appendix C.4 Landslide Risk by Watershed

	Acres in LTAs	Acres in LTAs	Sum:				
	w/high risk	prone to	Total acres		% of fifth field with high risk for...		
	for debris	slumping or	with high	Total acres		slumping or	landslides of
Fifth Field	slides	earthflow	landslide risk	in fifth field	debris slides	earthflow	either kind
	95,743	6,936	102,679				
ALSEA	38,058	0	38,058	55,788	68%	0%	68%
ALSEA_FRONTAL	22	4,674	4,695	14,758	0%	32%	32%
BEAVER	0	0	0	21,596	0%	0%	0%
BERRY	0	2,032	2,032	3,468	0%	59%	59%
BIG ELK	0	0	0	11,036	0%	0%	0%
BIG/ROCK/CAPE	13,214	11,512	24,726	24,628	54%	47%	100%
BLODGETT	11	0	11	13,806	0%	0%	0%
CLEAWOX/CARTER	0	0	0	3,875	0%	0%	0%
DEADWOOD	40,261	0	40,261	40,261	100%	0%	100%
DEVILS LAKE	134	0	134	10,396	1%	0%	1%
DRIFT (ALSEA)	14,074	0	14,074	44,204	32%	0%	32%
EAST BEAVER	8,353	3,811	12,164	18,644	45%	20%	65%
ESMO_WHITT	21,952	0	21,952	26,706	82%	0%	82%
FALL	4,217	0	4,217	19,268	22%	0%	22%
FIVE RIVERS	39,016	30	39,046	39,046	100%	0%	100%
HAUSER	0	0	0	20,634	0%	0%	0%
INDIAN	24,064	224	24,288	30,794	78%	1%	79%
KILCHIS_RIVER	9,105	0	9,105	16,119	56%	0%	56%
KNOWLES	3,636	0	3,636	3,636	100%	0%	100%
LITTLE NESTUCCA	0	17,011	17,011	37,642	0%	45%	45%
LOBSTER	24,130	0	24,130	37,313	65%	0%	65%
LOWER LAKE/LAKE	33,074	0	33,074	33,074	100%	0%	100%
LOWER NESTUCCA	10,172	58,925	69,097	91,140	11%	65%	76%
LOWER SIUSLAW	75,917	0	75,917	99,963	76%	0%	76%
LOWER UMPQUA	35,979	0	35,979	60,351	60%	0%	60%
LOWER_NF_TRASK_RIVER	12,933	0	12,933	12,933	100%	0%	100%
LOWER_TRASK_RIVER	12,765	0	12,765	12,777	100%	0%	100%

	Acres in LTAs	Acres in LTAs	Sum:				
	w/high risk	prone to	Total acres		% of fifth field with high risk for...		
	for debris	slumping or	with high	Total acres		slumping or	landslides of
Fifth Field	slides	earthflow	landslide risk	in fifth field	debris slides	earthflow	either kind
MARYS PEAK	0	12,544	12,544	15,840	0%	79%	79%
MERCER	215	690	906	10,284	2%	7%	9%
MIDDLE_SIUSLAW	8,021	0	8,021	61,959	13%	0%	13%
NESKOWIN	0	6,259	6,259	15,971	0%	39%	39%
NESTUCCA_RIVER	20	30,490	30,510	30,510	0%	100%	100%
NORTH_FORK_ALSEA	0	19,650	19,650	41,594	0%	47%	47%
NORTH FORK SIUSLAW	22,883	956	23,839	40,944	56%	2%	58%
NORTH FORK SMITH	30,810	0	30,810	43,891	70%	0%	70%
ROCK	0	0	0	27,622	0%	0%	0%
SALMON	0	13,356	13,356	47,530	0%	28%	28%
SANDLAKE	0	2,464	2,464	16,984	0%	15%	15%
SCHOONER/DRIFT (SILETZ)	20,367	0	20,367	38,059	54%	0%	54%
SEAL ROCK	0	0	0	6,766	0%	0%	0%
SILETZ	11,859	0	11,859	20,930	57%	0%	57%
SILTCOOS	17,179	0	17,179	48,176	36%	0%	36%
SMITH	53,953	0	53,953	56,901	95%	0%	95%
SOUTH_FORK_ALSEA	6,998	0	6,998	40,367	17%	0%	17%
TAHKENITCH	6,739	0	6,739	27,323	25%	0%	25%
TENMILE	0	0	0	55,295	0%	0%	0%
TENMILE/CUMMINS	23,407	6,984	30,391	30,316	77%	23%	100%
THREEMILE	0	0	0	1,949	0%	0%	0%
THREE RIVERS	0	22,473	22,473	24,342	0%	92%	92%
TILLAMOOK	2,331	0	2,331	9,603	24%	0%	24%
TOLEDO	0	0	0	6,610	0%	0%	0%
TUMTUM	0	2,521	2,521	4,527	0%	56%	56%
UMPQUA DUNES	0	0	0	3,996	0%	0%	0%
UPPER_LAKE	31,474	0	31,474	31,562	100%	0%	100%
UPPER_MF_NF_TRASK	23,473	0	23,473	27,631	85%	0%	85%

	Acres in LTAs	Acres in LTAs	Sum:				
	w/high risk	prone to	Total acres		% of fifth field with high risk for...		
	for debris	slumping or	with high	Total acres		slumping or	landslides of
Fifth Field	slides	earthflow	landslide risk	in fifth field	debris slides	earthflow	either kind
UPPER_SILETZ	7,920	0	7,920	44,608	18%	0%	18%
UPPER SIUSLAW	0	0	0	42,720	0%	0%	0%
WILLAMINA	0	10,710	10,710	10,711	0%	100%	100%
WEST FORK SMITH	14,995	0	14,995	17,345	86%	0%	86%
WILDCAT_CREEK	23,801	0	23,801	43,811	54%	0%	54%
WILSON_RIVER	11,712	0	11,712	18,208	64%	0%	64%
WOLF CREEK	0	0	0	37,890	0%	0%	0%
YACHATS	24,457	1,163	25,620	27,741	88%	4%	92%
YAMHILL	0	23,687	23,687	23,846	0%	99%	99%
YAQUINA/BIG ELK	0	480	480	37,852	0%	1%	1%
TOTALS	859,441	259,582	1,119,023	1,896,070	45%	14%	59%

Appendix D.1 Development of Federal Lands Assessment North Coast Province Seral Stage Classifications

Current Seral Stages

The current seral stage coverage for the assessment study area was developed by combining polygon vegetation datasets from both the Salem and Eugene District BLM and the Siuslaw National Forest. All vegetation datasets were developed from 1:12000 aerial photo interpreted data.

Items names from the BLM datasets were changed to match the Siuslaw's dataset and items that were not common to both datasets were dropped. The items that were common to both datasets and that were retained in the combined dataset were: primary and secondary species, mean sizeclass, age of stands, and type (managed vs. natural).

These remaining items were used to designate seral stages using the following criteria:

	USFS	BLM
Perennial Grass/Forb	developed sitex (XAD) grass/forb (XME) or brush (XBR)	same as USFS
Very Early Seral	natural stands 0-5" dbh plantations <= 10 yrs old	0-5"dbh or 0-10 yrs old
Early Seral (pole)	conifer 5-10"dbh plantations 11-24 yrs old	5-11" dbh 11-25 yrs old
Conifer mix (pole)	conifer/hdwd 5-10"dbh	same as above conifer/hdwd
Young conifer	conifer 10-18" dbh plantations 25-50	25-50 yrs old conifer
Young conifer mix	conifer/hdwd 10-18" dbh	25-50 yrs old
Mature conifer	conifer dbh >18" dbh	conifer >50 yrs old
Mature conifer mix	conifer/hdwd >18" dbh	conifer/hdwd >50 yrs old
Deciduous mix	hardwood dominated mixed stands (spp1 = ALRU or TREED or HDWD, or ACMA) spp2 = conifer	
Pure hardwood	hardwood stands (spp1 = ALRU or TREED or HDWD or ACMA)	
untyped	spp1 and spp2 blank	

1940-56 Seral Stages

Seral stages were developed from a series of county-wide vegetation coverages that were digitized by Pacific Meridian Resources (PMR) from original county maps published prior to 1947, between 1947 and 1949, or after January 1, 1949.

Forest type maps were prepared in conjunction with FIA inventories from 1930 until 1958. Before World War II, maps were assembled and standardized from existing maps obtained from forest owners. Unmapped areas were filled in by field observation. After the war (starting in 1946), maps were based on aerial photots. The procedure used was to drive all roads and map what could be seen from the road. At the same time, typing was extrapolated into unseen areas by photo interpretation. In remote areas, trail hiking was sometimes necessary in addition to driving. All mapping was done in the field by observation and comparison to photo images. Typing was later edited and transfered to base maps at 4 inches to the mile. After drafting and editing was complete, reproducible negatives or positives were made at 1-inch and 2-inch scales.

Prior to 1956, the minimum area mapped was 10 acre for forest/nonforest classification and 40 acres for all other typing. From 1956 to 1958, all types were mapped to a 10 acre minimum.

Primary and Secondary species, mean sizeclass, dbh, and percent density items were added to each county coverage that fell within the study area boundary. The original coverages came with a single attribute called DATA. This item contained all of the attributes for the above added items. A program was written that would populate these added item fields based on the content of the DATA item. Once the added items were populated, the individual county coverages were mapjoined together and the resultant coverage was clipped to the study area boundary. Because of the wide range of dbh ranges, each county was classified into seral stages seperately. Benton county for instance, had basically only two dbh ranges listed 6-20" and over 20". In some cases species compositin was vague if not missing all together. Gross classifications of seral stages were made where necessary. Polygons with these gross classifcations represent only a small portion of the total study area.

The primary and secondary species, mean sizeclass, and dbh range items were used to designate seral stages using the following criteria:

Benton County:

	DBH Range	Primary and Secondary Species
Early/Young	6-20" dbh	both conifer and hardwood stands
Mature Conifer	>20" dbh	conifer/conifer

Douglas County:

Very Early Seral	0-6" dbh	both conifer and hardwood stands
Early Seral (Pole)	6-14" dbh	conifer/conifer
Conifer Mix (pole)	6-14" dbh	conifer/hdwd

Young Conifer	12-20" dbh	conifer
Young conifer mix	12-20" dbh	conifer/hdwd
Mature conifer	ge 22" dbh	conifer
Mature conifer mix	ge 22" dbh	conifer/hdwd

Lane, Lincoln, and Tillamook Counties

Very Early Seral	0-5" dbh	both conifer and hardwood stands
Early Seral (pole)	5-11" dbh	conifer/conifer
Conifer Mix (pole)	5-11" dbh	conifer/hdwd
Young Conifer	11-21" dbh	conifer/conifer
Young conifer mix	11-21" dbh	conifer/hdwd
Mature conifer	ge 21" dbh	conifer/conifer
Mature conifer mix	ge 21" dbh	conifer/hdwd

Polk County

Very early seral	0-6" dbh	both conifer and hardwood stands
Mature conifer	ge 16+	conifer
Mature conifer mix	ge 16+	conifer/hdwd

All counties:

Deciduous mix	hardwood dominated mixed stands	hdwd/conifer
Pure hardwood	hardwood stands	hdwd/hdwd
Untyped	primary and secondary species blank	

Appendix D.2 Plantation Management Trends on the Siuslaw National Forest

I. Plantation Establishment

Harvesting and reforestation began on a programmed level in the late 1940's. Until then, reforestation was sporadic and usually a result of a few large fires (Hebo) or aquisition of private harvested land (Waldport).

From the beginning of this programmed harvesting (predominantly clear cutting) in the late 1940's to the mid 1950's, clear cut areas were broadcast burned and planted. No other establishment practices were used. Most of the areas selected for harvest were on flatter ground which could be harvested by high lead cable systems or tractor yarded. The majority of these areas had few regeneration problems.

Programmed harvesting and development of the primary road system continued to develop through the late 1950's. By the early 1960's, harvested areas were reforested by planting and aerial seeding. Because most of the areas harvested were surrounded by mature natural stands, seed fall from these stands played a significant role in reforestation.

During the Mid 1960's intensive reforestation establishment practices began. Animal control by baiting, trapping and tubing were being used. Aerial application of herbicides began to be used in the mid 1960's for site preparation (brown and burn technique) and release of conifers from brush and alder. In the early 1970's, the technique of stem injection of herbicides for alder control became a common practice on the Waldport district.

By the late 1960's aerial seeding was dropped and hand planting was the preferred method of reforestation. Also, during this time the Forest started a Douglas-fir seed buying program. There was little control of where the seed came from, probably a mix of local and non-local sources, thus raising the concern for genetics and seed certification. By the mid 1970's, the seed certification and tree improvement programs were accelerated. By 1985, the majority of planted trees on the Mapleton and Alsea districts came from known seed sources. (seed was collected from selected parent trees in the woods) In 1985, the Forest's seed orchard at Beaver Creek produced 2000 bu of cones. All districts were represented in this collection. There has been additional seed crops at the orchard since 1985, thus filling out the Forest's seed inventory with certified seed. By 1990, all Douglas-fir planting stock was produced from known seed sources.

Also during the mid 1970's, in addition to Douglas-fir, western hemlock, western red cedar and sitka spruce seedlings were available and being planted on the Forest. Five to 10% of the trees planted from the mid 1970's to the late 1980's were a shade tolerant "minor" species. The "minor" species have usually been planted in sites with higher vegetation competition, and the seedling quality, until recently has been questionable, therefore actual establishment is probably at a lower proportion then planted.

The last year that the Forest used herbicides was 1983. The discontinued use of herbicides was a result of court rulings, and development of techniques

where reforestation can be accomplished without the use of herbicides. Since 1983, all preburn site preparation, or site preparation in place of burning, and release has been accomplished by manual methods.

By the 1990's seedlings from genetic sources selected for faster growth from progeny tests were being planted.

II. Precommercial Thinning

Precommercial thinning became a common practice by the Mid 1960's. Stands were typically thinned to 12 to 14 foot spacing. However, During the late 1970's and early 1980's plantations were thinned to 10 foot spacing to accommodate timber management stand growth projections.

Then by the mid 1980's plantations were being thinned to 12 to 14 foot spacing again. Many of the plantations thinned to 10 foot spacing, especially on the Waldport and Alsea districts, were re-thinned to wider spacing.

Approximately 70% of plantations old enough to be precommercial thinned (about 10 to 12 years old) have been thinned. The majority of acres not precommercially thinned were near desired stocking levels or below.

III. Slash Burning

Virtually all clear cuts were broadcast burned up to 1985. At this time districts began prescribing cooler burns or not burning. The Waldport district shifted to not burning a portion of there units first, followed by Alsea, Hebo and Mapleton. So the greatest number of non-burned units will be found at Waldport and the least at Mapleton.

IV. Forage seeding and Fertilization

Forage seeding and fertilization in recently harvested and burned clear cuts began in 1983 to provide big game forage. A total of 9,113 acres have been forage seeded on the Forest since that time. The Alsea district had the majority of the acres with 5,657. Hebo has seeded 2,056 acres with Waldport at 837 acres and Mapleton with 563.

These seeded acres were fertilized with one or more treatments. The total forest acreage for fertilizer applications of forage seeded areas was 15,920. District acreages are as follows; Alsea - 10,885, Waldport - 2,763, Mapleton - 1,873 and Hebo 399.

V. Stand fertilization

The Forest began fertilizing young stands in 1989 to increase plantation growth. Plantations fertilized were 17 years old and older. A total of 5,198 acres were fertilized from 1989 to 1992, the last year of the program. The District acreages are: Mapleton - 2,455, Alsea - 1,388, Waldport - 957, Hebo - 398.

VI. Pruning

In 1990 The forest began pruning trees in plantations to increase future wood quality. Live and dead limbs were cut from the first 18 feet of trees usually about 40 to 50 feet tall. Plantations were usually 17 to 20 years old. A total of 560 acres have been pruned on the Forest. District acreages are: Hebo - 276, Mapleton - 200, Waldport - 64, Alsea - 0.

DATA SOURCES:

A breakdown of accomplished acres for each year and by district are available starting from 1972. See the Forest Silviculturist for annual accomplishment reports (also available on electronic spreadsheet).

Specific locations and descriptions of treatments are available in hard copy and microfilm at each district.

APPENDIX D.3: Mature Conifer Acres on Federal Lands, by Fifth Field Watershed								
		Mature Acres			Total Acres			% Mature
FOURTH FIELD WS					Total	Total	% Fed'l	on
		USFS	BLM	Total	Federal	in	in	Fed'l
	Fifth Field Watershed					WS	WS	Land
WILSON-TRASK-NESTUCCA								
	East Beaver	1,452	613	2,065	7,173	18,644	38%	29%
	Kilchis River	0	623	623	2,907	16,119	18%	21%
	Little Nestucca	6,338	1	6,339	18,932	37,642	50%	33%
	Lower Nestucca	18,848	3,280	22,128	55,478	91,140	61%	40%
	Lower NF Trask River	0	0	0	1,957	12,933	15%	0%
	Lower Trask River	0	530	530	2,265	12,777	18%	23%
	Neskowin	4,492	0	4,492	8,270	15,971	52%	54%
	Nestucca River	8	6,552	6,560	22,317	30,510	73%	29%
	Sandlake	1,731	23	1,754	7,123	16,984	42%	25%
	Three Rivers	6,804	0	6,804	20,042	24,342	82%	34%
	Tillamook	90	53	143	1,146	9,603	12%	12%
	Upper MF NF Trask	0	0	0	3,725	27,631	13%	0%
	Wilson River	0	773	773	3,094	18,208	17%	25%
WILSON-TRASK-NESTUCCA		39,763	12,448	52,211	154,429	332,504	46%	34%
YAMHILL								
	Willamina	600	0	600	1,108	10,711	10%	54%
	Yamhill	3,167	0	3,167	5,572	23,846	23%	57%
YAMHILL		3,767	0	3,767	6,680	34,557	19%	56%
SILETZ-YAQUINA								
	Devils Lake	596	0	596	1,954	10,396	19%	31%
	Rock	0	183	183	1,373	27,622	5%	13%
	Salmon	4,214	275	4,489	12,683	47,530	27%	35%
	Schooner/Drift (Siletz)	8,521	465	8,986	20,512	38,059	54%	44%
	Siletz	2,883	289	3,172	4,805	20,930	23%	66%
	Toledo	1,918	6	1,924	3,617	6,610	55%	53%
	Upper Siletz	0	1,248	1,248	12,355	44,608	28%	10%
	Yaquina/Big Elk	4,788	1,241	6,029	18,770	37,852	50%	32%
SILETZ-YAQUINA		22,920	3,707	26,627	76,069	233,607	33%	35%
				0				
UPPER WILLAMETTE				0				
	Marys Peak	4,781	87	4,868	8,799	15,840	56%	55%
	Tumtum	314	33	347	1,062	4,527	23%	33%
UPPER WILLAMETTE		5,095	120	5,215	9,861	20,367	48%	53%

**BLM acreage data were incomplete for Umpqua fourth field watershed (Lower Umpqua, North Fork Smith, Smith, West Fork Smith 5th fields) as of 8/95.

APPENDIX D.3: Mature Conifer Acres on Federal Lands, by Fifth Field Watershed

FOURTH FIELD WS / Fifth Field Watershed	Mature Acres			Total Acres			% Mature on Fed'l Land
	USFS	BLM	Total	Total Federal	Total in WS	% Fed'l in WS	
ALSEA							
Alsea	17,096	896	17,992	39,868	55,788	71%	45%
Alsea Frontal	0	1,435	1,435	4,818	14,758	33%	30%
Beaver	4,037	0	4,037	10,300	21,596	48%	39%
Berry	621	0	621	1,901	3,468	55%	33%
Big/Rock/Cape	9,365	0	9,365	20,672	24,628	84%	45%
Blodgett	967	0	967	7,970	13,806	58%	12%
Drift (Alsea)	16,587	932	17,519	29,604	44,204	67%	59%
Fall	1,389	2,522	3,911	9,144	19,268	47%	43%
Five Rivers	13,698	0	13,698	33,395	39,046	86%	41%
Lobster/Lobster_Cr	4,984	4,265	9,249	27,860	37,313	75%	33%
Mercer	1,593	0	1,593	4,505	10,284	44%	35%
North Fork Alsea	306	4,877	5,183	21,058	41,594	51%	25%
Seal Rock	117	0	117	365	6,766	5%	32%
South Fork Alsea	0	5,794	5,794	23,098	40,367	57%	25%
Tenmile/Cummins	15,234	0	15,234	26,073	30,316	86%	58%
Yachats	9,282	0	9,282	20,111	27,741	72%	46%
ALSEA	95,276	20,721	115,997	280,742	430,943	65%	41%
SIUSLAW							
Deadwood	11,910	366	12,276	32,553	40,261	81%	38%
Esmo Whitt	0	6,034	6,034	13,839	26,706	52%	44%
Indian	12,343	0	12,343	25,335	30,794	82%	49%
Knowles	0	233	233	308	3,636	8%	76%
Lower Lake (incl. Lake)	3	4,000	4,003	16,020	33,074	48%	25%
Lower Siuslaw	23,738	1,092	24,830	46,567	99,963	47%	53%
Middle Siuslaw	0	9,998	9,998	29,037	61,959	47%	34%
North Fork Siuslaw	16,190	0	16,190	31,688	40,944	77%	51%
Upper Lake	0	1,685	1,685	14,462	31,562	46%	12%
Upper Siuslaw	0	1,907	1,907	14,581	42,720	34%	13%
Wildcat Creek	0	3,573	3,573	16,324	43,811	37%	22%
Wolf Creek	0	4,641	4,641	15,468	37,890	41%	30%
SIUSLAW	64,184	33,529	97,713	256,182	493,320	52%	38%
UMPQUA**							
Lower Umpqua**	9,380	NA	9,380	16,825	60,351	28%	56%
North Fork Smith**	15,522	NA	15,522	28,691	43,891	65%	54%
Smith**	11,162	NA	11,162	26,525	56,901	47%	42%
West Fork Smith**	236	NA	236	10,946	17,345	63%	2%
UMPQUA**	36,300	NA	36,300	82,987	178,488	46%	44%
SILTCOOS							
Siltcoos	6,808	393	7,201	19,212	48,176	40%	37%
Tahkenitch	1,467	60	1,527	7,917	27,323	29%	19%
SILTCOOS	8,275	453	8,728	27,129	75,499	36%	32%

**BLM acreage data were incomplete for Umpqua fourth field watershed (Lower Umpqua, North Fork Smith, Smith, West Fork Smith 5th fields) as of 8/95.

PSQ/TSQ Adjustment
Siuslaw National Forest
June, 1995

BACKGROUND

The Northwest Forest Plan specified a probable sale quantity (PSQ) of 23 mmbf for the Forest. This was calculated for Option 9 of the Draft Northwest Forest Plan, and was based on acres in the matrix only. The matrix was defined as all forested land outside of riparian and late-successional reserves, and on land specified as suitable for commercial timber management in the Siuslaw Forest Plan. The riparian reserves for Option 9 in the Draft were defined as one half site-potential tree length for either side of intermittent streams and 2 site-potential tree lengths for either side of perennial streams; or about 130 and 520 feet respectively. The reserve width for intermittent streams was increased to a full site-potential tree length (260 feet) for the Final Northwest Forest Plan (NWFP). This significantly reduced the matrix acres, but PSQ was not recalculated between draft and final. Following is documentation for the process used to adjust the Siuslaw PSQ given our current knowledge of the NWFP.

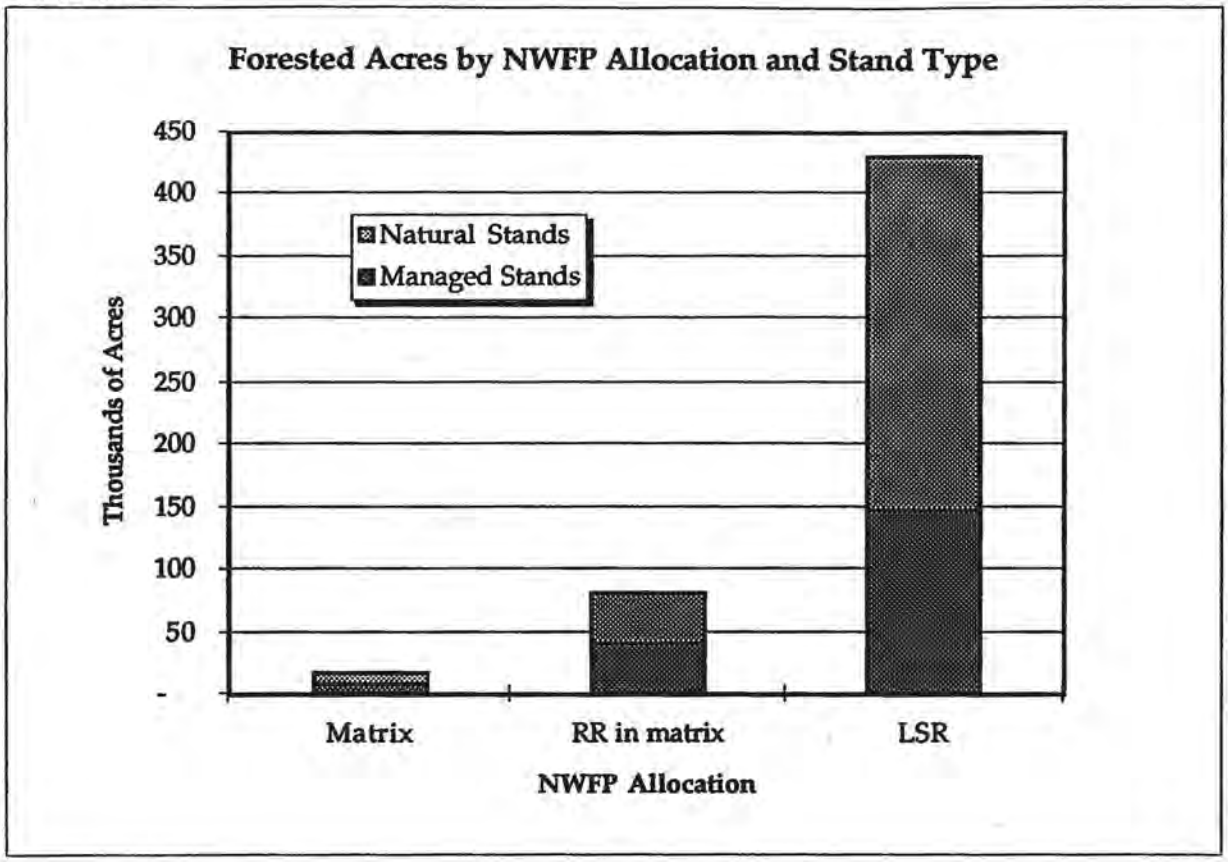
This document will display the adjusted total sale quantity (TSQ) as well as PSQ. PSQ cannot be considered alone, since the riparian reserves specified in the NWFP have left a highly fragmented matrix, in which very few feasible timber sales will be possible without inclusion of the parts of stands within the riparian reserves. This is well within the scope of the Northwest Forest Plan, as long as timber sales are the means by which the Aquatic Conservation Strategy is implemented within the riparian reserves. The same is true in LSR's, given that timber sales will be the main tool used to promote and accelerate the development of late-successional habitat. Commercial thinning of managed stands will be the predominant treatment in reserves.

The managed stands, in reserves as well as in matrix, were established under a high intensity timber management plan, and are too densely stocked to be within the range of natural conditions for the Coast Range. Density management, usually in the form of commercial thinning will be needed to reduce stocking and accelerate the development of late-successional forest stand characteristics. There are approximately 200,000 acres of managed stands on the Forest, and 75,000 are at an age when inter-stand competition reduces canopy ratios to a point where stands can stagnate, and development of late-successional characteristics will be severely delayed or possibly never achieved. Table 1 and Chart 1 show the acres of stands within matrix and reserves:

Table 1:

	Managed Stands					Natural Stands		
	0-10	10-20	20-30	30-40	50+	Con Dom	Hwd Dom	Total
Matrix Acres	2,352	1,776	2,160	1,324	255	5,999	2,492	16,357
RR Associated with Matrix	8,436	10,532	11,171	9,802	1,595	23,058	16,534	81,127
LSR Less RR	6,516	4,775	5,185	3,583	433	44,789	3,744	69,026
RR Associated with LSR	26,055	31,923	34,955	23,001	10,117	189,915	44,884	360,850
TOTAL	43,359	49,005	53,470	37,711	12,400	263,761	67,653	527,359

Chart 1:



CALCULATION OF TSQ

TSQ includes volume from both PSQ, which is considered chargeable, and non-chargeable volume from riparian and late-successional reserves. PSQ is calculated in a manner similar to ASQ in the Siuslaw Forest Plan. The objective is a non-declining even flow of output from matrix acres. Calculation of sale quantities involves 2 major factors– acres to be harvested, and expected per acre outputs for selected harvest options.

PSQ or Chargeable Volume Calculation:

Matrix and AMA Acres

Matrix acres were tallied as follows:

1. Riparian reserve widths are slope distance. Streams were buffered to 260 and 520 feet both sides of intermittent and perennials. Average slope was calculated within these buffers, with Hebo and the south part of the forest calculated separately. Streams were re-buffered using the slopes to adjust horizontal distance.

2. Acres were tallied by fifth field watershed, inventory model component, Northwest Forest Plan allocation, for Siuslaw forest plan MA 15.

3. Riparian reserve acres were increased to account for unmapped intermittent streams. Adjustments were made by river basin and were based on a sample of 12 watersheds which were

mapped in detail and compared to the extensive mapping in GIS. Streams were buffered for the extensive and detailed streams and resulting buffer acres were compared and used to come up with adjustment factors for each river basin.

Table 2 displays the estimated acres of matrix by river basin for the Northwest Forest Plan. Of the 16,400 acres in matrix, 48% is in managed stands. Due to the high density of streams in the coast range, the matrix is highly fragmented, with a median patch size of less than 10 acres.

Table 2.

	Managed Stands (Age in years)					Natural Stands		
River Basin:	0-10	10-20	20-30	30-40	50+	Con Dom	Hwd Dom	Total
Wilson-Trask-Nestucca	1,466	874	1,077	737	46	2,685	1,833	8,717
Yamhill	3	9	0	0	0	1	0	13
Siletz-Yaquina	149	64	100	40	22	463	130	968
Upper Willamette	31	0	0	0	0	24	0	55
Alsea	534	382	452	171	48	1,245	0	2,832
Siuslaw	151	185	316	209	39	882	87	1,869
Umpqua	4	39	2	19	0	87	77	228
Siltcoos	14	224	213	150	100	612	365	1,676
TOTAL	2,352	1,776	2,160	1,324	255	5,999	2,492	16,357

Harvest Treatments in Matrix and AMA

Harvest activities will include commercial thinning in managed stands, and some type of regeneration harvest in mature stands. Timing and intensity of treatments depends on objectives for stands in the future. The Siuslaw Forest Plan stressed treatments for intensive timber production for the majority of the suitable land base. Stands were to be commercially thinned once or twice and regenerated on a 60-70 year rotation. Under the NWFP, with its emphasis on late successional habitat, rotation lengths will be lengthened and in accordance with agency policy, clearcutting will be avoided. In addition to Siuslaw Plan standards and guidelines, harvest treatments under the NWFP may be affected by the following standards and guidelines:

Matrix-

- Manage to provide course woody debris- 240 linear ft, $\geq$ 20 inches (page C-40).
- Green tree and snag retention, same as Siuslaw Forest Plan, except in 2.5 acre patches.
- Provide for retention of old-growth fragments. Also, where less than 15% of a fifth field watershed is in late-successional condition, protect all remaining late successional habitat (page C-44).
- Protect 100 acres of habitat around known owl activity centers.

Matrix and Key Watershed-

- No new roads in RARE II.
- In non-RARE II reduce existing road mileage, or no net increase if funds are not available to reduce.

AMA- Standards and guidelines are the same as matrix, but s&g for 15% late-successional requirement is relaxed. It should be considered a threshold rather than a strict s&g.

Assumptions for harvest in matrix and AMA are as follows (*Note– these are modeling assumptions only– they are not standards and guidelines):*

Managed Stands- Commercial thinning performed to improve tree growth. Approximately 70% of the acres will be thinned, with 6 mbf/ acre removed at Hebo and 8 mbf/acre on the other Districts. Thinning age is 35 at Hebo and 25 on the other Districts.

Natural Stands-

Conifer- Matrix is highly fragmented due to high stream densities and the width of riparian reserves, so most of the matrix is in patches less than 10 acres. Stands will be managed on 120 year rotations. Actual rotations may be between 60 and several hundred years- an increase over the Siuslaw Forest Plan, which reflects the intent of the NWFP. In patches less than 15 acres, 67% of the standing volume will be removed. In patches over 15 acres 50% of the volume will be removed. These percentages will meet requirements for coarse woody debris and snag and green tree retention in 2.5 acre patches.

Hardwood- Same as conifer.

Non-Chargeable Volume Calculation:

Reserve Acres

Table 3 displays reserve acres by river basin:

Riparian Reserve Associated with Matrix								
	Managed Stands					Natural Stands		
River Basin:	0-10	10-20	20-30	30-40	50+	Con Dom	Hwd Dom	Total
Wilson-Trask-Nestucca	3,212	3,180	2,972	1,889	606	4,692	9,820	26,371
Yamhill	12	35	0	0	0	55	17	119
Siletz-Yaquina	708	224	799	381	0	1,414	915	4,441
Upper Willamette	9	0	0	0	0	5	0	15
Alsea	3,009	4,752	3,951	4,755	795	10,216	3,962	31,439
Siuslaw	1,441	1,891	2,825	2,624	96	5,692	1,184	15,753
Umpqua	3	66	8	25	0	133	118	352
Siltcoos	42	383	617	127	99	852	517	2,637
TOTAL	8,436	10,532	11,171	9,802	1,595	23,058	16,534	81,127
LSR (includes associated RR)								
	Managed Stands					Natural Stands		
River Basin:	0-10	10-20	20-30	30-40	50+	Con Dom	HWD Dom	Total
Wilson-Trask-Nestucca	6,569	2,845	2,552	1,826	316	30,045	12,884	5,7037
Yamhill	932	700	43	0	0	3,879	749	6,303
Siletz-Yaquina	5,547	4,663	4,194	3,980	260	20,716	4487	43,847
Upper Willamette	383	479	643	716	138	5595	318	8,273
Alsea	12,297	13,274	12,881	9,694	8,998	72,831	14,719	144,694
Siuslaw	5,613	10,562	12,248	8,959	726	61,297	9,543	108,948
Umpqua	985	2,565	5,740	844	10	33,420	3,681	47,246
Siltcoos	245	1,609	1,840	565	101	6,920	2,247	13,527
TOTAL	32,571	36,697	40,139	26,585	10,550	234,705	48,628	429,875

Harvest Treatments in Reserves

Riparian Reserves- Timber activities in RR are done only to control stocking, reestablish and manage stands, and acquire desired vegetation conditions to attain Aquatic Conservation Strategy objectives. Volume counts toward TSQ, not PSQ.

Managed Stands- Commercial thinning performed to promote late-successional characteristics, as riparian reserves are intended as corridors between LSRs. Approximately 60% of the thinnable acres will be treated. Yields will be 5 mbf/acre at Hebo and 6 mbf/acre on the rest of the Forest.

Natural Stands- Harvest in the natural stands in riparian reserves will occur only on the upper half of the slope.

Conifer- Small group selections or other partial cutting method may be prescribed in natural stands that are homogenous and are not showing signs of developing structure on their own. This is estimated to be between 67 and 89%, and yields are expected to be 10-20% of standing volume.

Hardwood- The objective in the hardwood dominated stands will be to convert to conifer dominated stands, where that has been the predominate historical condition. This has been the case on about 30% of the hardwood dominated area at Hebo and 75% of the hardwood dominated area on the rest of the forest. Harvest will be 50% of standing volume.

LSR- Timber activities in LSR are done only to control stocking, reestablish and manage stands, and acquire desired vegetation conditions to move toward late-successional habitat conditions. Again, volume counts toward TSQ, not PSQ. There will be no harvest from natural stands, except under very special circumstances, such as salvage following a catastrophic event.

Managed Stands- Commercial thinning performed to promote late-successional characteristics. Approximately 60% of the thinnable acres will be treated. Yields will be the same as in matrix, although spacing and distribution of residual stems may vary. Commercial thinnings at Hebo include about 120 acres per year in Douglas-fir stands between 80 and 110 years of age (see ROD page D-15). Yields in these stands will be 25 mbf per acre.

TSQ Summary

Attachment A shows the detailed process used to calculate TSQ, and Table 4 displays TSQ.

Table 4:

	Commercial Thinning			Harvest in Natural Stands			Total		
Land Allocation	Acres	MCF	MBF	Acres	MCF	MBF	Acres	MCF	MBF
Matrix	94	214	749	50	304	1,848	143	518	2,597
AMA	29	50	174	56	286	1,738	86	336	1,912
PSQ (chargeable)	123	264	924	106	591	3,586	229	854	4,509
RR associated with matrix	513	879	3,078	114	209	1,274	627	1,088	4,352
RR associated with AMA	75	107	374	51	98	600	126	205	974
Total from RR	588	986	3,452	165	307	1,874	753	1,293	5,327
LSR South	1,989	3,409	11,933				1,989	3,409	11,933
LSR Hebo	280	978	3,798				280	978	3,798
Total LSR	2,268	4,387	15,731				2,268	4,387	15,731
Total Reserves (non-chargeable)	2,856	5,374	19,183	165	307	1,874	3,022	5,681	21,058
TSQ	2,979	5,638	20,107	272	897	5,460	3,251	6,535	25,567

RR= Riparian Reserve. LSR's include intermingled riparian reserves.

Concerns:

The TSQ calculation is an estimate only, based on current knowledge, and it will be refined and modified as the Forest-wide Assessment, AMA Plan, LSR Assessments, and Watershed Analyses are completed. The PSQ will be a more stable number than TSQ. Harvest volume from reserves is considered non-scheduled volume, and output levels will vary greatly from site to site as habitat objectives and current conditions vary. Factors such as current stumpage values will affect levels of non-chargeable outputs. As emphasis has shifted to habitat objectives, such as coarse woody debris, volume removed from the site will in many cases, be limited to just the amount needed to maintain an above-cost sale. Compounding the economic considerations for sales, is the issue of access, and the costs and environmental considerations of road construction/reconstruction versus helicopter logging opportunities.

Subsequently, another major concern with the above TSQ is our workforce ability to accomplish 3,000 acres of commercial thinning in managed stands and 270 acres of partial or selective harvest in natural stands per year. It is estimated that our current workforce will be capable of planning, preparing, laying out, marking, and cruising about 2,000 acres of commercial thinning per year.

Appendix D.5 Late Seral Species

Appendix D.5 lists the species of concern that have been identified in FEMAT (those having 40 points or less in Table IV), and the Survey and Manage species found in Table C-3 of the ROD from the President's Forest Plan.

Late seral species: Plant and Animal Species in ROD and/or <= 40 points, Category A, Option 9 in FEMAT

12-Apr-95

SCIENTIFIC NAME	ROD Category Descriptions	ROD	FEMAT	FOREST	HABITAT	ASSOCIATED SPECIES
Albatrellus avellaneus	Rare Ecto-Polypores	Y	Y	S	coastal	conifer/hardwood mix
Albatrellus ellsii	Uncommon Ecto-Polypores	Y	Y	S	coastal	mixed conifer/hardwood
Albatrellus flettii	Uncommon Ecto-Polypores	Y	Y	S	coastal	mixed conifer/hardwood
Allotropa virgata	Vascular Plants	Y	Y	P	deep humus	PSME, TSME, ABGR, ABAM,
Arcangeliella sp. nov. #Trappe 12359	Undescribed Rare Truffles & False Truffl	Y	Y	P	old-growth legacy of coarse woody debris in fog belt	PISI, TSHE
Arceuthobium tsugense	Vascular Plants	Y	Y	H	TSHE stands	
Boletus piperatus	Low elevation boletes	Y	Y	P	coarse woody debris	conifers
Boletus pulcherrimus	Rare boletes	Y	Y	S		conifer
Bryoria pseudocapillaris	Rare Oceanic Influenced Lichens	Y	Y	S	forests or open dunes on coast	PISI
Bryoria spiralifera	Rare Oceanic Influenced Lichens	Y	Y	S	pantropical areas, on peninsulas & headlands	
Bryoria subcana	Rare Oceanic Influenced Lichens	Y	Y	P	coastal bays & streams	
Bryoria tortuosa	Rare Forage Lichens	Y	Y	S	coast & mesic	oaks, conifers
Buellia oidalea	Rare Oceanic Influenced Lichens	Y	Y	S	dry coastal oak forest	Quercus
Calicium abietinum	Pin Lichens	Y	Y	H		conifer
Calicium adaequatum	Pin Lichens	Y	Y	S	high atmospheric humidity provided by forest conditions; substrate & texture specific	conifer
Calicium adspersum	Pin Lichens	Y	Y	S		
Calicium glaucellum	Pin Lichens	Y	Y	S		
Calicium viride	Pin Lichens	Y	Y	S	high atmospheric humidity provided by forest conditions; substrate & texture specific	
Cantharellus cibarius	Chanterelles	Y	Y	P		coniferous
Cantharellus subalbidus	Chanterelles	Y	Y	S		coniferous
Cantharellus tubaeformis	Chanterelles	Y	Y	S		coniferous
Cetraria californica	Oceanic Influenced Lichens	Y	Y	P	scrubby dune areas	PICO
Cetrelia cetrarioides	Riparian Lichens	Y	Y	P	foggy, riparian forest on older hardwood trees	conifers
Chaenotheca brunneola	Pin Lichens	Y	Y	S		
Chaenotheca chrysocephala	Pin Lichens	Y	Y	S		
Chaenotheca ferruginea	Pin Lichens	Y	Y	S		
Chaenotheca furfuracea	Pin Lichens	Y	Y	S		
Chaenotheca subroscida	Pin Lichens	Y	Y	S		
Chaenothecopis pusilla	Pin Lichens	Y	Y	S		
Chamonixia pacifica sp. nov. #Trappe 12	Undescribed Rare Truffles & False Truffl	Y	Y	P		TSHE, PISI, PSME
Cimicifuga elata	Vascular Plants	Y	Y	S	moist deciduous/coniferous forests, often along forest edge; north-facing slopes with rocky, loose soil	
Cladonia bacillaris	Decaying Wood Lichens	N	Y	S	soil, rotting logs or tree stumps	coniferous forest
Cladonia bellidiflora	Decaying Wood Lichens	N	Y	S	acidic soil, humus and among mosses; frequent near the coast	
Cladonia centrotea	Decaying Wood Lichens	N	Y	S	grows in clumps on humus or on decaying logs	coniferous forest
Clavicorona avellanea	Coral Fungi	Y	Y	S	moist with coarse woody debris & large diameter partially decayed logs	
Clavulina cinerea	Branched Coral Fungi	Y	Y	H	well-developed litter layer	
Clavulina cristata	Branched Coral Fungi	Y	Y	P	well-developed litter layer	
Clavulina ornatipes	Branched Coral Fungi	Y	Y	S	well-developed litter layer	

SCIENTIFIC NAME	ROD Category Descriptions	ROD	FEMAT	FOREST	HABITAT	ASSOCIATED SPECIES
Clitocybe senilis	Rare Gilled Mushrooms	Y	Y	S	moist, with a deep humus and litter layer	conifers
Clitocybe subditopoda	Rare Gilled Mushrooms	Y	Y	S	moist, with a deep humus and litter layer	conifers
Collema nigrescens	Riparian Lichens	Y	Y	S	foggy riparian forest, mostly on QUGA	QUGA
Cortinarius canabarba	Rare Gilled Mushrooms	Y	Y	S	diverse forest with heavy litter/humus layer and associated coarse woody debris	conifer
Cortinarius rainierensis	Rare Gilled Mushrooms	Y	Y	S	diverse forest with heavy litter/humus layer and associated coarse woody debris	conifer
Cortinarius varilpes	Rare Gilled Mushrooms	Y	Y	S	diverse forest with heavy litter/humus layer and associated coarse woody debris	conifers
Cudonia monticola	Rare Resupinates & Polypores	Y	Y	P	duff	conifer
Cyphelium inquinans	Pin Lichens	Y	Y	S		
Dermatocarpon luridum	Aqautic Lichens	Y	Y	S	streams	
Destuntzia fusca	Rare False Truffles	Y	Y	S	mature coastal forest	SESE,PSME,Ables,TSHE,LID
Destuntzia rubra	Rare False Truffles	Y	Y	S	mature coastal forest	SESE,PSME,LIDE,TSHE,Able
Diplophyllum albicans	Liverworts	Y	Y	S	tree-trunks, rotten wood & humic soil in coastal forest	TSME/PISI
Diplophyllum plicatum	Liverworts	Y	Y	S	coastal forest; on bark, decaying wood & thin soil over rock; cool, moist	PISI
Douinia ovata	Liverworts	Y	Y	S	foggy forest; ridges & rock outcrops or coniferous canopy on underside of limbs foggy forest	conifer
Elaphomyces sp. nov. #Trappe 1038	Undescribed Rare Truffles & False Truffl	Y	Y	H	Old-growth legacy of coarse woody debris in coastal fog belt	TSHE, PISI, PSME
Encalypta brevicolla var. crumiana	Mosses	Y	N	S	shaded foggy rock outcroppings	
Endogone oregonensis	Rare Zygomycetes	Y	Y	P	coast & coast ranges	PISI, TSHE
Erioderma sorediatum	Rare Oceanic Influenced Lichens	Y	Y	H	stabalized dunes in old forest	PISI & PICO
Gastroboletus imbellus	Rare boletes	Y	Y	S		Pinaceae
Gastroboletus turbinatus	Boletes	Y	Y	P	thick humus and abundant large coarse woody debris	PISI, TSHE, Abies
Glomus radiatum	Rare Zygomycetes	Y	Y	S	mesic to wet, thick humus, abundant coarse woody material	SESE & CHNO
Gomphus bonarii	Chanterelles - Gomphus	Y	Y	S	rich humus layer	conifer
Gomphus clavatus	Chanterelles - Gomphus	Y	Y	P	rich humus layer	conifer
Gomphus floccosus	Chanterelles - Gomphus	Y	Y	P	rich humus layer	conifer
Gomphus kauffanii	Chanterelles - Gomphus	Y	Y	S	rich humus layer	conifer
Gymnomyces sp. nov. #Trappe 4703, 55	Undescribed Rare Truffles & False Truffl	Y	Y	P		ABPR
Herbertus aduncus	Liverworts	Y	Y	S	fog-drenched rocks and tree-trunks	
Herbertus sakurali	Liverworts	Y	Y	S	fog-drenched rock faces in foest	
Heterodermia leucomelos	Oceanic Influenced Lichens	Y	Y	S	forested headands	PISI
Hydnum repandum	Tooth Fungi	Y	Y	S		conifer & hardwood
Hydnum umbilicatum	Tooth Fungi	Y	Y	S		conifers & hardwoods
Hydrothyria venosa	Aqautic Lichens	Y	Y	S	clear, cold streams	
Hypogymnia duplicata	Rare Leafy (arboreal) Lichens	Y	Y	S	wet, foggy, windy coast & maritime sites	conifers
Hypogymnia oceanica	Rare Oceanic Influenced Lichens	Y	Y	S	coast & maritime microclimates	
Iwatsukella leucotricha	Mosses	Y	Y	S	bark	
Kurzia makinoana	Liverworts	Y	Y	S	well-shaded rotten wood & humic soil	
Leioderma sorediatum	Rare Oceanic Influenced Lichens	Y	Y	H	stabalized dune in forest	PISI, PICO
Leptogium brebissonii	Rare Oceanic Influenced Lichens	Y	Y	P	stabalized dunes in old forest	PISI & PICO
Leptogium burnetiae var. hirsutum	Riparian Lichens	Y	Y	S	foggy riparian forest on older trees	hardwood

SCIENTIFIC NAME	ROD Category Descriptions	ROD	FEMAT	FOREST	HABITAT	ASSOCIATED SPECIES
Leptogium cyanescens	Riparian Lichens	Y	Y	H	foggy riparian forest on older hardwood trees	
Leptogium gelatinosum	Rock Lichens	N	Y	S	over soil or mossy rocks	
Leptogium rivale	Aqautic Lichens	Y	Y	S	streams	
Leptogium saturninum	Riparian Lichens	Y	Y	S	boreal riparian forest on older hardwood trees	
Leptogium teretiusculum	Riparian Lichens	Y	Y	H	foggy riparian forest on older hardwood trees	
Leucogaster citrinus	Rare False Truffles	Y	Y	P	stands with an abudant legacy of large, coarse woody debris	PSME,TSHE,CACH,LIDE
Leucogaster microsporus	Rare False Truffles	Y	Y	P	stands with an abudant legacy of coarse woody debris	PSME
Lobaria hallii	Rare Nitrogen-fixing lichens	Y	Y	H	wet,foggy forest on large diam. hardwoods & on shrubs	conifers
Lobaria linita	Rare Nitrogen-fixing lichens	Y	Y	S	bases of conifers in humid forest	PSME
Lobaria oregana	Nitrogen-fixing lichens	Y	Y	P	open coastal forests	conifers
Lobaria pulmonaria	Nitrogen-fixing lichens	Y	Y	P	moist, hardwood forest & swamps	
Lobaria scrobiculata	Nitrogen-fixing lichens	Y	Y	H	trees & mossy outcrops	
Loxospora sp nov. "corallifera" (Brodo in	Oceanic Influenced Lichens	Y	Y	S	immediate coast	conifers
Macowanites chlorinosmus	Uncommon False Truffles	Y	Y	P	large course woody material	PISI,PSME,TSHE
Martellia idahoensis	Rare False Truffles	Y	Y	P		Abies, Pinaceae
Microcalicium arenarium	Pin Lichens	Y	Y	S		
Mycocalicium subtile	Pin Lichens	Y	Y	S		
Neolentinus kauffmanii	Uncommon Gilled Mushrooms	Y	Y	S	occurs only on logs or stumps of PISI	PISI
Nephroma bellum	Nitrogen-fixing lichens	Y	Y	P	open forest	
Nephroma helveticum	Nitrogen-fixing lichens	Y	Y	H	coastal & montane forests woodlands and valleys	
Nephroma laevigatum	Nitrogen-fixing lichens	Y	Y	P	coastal forest	
Nephroma occultum	Rare Nitrogen-fixing lichens	Y	Y	S		conifers
Nephroma parile	Nitrogen-fixing lichens	Y	Y	H	moist	coniferous & deciduous
Nephroma resupinatum	Nitrogen-fixing lichens	Y	Y	H	coast & montane shady forests	conifers
Niebla cephalota	Rare Oceanic Influenced Lichens	Y	Y	H	windswept headlands	
Octavianina macrospora	Rare False Truffles	Y	Y	S	mesic	PSME,TSHE
Octavianina papyracea	Rare False Truffles	Y	Y	S	fog belt	PISI,TSHE,PSME,SESE
Otidea leporina	Rare Resupinates & Polypores	Y	Y	S	duff in moist-wet forest	conifer
Otidea onotica	Rare Resupinates & Polypores	Y	Y	S	duff in moist-wet forest	conifer
Otidea smithii	Rare Resupinates & Polypores	Y	Y	S	duff in moist-wet forest	conifer
Oxyporus nobilissimus	Rare & Endangered Noble Polypore	Y	Y	S	large stumps, snags, living trees; requires large diameter substrate; not found on logs	Abies, esp. ABPR
Pannaria leucostictoides	Nitrogen-fixing lichens	Y	Y	H	open coastal forest	
Pannaria mediterranea	Nitrogen-fixing lichens	Y	Y	H		
Pannaria rubiginosa	Rare Nitrogen-fixing lichens	Y	Y	S	bases of trees	conifers
Pannaria saubinetii	Nitrogen-fixing lichens	Y	Y	H		
Peltiger pacifica	Nitrogen-fixing lichens	Y	Y	S		
Peltigera collina	Nitrogen-fixing lichens	Y	Y	P	coast forests	
Peltigera neckeri	Nitrogen-fixing lichens	Y	Y	H		
Phaeocollybia californica	Phaeocollybia	Y	Y	P		
Phaeocollybia fallax	Phaeocollybia	Y	Y	P		
Phaeocollybia kauffmannii	Phaeocollybia	Y	Y	P		
Phaeocollybia ssp.	Phaeocollybia	Y	Y	H		

SCIENTIFIC NAME	ROD Category Descriptions	ROD	FEMAT	FOREST	HABITAT	ASSOCIATED SPECIES
Phellodon atratum	Tooth Fungi	Y	Y	H		conifers & hardwoods
Phenacomys longicaudus	Mammals	Y	Y	S		
Phlogoitis helvelloides	Jelly Mushroom	Y	Y	S	riparian zones, upper headwater seeps, & intermittent streams with large woody debris	conifers
Phytoconis ericetorum	Mushroom Lichen	Y	Y	S	dead, decorticated wood & large woody debris in well lit forest with altern. high/low moisture	Botryodina (alga)
Pilophorus nigricaulis	Rare Rock Lickens	Y	Y	S	talus rock patches in forest with low fire frequency	
Plagiochila satoi	Liverworts	Y	Y	S	cliffs, rocks &conifer bark	conifer
Plagiochila semidecurrens var. crumnian	Liverworts	Y	Y	S	fog-drenched cliffs, bark & shaded thin soil over rock	
Platismatia lacunosa	Riparian Lichens	Y	Y	P	moist forest on decidious & hardwood trees	
Polyozellus multiplex	Rare Chanterelles	Y	Y	S	along intermittent streams/seeps	Picea, Abies
Pseudaleuria quinaultiana	Rare Cup Fungi	Y	Y	S	wet	conifer
Pseudocyphellaria anomala	Nitrogen-fixing lichens	Y	Y	P	coast forests	
Pseudocyphellaria anthraspis	Nitrogen-fixing lichens	Y	Y	P	open forest	conifers
Pseudocyphellaria crocata	Nitrogen-fixing lichens	Y	Y	P		
Pseudocyphellaria mougeotiana	Rare Oceanic Influenced Lichens	Y	Y	P	coast forest	PISI
Pseudocyphellaria rainierensis	Rare Nitrogen-fixing lichens	Y	Y	S	trunks, trees & shrubs	PSME
Psoroma hypnorum	Rock Lichens	N	Y	S	on moist soil, humus & over mosses	
Ptilium californicum	Liverworts	Y	Y	S	boles	conifers
Pyrrhospora quernea	Oceanic Influenced Lichens	Y	Y	S	immediate coast	conifers
Ramalina pollinaria	Additional Lichenls	Y	Y	S	coastal forest with sandstone outcroppings	
Ramalina thrausta	Riparian Lichens	Y	Y	H	boreal forest on hardwood & coniferous trees	
Rhizopogon brunneiniger	Rare False Truffles	Y	Y	P	dry to moderate	TSHE, PSME, Abies & Pinus
Rhizopogon exiguus	Rare False Truffles	Y	N	P	moist-dry with an abundant legacy of coarse woody material	PSME, TSHE
Rhodocybe nitida	Rare Gilled Mushrooms	Y	Y	S	moist, with a deep humus and litter layer	
Sarcodon fuscoindicum	Tooth Fungi	Y	Y	S		conifers & hardwoos
Sarcodon imbricatus	Tooth Fungi	Y	Y	S		conifers and hardwoods
Sarcosoma mexicana	Rare Resupinates & Polypores	Y	Y	S	Coastal forests	conifers
Scouleria marginata	Mosses	Y	Y	S	splash zone of streams	
Sparassis crispa	Cauliflower Mushroom	Y	Y	S	large trees	PSME
Stenocybe clavata	Pin Lichens	Y	Y	S	high atmospheric humidity provided by forest conditions; substrate & texture specific	
Stenocybe major	Pin Lichens	Y	Y	S		
Sticta arctica	Rare Rock Lickens	Y	Y	S	rock outcrops in foggy wet coast forest	
Sticta beauvoisii	Nitrogen-fixing lichens	Y	Y	S		
Sticta fuliginosa	Nitrogen-fixing lichens	Y	Y	P	coast & moist forests	conifers
Sticta limbata	Nitrogen-fixing lichens	Y	Y	P	coast forests	
Teloschiste flavicans	Rare Oceanic Influenced Lichens	Y	Y	P	dry uplands & prairies, on coastal shrubs	
Tetraphis geniculata	Mosses	Y	Y	S	moist rotting wood; shaded	
Thaxterogaster sp. nov. #Trappe 4867	Undescribed Rare Truffles & False Truffl	Y	Y	P	coarse woody debris in fog belt	PISI, TSME, PSME
Thaxterogaster sp. nov. #Trappe 6242	Undescribed Rare Truffles & False Truffl	Y	Y	P	coarse woody debris in fog belt	PISI, TSME, PSME
Thaxterogaster sp. nov. #Trappe 7427	Undescribed Rare Truffles & False Truffl	Y	Y	P	coarse woody debris in fog belt	PISI, TSME, PSME
Thaxterogaster sp. nov. #Trappe 7962	Undescribed Rare Truffles & False Truffl	Y	Y	P	coarse woody debris in fog belt	PISI, TSME, PSME

SCIENTIFIC NAME	ROD Category Descriptions	ROD	FEMAT	FOREST	HABITAT	ASSOCIATED SPECIES
Thaxterogaster sp. nov. #Trappe 8520	Undescribed Rare Truffles & False Truffl	Y	Y	P	coarse woody debris in fog belt	PISI, TSME, PSME
Tholurna dissimilis	Rare Leafy (arboreal) Lichens	Y	Y	S	subalpine fog zone on stunted TSME, canopy of old-growth PSME	TSME/PSME
Tricholoma venenatum	Rare Gilled Mushrooms	Y	Y	S	diverse forests with heavy humus layer and course woody material	conifers
Tritomaria exsectiformis	Liverworts	Y	Y	S	moist shaded rocks, primarily in riparian areas	
Tritomaria quinquedentata	Liverworts	Y	Y	S	moist, shaded rocks	
Tuber sp. nov. #Trappe 12493	Undescribed Rare Truffles & False Truffl	Y	Y	P	coarse woody debris in fog belt	PISI, TSHE, PSME
Tuber sp. nov. #Trappe 2302	Undescribed Rare Truffles & False Truffl	Y	Y	P	coarse woody debris in fog belt	PISI, TSHE, PSME
Tylopilus pseudoscaber	Low elevation boletes	Y	Y	S	moist forest with coarse woody debris	PISI
Usnea hesperina	Rare Oceanic Influenced Lichens	Y	Y	H	broken dune forest	PICO
Usnea longissima	Riparian Lichens	Y	Y	H	wet forests & swamps	hardwood/conifer
Vespericola sierranus	Mollusks	Y	Y	S	spring seeps and leaf litter along streambanks	

Appendix D.6 Regional Forester Sensitive Species on the Siuslaw National Forest.

Note: **Bold face type indicates Federal classification as threatened or endangered.**

BIRDS

Common loon (Gavia immer)
Documented on Forest
Status: Regional Sensitive

Brown pelican (Pelecanus occidentalis)
Documented on Forest
Status: Federal Endangered

American white pelican (Pelecanus erythorhynchos)
Documented on Forest
Status: Regional Sensitive

Aleutian Canada Goose (Branta canadensis leucopareia)
Documented on Forest
Status: Federal Threatened

Ferruginous hawk (Buteo regalis)
Suspected on Forest
Status: Federal Category 2

Northern bald eagle (Haliaeetus leucocephalus)
Documented on Forest
Status: Federal Threatened

American peregrine falcon (Falco peregrinus anatum)
Documented on Forest
Status: Federal Endangered

Western snowy plover (Charadrius alexandrinus nivosus)
Documented on Forest
Status: Federal Threatened

Long-billed curlew (Numenius americanus)
Documented on Forest
Status: Federal Category 2

Northern spotted owl (Strix occidentalis caurina)
Documented on Forest
Status: Federal Threatened

Marbled murrelet (Brachyramphus marmoratus)
Documented on Forest
Status: Federal Threatened

MAMMALS

Pacific western big-eared bat (Plecotus townsendii townsendii)
Documented on Forest
Status: Federal Category 2

White-footed vole (Arborimus albipes)
Documented on Forest
Status: Federal Category 2

California wolverine (Gulo gulo luteus)
Suspected on Forest
Status: Federal Category 2

REPTILES AND AMPHIBIANS

California mountain kingsnake (Lampropeltis zonata)
Documented on Forest
Status: Regional Sensitive

Red-legged frog (Rana auroa)
Documented on Forst
Status: Federal Category 2

Northwestern pond turtle (Clemmys marmorata marmorata)
Documented on Forest
Status: Federal Category 2

INVERTEBRATES

Oregon silverspot butterfly (Speyeria zerene hippolyta)
Documented on Forest
Status: Federal Threatened

Alsea micro caddisfly (Ochrotrichia alsea)
Documented on Forest
Status: Federal Category 2

Haddock's caddisfly (Rhyacophila haddocki)
Documented on Forest
Status: Federal Category 2

FISH

Umpqua River Cutthroat Trout (Oncorhynchus clarki)
Documented on Forest
Status: Federal Proposed as Endangered

PLANTS

Pink sandverbena (Abronia umbellata breviflora)
Documented on Forest
Status: Federal Category 2, State Endangered

Bog anemone (Anemone oregana var. felix)
Suspected on Forest
Status: Federal Category 3C

Saddle mountain bittercress (Cardamine pattersonii)
Documented on Forest
Status: Federal Category C1, State Candidate

Salt marsh bird's beak (Cordylanthus maritimus ssp. palustris)
Documented on Forest
Status: Federal Category 2, State Candidate

Wandering daisy (Erigeron peregrinus ssp. peregrinus var. peregrinus)
Suspected on Forest
Status: Regional Sensitive

Elegant fawn-lily (Erythronium elegans)
Documented on Forest
Status: Federal Category 2, State Candidate

Queen-of-the-forest (Filipendula occidentalis)
Documented on Forest
Status: Federal Category 2, State Candidate

Western red avens (Geum triflorum var. companulatum)
Suspected on Forest
Status: Regional Sensitive

Whorled marsh pennywort (Hydrocotyle verticillata)
Documented on Forest
Status: Regional Sensitive

Rosy lewisia (Lewisia columbiana ssp. rupicola)
Suspected on Forest
Status: Regional Sensitive

Frye's moss (Limbella fryei)
Suspected on Forest
Status: Regional Sensitive, State Candidate

Northern bog club moss (Lycopodium inundatum)
Documented on Forest
Status: Regional Sensitive

Adder's-tongue (Ophioglossum vulgatum)
Documented on Forest
Status: Regional Sensitive

PLANTS, con't.

North Pacific plantain (Plantago macrocarpa)
Suspected on Forest
Status: Regional Sensitive

Kellogg's bluegrass (Poa kelloggii)
Suspected on Forest
Status: Regional Sensitive

Loose-flowered bluegrass (Poa laxiflora)
Documented on Forest
Status: Federal Category 3C

Pohlia moss (Pohlia sphagnicola)
Documented on Forest
Status: Regional Sensitive

Saddle mountain saxifrage (Saxifraga hitchcockiana)
Suspected on Forest
Status: Federal Category 2, State Candidate

Flett's groundsel (Senecio flettii)
Suspected on Forest
Status: Regional Sensitive

Bristly-stemmed sidalcea (Sidalcea hirtipes)
Documented on Forest
Status: Regional Sensitive, State Candidate

Cascade Head catchfly (Silene douglassii var. oraria)
Suspected on Forest
Status: Federal Category 2, State Candidate

Alaska large-awned sedge (Carex macrochaeta)
Suspected on Forest
Status: Regional Sensitive

Several-flowered sedge (Carex pluriflora)
Suspected on Forest
Status: Regional Sensitive

Tall bugbane (Cimicifuga elata)
Suspected on Forest
Federal Category 2, State Candidate

Frigid shooting star (Dodecatheon austrofrigidum)
Suspected on Forest
Regional Sensitive

Male fern (Dryopteris filix-mas)
Suspected on Forest
Status: Regional Sensitive

PLANTS, con't.

Indian rice or black lily (Fritillaria camschatcensis)
Suspected on Forest
Status: Regional Sensitive

Dwarf isopyrum (Isopyrum stipitatum)
Suspected on Forest
Status: Regional Sensitive

Wool-grass (Scirpus cyperinus)
Suspected on Forest
Status: Regional Sensitive

Humped bladderwort (Utricularia gibba)
Suspected on Forest
Status: Regional Sensitive

Lesser bladderwort (Utricularia minor)
Suspected on Forest
Status: Regional Sensitive

Water-meal (Wolffia columbiana)
Suspected on Forest
Status: Regional Sensitive

Water-meal (Wolffia punctata)
Suspected on Forest
Status: Regional Sensitive

APPENDIX D.7: Interior Forest Acres by Watershed on Federal Lands

FOURTH FIELD WATERSHED / Fifth Field Watershed		USFS			BLM			COMBINED FEDERAL		
	Interior Acres	% of WS USFS Interior	% FS that is Interior	Interior Acres	% of WS BLM Interior	% BLM that is Interior	Total Interior Acres	% of WS Federal Interior	% Fed'l that is Interior
WILSON-TRASK-NESTUCCA									
East Beaver	196	1.1%	3.6%	135	0.7%	8.0%	331	1.8%	4.6%
Kilchis River	0	0.0%	0.0%	13	0.1%	0.4%	13	0.1%	0.4%
Little Nestucca	782	2.1%	4.2%	0	0.0%	0.0%	782	2.1%	4.1%
Lower Nestucca	2927	3.2%	6.8%	623	0.7%	5.0%	3550	3.9%	6.4%
Lower NF Trask River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
Lower Trask River	0	0.0%	0.0%	20	0.2%	0.9%	20	0.2%	0.9%
Neskowin	1370	8.6%	16.6%	0	0.0%	0.0%	1370	8.6%	16.6%
Nestucca River	0	0.0%	0.0%	425	1.4%	1.9%	425	1.4%	1.9%
Sandlake	276	1.6%	3.9%	0	0.0%	0.0%	276	1.6%	3.9%
Three Rivers	928	3.8%	4.6%	0	0.0%	0.0%	928	3.8%	4.6%
Tillamook	10	0.1%	1.1%	2	0.0%	0.7%	12	0.1%	1.0%
Upper MF NF Trask	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
Wilson River	0	0.0%	0.0%	81	0.4%	2.6%	81	0.4%	2.6%
YAMHILL									
Willamina	150	1.4%	14.1%	0	0.0%	0.0%	150	1.4%	13.5%
Yamhill	861	3.6%	15.5%	0	0.0%	0.0%	861	3.6%	15.5%
SILETZ-YAQUINA									
Devils Lake	107	1.0%	5.5%	0	0.0%	0.0%	107	1.0%	5.5%
Rock	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
Salmon	1037	2.2%	10.8%	11	0.0%	0.4%	1048	2.2%	8.3%
Schooner/Drift (Siletz)	2605	6.8%	14.3%	47	0.1%	2.1%	2652	7.0%	12.9%
Siletz	1078	5.2%	25.0%	113	0.5%	23.2%	1191	5.7%	24.8%
Toledo	381	5.8%	10.7%	0	0.0%	0.0%	381	5.8%	10.5%
Upper Siletz	0	0.0%	0.0%	217	0.5%	1.8%	217	0.5%	1.8%
Yaquina/Big Elk	474	1.3%	2.9%	170	0.4%	6.8%	644	1.7%	3.4%
UPPER WILLAMETTE									
Marys Peak	2004	12.7%	24.6%	4	0.0%	0.6%	2008	12.7%	22.8%
Tumtum	47	1.0%	5.7%	0	0.0%	0.0%	47	1.0%	4.4%
ALSEA									
Alsea	4480	8.0%	11.9%	140	0.3%	6.4%	4620	8.3%	11.6%
Alsea Frontal	0	0.0%	0.0%	115	0.8%	2.4%	115	0.8%	2.4%
Beaver	1153	5.3%	11.3%	0	0.0%	0.0%	1153	5.3%	11.2%
Berry	35	1.0%	1.8%	0	0.0%	0.0%	35	1.0%	1.8%
Big/Rock/Cape	2687	10.9%	13.0%	0	0.0%	0.0%	2687	10.9%	13.0%
Blodgett	66	0.5%	0.8%	0	0.0%	0.0%	66	0.5%	0.8%
Drift (Alsea)	6277	14.2%	22.1%	748	1.7%	63.1%	7025	15.9%	23.7%
Fall	194	1.0%	5.8%	625	3.2%	10.8%	819	4.3%	9.0%
Five Rivers	2392	6.1%	7.2%	0	0.0%	0.0%	2392	6.1%	7.2%
Lobster/Lobster_Cr	897	2.4%	7.2%	439	1.2%	2.9%	1336	3.6%	4.8%
Mercer	210	2.0%	4.9%	0	0.0%	0.0%	210	2.0%	4.7%
North Fork Alsea	23	0.1%	2.5%	565	1.4%	2.8%	588	1.4%	2.8%
Seal Rock	11	0.2%	3.0%	0	0.0%	0.0%	11	0.2%	3.0%
South Fork Alsea	0	0.0%	0.0%	493	1.2%	2.1%	493	1.2%	2.1%
Tenmile/Cummins	5000	16.5%	19.2%	0	0.0%	0.0%	5000	16.5%	19.2%
Yachats	2798	10.1%	14.1%	0	0.0%	0.0%	2798	10.1%	13.9%

APPENDIX D.7: Interior Forest Acres by Watershed on Federal Lands

		USFS			BLM			COMBINED FEDERAL		
FOURTH FIELD WATERSHED			% of WS	% FS		% of WS	% BLM	Total	% of WS	% Fed'l
	Fifth Field Watershed	Interior	USFS	that is	Interior	BLM	that is	Interior	Federal	that is
		Acres	Interior	Interior	Acres	Interior	Interior	Acres	Interior	Interior
SIUSLAW										
	Deadwood	2848	5.8%	10.5%	77	0.2%	1.4%	2925	7.3%	9.0%
	Esmo Whitt	0	0.0%	0.0%	2144	0.0%	15.5%	2144	8.0%	15.5%
	Indian	3777	9.0%	14.9%	0	0.0%	0.0%	3777	12.3%	14.9%
	Knowles	0	0.0%	0.0%	161	0.0%	52.3%	161	4.4%	52.3%
	Lower Lake (includes Lake	0	0.0%	0.0%	1194	1.9%	7.5%	1194	3.6%	7.5%
	Lower Siuslaw	6887	2.7%	15.5%	562	0.1%	27.9%	7449	7.5%	16.0%
	Middle Siuslaw	0	0.0%	0.0%	1726	0.0%	5.9%	1726	2.8%	5.9%
	North Fork Siuslaw	4477	10.9%	14.2%	0	0.0%	0.0%	4477	10.9%	14.1%
	Upper Lake	0	0.0%	0.0%	87	0.3%	0.6%	87	0.3%	0.6%
	Upper Siuslaw	0	0.0%	0.0%	311	0.0%	2.1%	311	0.7%	2.1%
	Wildcat Creek	0	0.0%	0.0%	1146	0.0%	7.0%	1146	2.6%	7.0%
	Wolf Creek	0	0.0%	0.0%	676	0.0%	4.4%	676	1.8%	4.4%
UMPQUA										
	Lower Umpqua	5166	8.6%	39.1%	76	0.0%	2.1%	5242	8.7%	31.2%
	North Fork Smith	4727	10.8%	18.8%	253	0.0%	7.1%	4980	11.3%	17.4%
	Smith	6063	10.7%	33.5%	165	0.0%	2.0%	6228	10.9%	23.5%
	West Fork Smith	37	0.2%	4.6%	0	0.0%	0.0%	37	0.2%	0.3%
SILTCOOS										
	Siltcoos	1441	3.0%	7.8%	110	0.0%	13.7%	1551	3.2%	8.1%
	Tahkenitch	355	1.3%	4.7%	6	0.0%	1.7%	361	1.3%	4.6%

Appendix D.8 Dispersal Habitat, 50-11-40 Analysis

Acres of dispersal habitat (11" DBH and 40% crown closure) by 1/4 township on the Siuslaw National Forest. NOTE: 1/4 townships are counted 1-4 starting with the upper right and counting counter-clockwise.

	50-11-40 Analysis, North Half, March 1995				
			TOTAL	50-11-40	% MEETING
TOWNSHI	RANGE	QTR	ACRES	ACRES	50-11-40
3S	10W	1	683.43	262.27	38.38
3S	10W	2	1,520.22	646.03	42.50
3S	10W	3	1,901.86	1,325.05	69.67
3S	10W	4	4,166.39	1,890.32	45.37
3S	7W	3	616.17	461.38	74.88
3S	8W	2	281.98	225.53	79.98
3S	8W	3	1,915.49	1,393.84	72.77
3S	8W	4	3,019.58	1,810.84	59.97
3S	9W	1	4,576.03	2,866.15	62.63
3S	9W	2	1,966.85	804.37	40.90
3S	9W	3	439.24	361.53	82.31
3S	9W	4	1,628.50	882.28	54.18
4S	10W	1	2,181.66	1,458.50	66.85
4S	10W	2	4,012.69	3,260.82	81.26
4S	10W	4	2,151.87	1,254.04	58.28
4S	7W	2	1,080.08	777.39	71.98
4S	8W	1	3,960.57	2,865.10	72.34
4S	8W	2	5,065.76	4,679.38	92.37
4S	8W	3	5,269.15	4,192.13	79.56
4S	8W	4	5,015.55	4,034.42	80.44
4S	9W	1	4,819.37	3,826.76	79.40
4S	9W	2	5,016.12	4,005.78	79.86
4S	9W	3	4,528.72	3,265.50	72.11
4S	9W	4	5,195.53	4,435.22	85.37
5S	10W	1	3,617.03	2,043.67	56.50
5S	10W	2	340.31	269.58	79.22
5S	10W	3	1,271.65	858.3	67.49
5S	10W	4	3,443.76	1,812.37	52.63
5S	9W	1	4,979.28	4,185.79	84.06
5S	9W	2	4,786.59	3,671.56	76.71
5S	9W	3	3,778.55	2,185.88	57.85
5S	9W	4	3,380.83	2,247.13	66.47
6S	10W	1	2,727.51	1,378.51	50.54
6S	10W	2	4,857.88	4,032.72	83.01
6S	10W	3	2,280.30	1,427.75	62.61
6S	10W	4	1,843.62	1,078.10	58.48
6S	11W	1	2,871.49	2,272.75	79.15
6S	11W	4	421.1	83.39	19.80
6S	9W	1	872.64	427.07	48.94
6S	9W	2	2,806.11	1,523.31	54.29
7S	10W	1	2,715.15	1,038.58	38.25
7S	10W	2	4,626.01	2,008.68	43.42
7S	10W	3	3,516.32	1,683.84	47.89
7S	10W	4	4,499.86	2,288.41	50.86
7S	9W	2	342.01	254.53	74.42
7S	9W	3	188.19	146.2	77.69
8S	10W	1	5,952.23	4,232.68	71.11
8S	10W	2	3,825.33	3,061.87	80.04
8S	10W	3	73	73	100.00

8S	10W	4	1,626.65	1,103.30	67.83

	50-11-40 Analysis, South Half, 3/12/95					
			TOTAL	50-11-40	% MEETING	
TOWNSHI	RANGE	QTR	ACRES	ACRES	50-11-40	
12S	10W	1	4,088.54	2,965.93	72.54	
12S	10W	2	5,017.67	3,727.56	74.29	
12S	10W	3	5,301.34	3,903.88	73.64	
12S	10W	4	311.92	219.87	70.49	
12S	11W	1	1,870.09	948.88	50.74	
12S	11W	3	154.49	150.91	97.68	
12S	11W	4	4,292.42	2,510.38	58.48	
12S	7W	1	2,097.19	1,832.18	87.36	
12S	7W	2	580.29	492.8	84.92	
12S	7W	3	1,836.66	1,518.61	82.68	
12S	7W	4	4,835.19	3,758.67	77.74	
12S	8W	1	1,926.10	1,272.53	66.07	
12S	8W	2	1,487.57	1,188.42	79.89	
12S	8W	3	1,138.49	827.18	72.66	
12S	8W	4	1,898.66	1,319.13	69.48	
12S	9W	1	2,738.11	1,880.36	68.67	
12S	9W	2	3,955.98	2,560.78	64.73	
12S	9W	3	2,652.48	2,001.01	75.44	
12S	9W	4	4,069.52	2,399.78	58.97	
13S	10W	1	5,536.87	4,892.17	88.36	
13S	10W	2	5,165.25	4,945.86	95.75	
13S	10W	3	4,109.32	3,527.40	85.84	
13S	10W	4	3,793.70	2,934.19	77.34	
13S	11W	1	2,999.99	1,767.39	58.91	
13S	11W	2	157.13	131.27	83.54	
13S	11W	3	246.05	121.21	49.26	
13S	11W	4	2,625.02	1,583.24	60.31	
13S	7W	1	413.5	386.01	93.35	
13S	9W	1	1,560.47	990.68	63.49	
13S	9W	2	2,031.12	1,713.71	84.37	
13S	9W	3	4,703.62	3,364.14	71.52	
13S	9W	4	1,641.52	1,220.48	74.35	
14S	10W	1	5,178.20	3,644.22	70.38	
14S	10W	2	3,966.26	2,728.41	68.79	
14S	10W	3	4,325.52	2,675.71	61.86	
14S	10W	4	4,811.35	3,019.07	62.75	
14S	11W	1	6,111.94	3,502.35	57.30	
14S	11W	2	6,286.82	3,891.08	61.89	
14S	11W	3	4,726.29	4,054.96	85.80	
14S	11W	4	3,683.94	2,442.20	66.29	
14S	12W	1	2,060.68	1,774.90	86.13	
14S	12W	4	1,635.76	1,493.12	91.28	
14S	9W	1	3,397.51	2,256.90	66.43	
14S	9W	2	3,876.84	2,996.30	77.29	
14S	9W	3	4,638.75	2,827.55	60.95	
14S	9W	4	3,644.80	2,327.96	63.87	
15S	10W	1	4,644.80	2,888.61	62.19	
15S	10W	2	3,516.64	2,548.88	72.48	
15S	10W	3	4,222.67	3,087.29	73.11	

15S	10W	4	4,580.81	2,991.78	65.31	
15S	11W	1	4,070.64	3,195.63	78.50	
15S	11W	2	4,356.26	3,806.24	87.37	
15S	11W	3	5,374.41	5,248.51	97.66	
15S	11W	4	4,926.41	3,363.42	68.27	
15S	12W	1	3,723.29	3,163.40	84.96	
15S	12W	4	3,845.03	3,101.12	80.65	
15S	8W	2	593.4	440.79	74.28	
15S	8W	3	4,756.53	3,542.89	74.48	
15S	9W	1	4,427.57	2,793.04	63.08	
15S	9W	2	4,778.11	3,286.31	68.78	
15S	9W	3	5,826.07	3,816.31	65.50	
15S	9W	4	5,348.44	2,905.43	54.32	
16S	10W	1	4,609.49	3,062.37	66.44	
16S	10W	2	5,005.11	3,350.34	66.94	
16S	10W	3	4,908.12	3,662.34	74.62	
16S	10W	4	3,785.84	2,756.05	72.80	
16S	11W	1	4,243.54	3,242.90	76.42	
16S	11W	2	4,487.01	4,252.25	94.77	
16S	11W	3	4,758.35	3,295.94	69.27	
16S	11W	4	5,576.47	3,684.28	66.07	
16S	12W	1	3,944.58	3,623.59	91.86	
16S	12W	3	2.85	2.85	100.00	
16S	12W	4	3,481.17	2,401.15	68.98	
16S	8W	1	315.41	264.73	83.93	
16S	8W	2	2,793.72	2,125.73	76.09	
16S	8W	3	192.94	124.38	64.47	
16S	9W	1	5,307.82	3,387.86	63.83	
16S	9W	2	5,052.42	3,164.66	62.64	
16S	9W	3	5,093.16	2,666.01	52.34	
16S	9W	4	3,817.07	2,723.50	71.35	
17S	10W	1	4,851.89	2,965.37	61.12	
17S	10W	2	5,469.62	3,504.87	64.08	
17S	10W	3	5,142.39	3,765.31	73.22	
17S	10W	4	3,554.58	3,016.60	84.87	
17S	11W	1	4,570.86	3,090.53	67.61	
17S	11W	2	5,137.02	3,813.70	74.24	
17S	11W	3	4,083.92	3,115.27	76.28	
17S	11W	4	4,196.32	3,158.34	75.26	
17S	12W	1	4,111.86	2,300.18	55.94	
17S	12W	3	2.92	2.92	100.00	
17S	12W	4	549.38	304.29	55.39	
17S	9W	1	907.73	753.08	82.96	
17S	9W	2	4,882.15	2,960.50	60.64	
17S	9W	3	2,865.51	2,232.98	77.93	
17S	9W	4	1,005.42	997.81	99.24	
18S	10W	1	634.48	301.37	47.50	
18S	10W	2	3,298.05	2,210.79	67.03	
18S	10W	3	4,490.51	2,912.22	64.85	
18S	10W	4	3,429.36	2,532.14	73.84	
18S	11W	1	2,904.77	2,029.91	69.88	
18S	11W	2	1,210.07	657.7	54.35	

18S	11W	3	1,045.24	808.18	77.32	
18S	11W	4	5,106.02	3,775.21	73.94	
18S	12W	1	14.5	9.12	62.90	
18S	9W	1	1,531.53	1,469.45	95.95	
18S	9W	2	1,327.54	1,322.04	99.59	
18S	9W	3	999.32	682.95	68.34	
18S	9W	4	1,375.83	1,064.60	77.38	
19S	10W	1	4,642.64	2,744.65	59.12	
19S	10W	2	5,664.73	3,545.86	62.60	
19S	10W	3	5,535.50	4,071.53	73.55	
19S	10W	4	5,597.14	3,689.67	65.92	
19S	11W	1	3,941.92	2,260.27	57.34	
19S	11W	2	975.47	621.52	63.71	
19S	11W	3	1,268.19	885.23	69.80	
19S	11W	4	3,177.25	2,395.80	75.40	
19S	9W	1	593.64	406.67	68.50	
19S	9W	2	3,628.32	3,243.77	89.40	
19S	9W	3	5,301.68	4,807.31	90.68	
20S	10W	1	259.79	259.58	99.92	
20S	10W	2	1,495.65	1,212.78	81.09	
20S	10W	3	755.81	584.48	77.33	
20S	10W	4	137.33	100.7	73.33	
20S	11W	1	3,437.03	2,239.73	65.16	
20S	11W	2	754.72	332.3	44.03	
20S	11W	4	2,438.36	1,619.60	66.42	
20S	12W	1	76.36		0.00	
20S	9W	2	2,479.21	1,328.86	53.60	
21S	10W	1	3,100.65	2,707.76	87.33	
21S	10W	2	2,584.47	2,267.68	87.74	
21S	10W	3	5,714.83	4,837.24	84.64	
21S	10W	4	3,760.94	3,384.53	89.99	
21S	11W	1	193.93	185.76	95.79	
21S	11W	3	775.45	729.74	94.11	
21S	11W	4	4,200.04	3,789.96	90.24	
21S	12W	4	272.3	177.81	65.30	
22S	10W	1	2,031.35	1,838.29	90.50	
22S	10W	2	3,018.72	2,410.70	79.86	
22S	11W	1	88.99	68.11	76.54	

Appendix D.9 Mature Conifer within Owl Home Ranges

Acres of mature conifer within the median home range radius (1.5 mile) of owl pairs and territorial singles on Federal lands expressed as a percentage of all habitat within the same radius by 5th field watershed.

Appendix D9: USFS and BLM Owl Median Home Range Condition by Fifth Field Watersheds																
			USFS					BLM				COMBINED FEDERAL				
FOURTH FIELD WS	Median	Median	% of WS	% of WS	% Habitat	Median	Median	% of WS	% of WS	% Habitat	Median	Median	% of WS	% of WS	% Habitat
	Hm. Range	Hm. Range	Median	Hm. Range	in Median	Hm. Range	Hm. Range	Median	Hm. Range	in Median	Hm. Rang	Hm. Range	Median	Hm. Range	in Median
Fifth Field WS	Acres	Habitat	Hm. Range	Habitat	Hm. Range	Acres	Habitat	Hm. Range	Habitat	Hm. Range	Acres	Habitat	Hm. Range	Habitat	Hm. Range
WILSON-TRASK-NESTUCCA															
East Beaver	0	0	0.0%	0.0%	0.0%	319	244	1.7%	1.3%	76.5%	319	244	1.7%	1.3%	76.5%
Kilchis River	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Little Nestucca	2119	800	5.6%	2.1%	37.8%	0	0	0.0%	0.0%	0.0%	2119	800	5.6%	2.1%	37.8%
Lower Nestucca	4977	2881	5.5%	3.2%	57.9%	2916	1587	3.2%	1.7%	54.4%	7893	4468	8.7%	4.9%	56.6%
Lower NF Trask River	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Lower Trask River	0	0	0.0%	0.0%	0.0%	1039	271	8.1%	2.1%	26.1%	1039	271	8.1%	2.1%	26.1%
Neskowin	5212	2875	32.6%	18.0%	55.2%	0	0	0.0%	0.0%	0.0%	5212	2875	32.6%	18.0%	55.2%
Nestucca River	0	0	0.0%	0.0%	0.0%	7470	3046	24.5%	10.0%	40.8%	7470	3046	24.5%	10.0%	40.8%
Sandlake	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Three Rivers	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Tillamook	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Upper MF NF Trask	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Wilson River	0	0	0.0%	0.0%	0.0%	2157	730	11.8%	4.0%	33.8%	2157	730	11.8%	4.0%	33.8%
YAMHILL															
Willamina	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Yamhill	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
SILETZ-YAQUINA															
Devils Lake	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Rock	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Salmon	5386	2532	11.3%	5.3%	47.0%	0	0	0.0%	0.0%	0.0%	5386	2532	11.3%	5.3%	47.0%
Schooner/Drift (Siletz)	6737	3821	17.7%	10.0%	56.7%	0	0	0.0%	0.0%	0.0%	6737	3821	17.7%	10.0%	56.7%
Siletz	3760	2579	18.0%	12.3%	68.6%	0	0	0.0%	0.0%	0.0%	3760	2579	18.0%	12.3%	68.6%
Toledo	520	281	7.9%	4.3%	54.0%	0	0	0.0%	0.0%	0.0%	520	281	7.9%	4.3%	54.0%
Upper Siletz	0	0	0.0%	0.0%	0.0%	3106	1076	7.0%	2.4%	34.6%	3106	1076	7.0%	2.4%	34.6%
Yaquina/Big Elk	3667	956	9.7%	2.5%	26.1%	0	0	0.0%	0.0%	0.0%	3667	956	9.7%	2.5%	26.1%
UPPER WILLAMETTE															
Marys Peak	5791	3296	36.6%	20.8%	56.9%	0	0	0.0%	0.0%	0.0%	5791	3296	36.6%	20.8%	56.9%
Tumtum	491	290	10.8%	6.4%	59.1%	0	0	0.0%	0.0%	0.0%	491	290	10.8%	6.4%	59.1%

Appendix D9: USFS and BLM Owl Median Home Range Condition by Fifth Field Watersheds																
			USFS					BLM				COMBINED FEDERAL				
FOURTH FIELD WS	Median	Median	% of WS	% of WS	% Habitat	Median	Median	% of WS	% of WS	% Habitat		Median	Median	% of WS	% of WS	% Habitat
	Hm. Range	Hm. Range	Median	Hm. Range	in Median	Hm. Range	Hm. Range	Median	Hm. Range	in Median		Hm. Rang	Hm. Range	Median	Hm. Range	in Median
Fifth Field WS	Acres	Habitat	Hm. Range	Habitat	Hm. Range	Acres	Habitat	Hm. Range	Habitat	Hm. Range		Acres	Habitat	Hm. Range	Habitat	Hm. Range
ALSEA																
Alsea	12115	5782	21.7%	10.4%	47.7%	780	371	1.4%	0.7%	47.6%		12895	6153	23.1%	11.0%	47.7%
Alsea Frontal	0	0	0.0%	0.0%	0.0%	949	477	6.4%	3.2%	50.3%		949	477	6.4%	3.2%	50.3%
Beaver	1296	673	6.0%	3.1%	51.9%	0	0	0.0%	0.0%	0.0%		1296	673	6.0%	3.1%	51.9%
Berry	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%		0	0	0.0%	0.0%	0.0%
Big/Rock/Cape	12902	6040	52.4%	24.5%	46.8%	0	0	0.0%	0.0%	0.0%		12902	6040	52.4%	24.5%	46.8%
Blodgett	3137	517	22.7%	3.7%	16.5%	0	0	0.0%	0.0%	0.0%		3137	517	22.7%	3.7%	16.5%
Drift (Alsea)	21078	12646	47.7%	28.6%	60.0%	0	0	0.0%	0.0%	0.0%		21078	12646	47.7%	28.6%	60.0%
Fall	137	59	0.7%	0.3%	43.1%	116	64	0.6%	0.3%	55.2%		253	123	1.3%	0.6%	48.6%
Five Rivers	12836	5647	32.9%	14.5%	44.0%	0	0	0.0%	0.0%	0.0%		12836	5647	32.9%	14.5%	44.0%
Lobster/Lobster_Cr	4882	1840	13.1%	4.9%	37.7%	6522	1773	17.5%	4.8%	27.2%		11404	3613	30.6%	9.7%	31.7%
Mercer	1876	935	18.2%	9.1%	49.8%	0	0	0.0%	0.0%	0.0%		1876	935	18.2%	9.1%	49.8%
North Fork Alsea	412	91	1.0%	0.2%	22.1%	3944	1333	9.5%	3.2%	33.8%		4356	1424	10.5%	3.4%	32.7%
Seal Rock	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%		0	0	0.0%	0.0%	0.0%
South Fork Alsea	0	0	0.0%	0.0%	0.0%	14079	4513	34.9%	11.2%	32.1%		14079	4513	34.9%	11.2%	32.1%
Tenmile/Cummins	5724	3555	18.9%	11.7%	62.1%	0	0	0.0%	0.0%	0.0%		5724	3555	18.9%	11.7%	62.1%
Yachats	15706	6281	56.6%	22.6%	40.0%	0	0	0.0%	0.0%	0.0%		15706	6281	56.6%	22.6%	40.0%
SIUSLAW																
Deadwood	16697	7830	41.5%	19.4%	46.9%	0	0	0.0%	0.0%	0.0%		16697	7830	41.5%	19.4%	46.9%
Esmo Whitt	0	0	0.0%	0.0%	0.0%	4652	2002	17.4%	7.5%	43.0%		4652	2002	17.4%	7.5%	43.0%
Indian	18426	9440	59.8%	30.7%	51.2%	0	0	0.0%	0.0%	0.0%		18426	9440	59.8%	30.7%	51.2%
Knowles	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%		0	0	0.0%	0.0%	0.0%
Lower Lake (includes	0	0	0.0%	0.0%	0.0%	9622	5375	29.1%	16.3%	55.9%		9622	5375	29.1%	16.3%	55.9%
Lower Siuslaw	31484	16866	31.5%	16.9%	53.6%	0	0	0.0%	0.0%	0.0%		31484	16866	31.5%	16.9%	53.6%
Middle Siuslaw	0	0	0.0%	0.0%	0.0%	23044	8646	37.2%	14.0%	37.5%		23044	8646	37.2%	14.0%	37.5%
North Fork Siuslaw	18885	9698	46.1%	23.7%	51.4%	0	0	0.0%	0.0%	0.0%		18885	9698	46.1%	23.7%	51.4%
Upper Lake	0	0	0.0%	0.0%	0.0%	7146	1187	22.6%	3.8%	16.6%		7146	1187	22.6%	3.8%	16.6%
Upper Siuslaw	0	0	0.0%	0.0%	0.0%	2120	915	5.0%	2.1%	43.2%		2120	915	5.0%	2.1%	43.2%
Wildcat Creek	0	0	0.0%	0.0%	0.0%	8610	3035	19.7%	6.9%	35.2%		8610	3035	19.7%	6.9%	35.2%
Wolf Creek	0	0	0.0%	0.0%	0.0%	11598	4066	30.6%	10.7%	35.1%		11598	4066	30.6%	10.7%	35.1%
UMPQUA																
Lower Umpqua	8767	6948	14.5%	11.5%	79.3%	0	0	0.0%	0.0%	0.0%		8767	6948	14.5%	11.5%	79.3%
North Fork Smith	22528	13136	51.3%	29.9%	58.3%	0	0	0.0%	0.0%	0.0%		22528	13136	51.3%	29.9%	58.3%
Smith	12189	8976	21.4%	15.8%	73.6%	0	0	0.0%	0.0%	0.0%		12189	8976	21.4%	15.8%	73.6%
West Fork Smith	182	73	1.0%	0.4%	40.1%	0	0	0.0%	0.0%	0.0%		182	73	1.0%	0.4%	40.1%
SILTCOOS																
Siltcoos	11183	4653	23.2%	9.7%	41.6%	0	0	0.0%	0.0%	0.0%		11183	4653	23.2%	9.7%	41.6%
Tahkenitch	2276	1283	8.3%	4.7%	56.4%	0	0	0.0%	0.0%	0.0%		2276	1283	8.3%	4.7%	56.4%

Appendix D.10: USFS Murrelet Area Condition by Fifth Field Watershed						
				USFS		
FOURTH FIELD WS		Murrelet	Murrelet	% of WS	% of WS	% Murrelet
		Area	Area	Murrelet	Murrelet	Area
	Fifth Field WS	Acres	Habitat	Area	Area Habitat	Habitat
WILSON-TRASK-NESTUCCA						
	East Beaver	1863	431	10.0%	2.3%	23.1%
	Kilchis River	0	0	0.0%	0.0%	0.0%
	Little Nestucca	3512	1512	9.3%	4.0%	43.1%
	Lower Nestucca	2401	1104	2.6%	1.2%	46.0%
	Lower NF Trask River		0	0.0%	0.0%	0.0%
	Lower Trask River	0	0	0.0%	0.0%	0.0%
	Neskowin	810	331	5.1%	2.1%	40.9%
	Nestucca River		0	0.0%	0.0%	0.0%
	Sandlake	1430	461	8.4%	2.7%	32.2%
	Three Rivers	0	0	0.0%	0.0%	0.0%
	Tillamook	50	3	0.5%	0.0%	6.0%
	Upper MF NF Trask		0	0.0%	0.0%	0.0%
	Wilson River		0	0.0%	0.0%	0.0%
YAMHILL						
	Willamina	0	0	0.0%	0.0%	0.0%
	Yamhill	0	0	0.0%	0.0%	0.0%
SILETZ-YAQUINA						
	Devils Lake	544	193	5.2%	1.9%	35.5%
	Rock		0	0.0%	0.0%	0.0%
	Salmon	2411	1149	5.1%	2.4%	47.7%
	Schooner/Drift (Sil	2397	1180	6.3%	3.1%	49.2%
	Schooner/Drift (Sil	2397	1180	6.3%	3.1%	49.2%
	Siletz	369	262	1.8%	1.3%	71.0%
	Toledo	50	22	0.8%	0.3%	44.0%
	Upper Siletz		0	0.0%	0.0%	0.0%
	Yaquina/Big Elk	39	7	0.1%	0.0%	17.9%
UPPER WILLAMETTE						
	Marys Peak	1312	897	8.3%	5.7%	68.4%
	Tumtum	13	8	0.3%	0.2%	61.5%
ALSEA						
	Alsea	10830	4679	19.4%	8.4%	43.2%
	Alsea Frontal		0	0.0%	0.0%	0.0%
	Beaver	449	392	2.1%	1.8%	87.3%
	Berry	333	134	9.6%	3.9%	40.2%
	Big/Rock/Cape	6170	3349	25.1%	13.6%	54.3%
	Blodgett	427	218	3.1%	1.6%	51.1%
	Drift (Alsea)	1863	431	4.2%	1.0%	23.1%
	Fall	128	35	0.7%	0.2%	27.3%
	Five Rivers	9693	4529	24.8%	11.6%	46.7%
	Lobster/Lobster_Cr	1311	544	3.5%	1.5%	41.5%
	Mercer	1094	455	10.6%	4.4%	41.6%
	North Fork Alsea	0	0	0.0%	0.0%	0.0%
	Seal Rock	0	0	0.0%	0.0%	0.0%
	South Fork Alsea	0	0	0.0%	0.0%	0.0%
	Tenmile/Cummins	6539	3930	21.6%	13.0%	60.1%
	Yachats	8832	4948	31.8%	17.8%	56.0%

Appendix D.10: USFS Murrelet Area Condition by Fifth Field Watershed						
				USFS		
FOURTH FIELD WS		Murrelet	Murrelet	% of WS	% of WS	% Murrelet
		Area	Area	Murrelet	Murrelet	Area
	Fifth Field WS	Acres	Habitat	Area	Area Habitat	Habitat
SIUSLAW						
	Deadwood	2991	1165	7.4%	2.9%	39.0%
	Esmo Whitt		0	0.0%	0.0%	0.0%
	Indian	5898	3220	19.2%	10.5%	54.6%
	Knowles		0	0.0%	0.0%	0.0%
	Lower Lake (includes Lake)		0	0.0%	0.0%	0.0%
	Lower Siuslaw	7138	4047	7.1%	4.0%	56.7%
	Lower Siuslaw	7138	4047	7.1%	4.0%	56.7%
	Middle Siuslaw		0	0.0%	0.0%	0.0%
	North Fork Siuslaw	9286	4649	22.7%	11.4%	50.1%
	Upper Lake		0	0.0%	0.0%	0.0%
	Upper Siuslaw		0	0.0%	0.0%	0.0%
	Wildcat Creek		0	0.0%	0.0%	0.0%
	Wolf Creek		0	0.0%	0.0%	0.0%
UMPQUA						
	Lower Umpqua	1448	1181	2.4%	2.0%	81.6%
	North Fork Smith	4155	2820	9.5%	6.4%	67.9%
	Smith	677	340	1.2%	0.6%	50.2%
	Smith	677	340	1.2%	0.6%	50.2%
	West Fork Smith	467	134	2.7%	0.8%	28.7%
SILTCOOS						
	Siltcoos	2158	1012	4.5%	2.1%	46.9%
	Tahkenitch	1052	714	3.9%	2.6%	67.9%

Appendix D.11 Species Associated with Riparian Reserves

Species that are strong associates of riparian reserves within the range of the Northern spotted owl and are suspected or known to occur in the Coast Range of Oregon are listed on the following table.

Appendix 2 -TERRESTRIAL PORTION of ECOSYSTEM ANALYSIS

Following is a list of species that must be considered as part of the Ecosystem Analysis when adjustments to Riparian Reserve boundaries are being considered. Those that are marked with an asterisk (*) are also survey and manage species.

BRYOPHYTES
Kurzia makinoana*
Marsupella emarginata var. aquatica*
Scouleria marginata*
Tritomaria exsectiformis*

LICHENS
Cetrelia cetrarioides*
Collema nigrescens*
Dermatocarpon luridum*
Hydrothyria venosa*
Leptogium burnetiae var. hirsutum*
Leptogium cyanescens*
Leptogium rivale*
Leptogium saturninum*
Leptogium teretiusculum*
Platismatia lacunosa*
Ramalina thrausta*
Usnea longissima*

FUNGI
Galerina sphagnicola*
Helvella compressa*
Helvella crassitunicata*
Helvella elastica*
Helvella maculata*
Polyozellus multiplex*
Phlogiotis helvelloides*
Rickenella setipes*

VASCULAR PLANTS
Adiantum pedatum
Aralia californica
Asarum caudatum
Bensoniella oregana*
Botrychium minganese*
Chamaecyparis lawsoniana
Cimicifuga elata
Cimicifuga laciniata
Coptis trifolia*
Corydalis aquae-gelidae*
Cypripedium fasciculatum (southwestern Oregon)*
Dryopteris austriaca
Galium kamtschaticum*
Gymnocarpium dryopteris
Habenaria orbiculata*
Habenaria saccata

Isopyrum hallii
Lysichiton americanum
Menziesia ferruginea
Mitella breweri
Mitella caulescens
Mitella ovalis
Mitella pentandra
Poa laxiflora
Scoliopus bigeloveii*
Scoliopus hallii
Streptopus amplexifolius
Streptopus roseus
Taxus brevifolia
Tiarella laciniata
Tiarella unifoliata
Vaccinium membranaceum
Viola glabella

MOLLUSKS
Land Snails
Ancotrema voyanum*
Cryptomastix devia*
Cryptomastix hendersoni*
Helminthoglypta hertleini*
Helminthoglypta talmadgei*
Megomphix hemphilli*
Monadenia callipeplus

Monadenia chaceana*
Monadenia churchi*
Monadenia fidelis celeuthia
Monadenia fidelis flava
Monadenia fidelis klamathica*
Monadenia fidelis leonina
Monadenia fidelis minor*
Monadenia fidelis ochromphalus*
Monadenia fidelis salmonensis
Monadenia scottiana
Monadenia setosa
Trilobopsis tehamana*
Vertigo n. sp.*
Vespericola depressa
Vespericola euthales
Vespericola pressleyi*
Vespericola shasta*
Vespericola sierrana
Vespericola undescribed #1
Vespericola undescribed #2

MOLLUSKS
<u>Slugs</u>
Deroceras hesperium*
Hemphillia burringtoni*
Hemphillia glandulosa*
Hemphillia malonei*

Hemphillia pantherina*
Prophysaon dubium*

MOLLUSKS
Riparian
Fluminicola n. sp. 2*
Fluminicola n. sp. 3
Fluminicola n. sp. 4
Fluminicola n. sp. 5
Fluminicola n. sp. 6
Fluminicola n. sp. 7
Fluminicola n. sp. 8
Fluminicola n. sp. 9
Fluminicola n. sp. 10
Fluminicola n. sp. 11*
Fluminicola n. sp. 12
Fluminicola n. sp. 14*
Fluminicola n. sp. 15*
Fluminicola n. sp. 16*
Fluminicola n. sp. 17*
Fluminicola n. sp. 18*
Fluminicola n. sp. 19*
Fluminicola seminalis*
Helisoma newberryi newberryi
Juga (C.) acutifilosa
Juga (J.) n. sp. 1
Juga (O.) n. sp. 1

Juga (O.) n. sp. 2*
Juga (O.) n. sp. 3*
Juga (Oreobasis) orickensis
Juga hemphilli dallesensis
Juga hemphilli hemphilli
Juga hemphilli n. subsp. 1
Lanx patelloides
Lyogyrus n. sp. 1*
Lyogyrus n. sp. 3*
Pyrgulopsis intermedia
Vorticifex klamathensis sinitsini*
Vorticifex neritoides

AMPHIBIANS
Black salamander
Cascade torrent salamander
Columbia torrent salamander
Cope's giant salamander
Dunn's salamander
Northwestern salamander
Pacific giant salamander
Olympic torrent salamander
Southern torrent salamander
Tailed frog
Van Dyke's salamander (Cascades)*
Van Dyke's salamander (Coastal, Olympic)

BIRDS
Marbled murrelet
Northern spotted owl

MAMMALS
Marten
Red tree vole (P.longicaudus)*

Appendix D.12 Riparian Reserve Condition in Late-Successional Reserves

The existing vegetation condition of the Riparian Reserves, expressed as the percentage of natural stands and managed stands, is listed by 5th field watershed. The data was generated only for lands allocated to Late-Successional Reserves. Not all the streams in the Study Area have been inventoried or mapped, therefore some of the watersheds show lower proportions of Riparian Reserves than others.

Appendix D.12: USFS and BLM Riparian Reserve Condition by Fifth Field Watershed

			USFS					BLM				COMBINED FEDERAL			
FOURTH FIELD WS	Managed Riparian Acres	Natural Riparian Acres	% of WS Managed Riparian	% of WS Natural Riparian	% of Riparian Natural	Managed Riparian Acres	Natural Riparian Acres	% of WS Managed Riparian	% of WS Natural Riparian	% of Riparian Natural	Managed Riparian Acres	Natural Riparian Acres	% of WS Managed Riparian	% of WS Natural Riparian	% of Riparian Natural
Fifth Field Watershed															
WILSON-TRASK-NESTUCCA															
East Beaver	787	1,016	4.2%	5.4%	56.4%	0	0	0.0%	0.0%	0.0%	787	1,016	4.2%	5.4%	56.4%
Kilchis River*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Little Nestucca	2,709	3,925	7.2%	10.4%	59.2%	0	0	0.0%	0.0%	0.0%	2,709	3,925	7.2%	10.4%	59.2%
Lower Nestucca	3,276	13,173	3.6%	14.5%	80.1%	0	0	0.0%	0.0%	0.0%	3,276	13,173	3.6%	14.5%	80.1%
Lower NF Trask River*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Lower Trask River*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Neskowin	2,218	3,494	13.9%	21.9%	61.2%	0	0	0.0%	0.0%	0.0%	2,218	3,494	13.9%	21.9%	61.2%
Nestucca River*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Sandlake	255	674	1.5%	4.0%	72.6%	0	0	0.0%	0.0%	0.0%	255	674	1.5%	4.0%	72.6%
Three Rivers	794	4,208	3.3%	17.3%	84.1%	0	0	0.0%	0.0%	0.0%	794	4,208	3.3%	17.3%	84.1%
Tillamook	23	2	0.2%	0.0%	8.0%	0	0	0.0%	0.0%	0.0%	23	2	0.2%	0.0%	8.0%
Upper MF NF Trask*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Wilson River*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
YAMHILL															
Willamina	115	237	1.1%	2.2%	67.3%	0	0	0.0%	0.0%	0.0%	115	237	1.1%	2.2%	67.3%
Yamhill	866	1,893	3.6%	7.9%	68.6%	0	0	0.0%	0.0%	0.0%	866	1,893	3.6%	7.9%	68.6%
SILETZ-YAQUINA															
Devils Lake	929	451	8.9%	4.3%	32.7%	0	0	0.0%	0.0%	0.0%	929	451	8.9%	4.3%	32.7%
Rock*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Salmon	2,930	4,575	6.2%	9.6%	61.0%	0	0	0.0%	0.0%	0.0%	2,930	4,575	6.2%	9.6%	61.0%
Schooner/Drift (Siletz)	5,947	7,013	15.6%	18.4%	54.1%	0	0	0.0%	0.0%	0.0%	5,947	7,013	15.6%	18.4%	54.1%
Siletz	801	2,438	3.8%	11.6%	75.3%	0	0	0.0%	0.0%	0.0%	801	2,438	3.8%	11.6%	75.3%
Toledo	946	1,590	14.3%	24.1%	62.7%	0	0	0.0%	0.0%	0.0%	946	1,590	14.3%	24.1%	62.7%
Upper Siletz*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Yaquina/Big Elk	2,940	4,777	7.8%	12.6%	61.9%	550	726	1.5%	1.9%	56.9%	3,490	5,503	9.2%	14.5%	61.2%
UPPER WILLAMETTE															
Marys Peak	1,262	3,044	8.0%	19.2%	70.7%	0	0	0.0%	0.0%	0.0%	1,262	3,044	8.0%	19.2%	70.7%
Tumtum	90	265	2.0%	5.9%	74.6%	47	93	1.0%	2.1%	66.4%	137	358	3.0%	7.9%	72.3%

* No data available

Note: Riparian reserve condition data are only for lands allocated to Late-Successional Reserves.

Appendix D.12: USFS and BLM Riparian Reserve Condition by Fifth Field Watershed

	USFS					BLM					COMBINED FEDERAL				
FOURTH FIELD WS	Managed Riparian	Natural Riparian	% of WS Managed	% of WS Natural	% of Riparian	Managed Riparian	Natural Riparian	% of WS Managed	% of WS Natural	% of Riparian	Managed Riparian	Natural Riparian	% of WS Managed	% of WS Natural	% of Riparian
Fifth Field Watershed	Acres	Acres	Riparian	Riparian	Natural	Acres	Acres	Riparian	Riparian	Natural	Acres	Acres	Riparian	Riparian	Natural
ALSEA															
Alsea	6,767	13,422	12.1%	24.1%	66.5%	317	514	0.6%	0.9%	61.9%	7,084	13,936	12.7%	25.0%	66.3%
Alsea Frontal	0	0	0.0%	0.0%	0.0%	1,124	1,648	7.6%	11.2%	59.5%	1,124	1,648	7.6%	11.2%	59.5%
Beaver	3,249	3,678	15.0%	17.0%	53.1%	0	0	0.0%	0.0%	0.0%	3,249	3,678	15.0%	17.0%	53.1%
Berry	9	161	0.3%	4.6%	94.7%	0	0	0.0%	0.0%	0.0%	9	161	0.3%	4.6%	94.7%
Big/Rock/Cape	5,511	11,217	22.4%	45.5%	67.1%	0	0	0.0%	0.0%	0.0%	5,511	11,217	22.4%	45.5%	67.1%
Blodgett	4,157	851	30.1%	6.2%	17.0%	0	0	0.0%	0.0%	0.0%	4,157	851	30.1%	6.2%	17.0%
Drift (Alsea)	3,713	12,753	8.4%	28.9%	77.5%	0	0	0.0%	0.0%	0.0%	3,713	12,753	8.4%	28.9%	77.5%
Fall	257	356	1.3%	1.8%	58.1%	1,236	2,004	6.4%	10.4%	61.9%	1,493	2,360	7.7%	12.2%	61.3%
Five Rivers	6,189	7,435	15.9%	19.0%	54.6%	0	0	0.0%	0.0%	0.0%	6,189	7,435	15.9%	19.0%	54.6%
Lobster/Lobster_Cr	3,315	3,743	8.9%	10.0%	53.0%	2,941	4,862	7.9%	13.0%	62.3%	6,256	8,605	16.8%	23.1%	57.9%
Mercer	551	1,781	5.4%	17.3%	76.4%	0	0	0.0%	0.0%	0.0%	551	1,781	5.4%	17.3%	76.4%
North Fork Alsea	156	246	0.4%	0.6%	61.2%	2,299	7,137	5.5%	17.2%	75.6%	2,455	7,383	5.9%	17.8%	75.0%
Seal Rock	0	4	0.0%	0.1%	100.0%	0	0	0.0%	0.0%	0.0%	0	4	0.0%	0.1%	100.0%
South Fork Alsea	0	0	0.0%	0.0%	0.0%	1,227	2,100	3.0%	5.2%	63.1%	1,227	2,100	3.0%	5.2%	63.1%
Tenmile/Cummins	2,997	15,692	9.9%	51.8%	84.0%	0	0	0.0%	0.0%	0.0%	2,997	15,692	9.9%	51.8%	84.0%
Yachats	7,137	9,216	25.7%	33.2%	56.4%	0	0	0.0%	0.0%	0.0%	7,137	9,216	25.7%	33.2%	56.4%
SIUSLAW															
Deadwood	7,978	9,256	19.8%	23.0%	53.7%	7	12	0.0%	0.0%	63.2%	7,985	9,268	19.8%	23.0%	53.7%
Esmo Whitt*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Indian	5,527	9,438	17.9%	30.6%	63.1%	0	0	0.0%	0.0%	0.0%	5,527	9,438	17.9%	30.6%	63.1%
Knowles*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Lower Lake*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Lower Siuslaw	9,661	22,224	9.7%	22.2%	69.7%	0	0	0.0%	0.0%	0.0%	9,661	22,224	9.7%	22.2%	69.7%
Middle Siuslaw*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
North Fork Siuslaw	7,068	13,849	17.3%	33.8%	66.2%	0	0	0.0%	0.0%	0.0%	7,068	13,849	17.3%	33.8%	66.2%
Upper Lake	0	0	0.0%	0.0%	0.0%	5	22	0.0%	0.1%	81.5%	5	22	0.0%	0.1%	81.5%
Upper Siuslaw*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Wildcat Creek*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
Wolf Creek*	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%	0	0	0.0%	0.0%	0.0%
UMPQUA															
Lower Umpqua	1,143	7,952	1.9%	13.2%	87.4%	0	0	0.0%	0.0%	0.0%	1,143	7,952	1.9%	13.2%	87.4%
North Fork Smith	4,950	13,608	11.3%	31.0%	73.3%	0	0	0.0%	0.0%	0.0%	4,950	13,608	11.3%	31.0%	73.3%
Smith	2,171	9,295	3.8%	16.3%	81.1%	0	0	0.0%	0.0%	0.0%	2,171	9,295	3.8%	16.3%	81.1%
West Fork Smith	263	141	1.5%	0.8%	34.9%	0	0	0.0%	0.0%	0.0%	263	141	1.5%	0.8%	34.9%
SILTCOOS															
Siltcoos	2,538	5,656	5.3%	11.7%	69.0%	0	0	0.0%	0.0%	0.0%	2,538	5,656	5.3%	11.7%	69.0%
Tahkenitch	551	1,182	2.0%	4.3%	68.2%	0	0	0.0%	0.0%	0.0%	551	1,182	2.0%	4.3%	68.2%

Appendix D.13 Elk Capability Areas

Major landtypes that form High, Moderate, and Low ECA lands.

Major landtypes that form the High ECA.

Landtype	Percent
# 53	30%
# 43	25%
# 42	25%
# 41	10%
# 52	10%
	100%

Major landtypes that form the Moderate ECA.

Landtype	Percent
# 42	34%
# 41	26%
# 16	17%
# 54	14%
# 53	9%
	100%

Major landtypes that form the Low ECA.

Landtype	Percent
# 42	32%
# 41	19%
# 44	18%
# 51	16%
# 52	15%
	100%

Landtypes 14 and 15 are the most productive (meadowlands and riparian zones, respectively) but make up at most 2-3% of the overall land base. Although these areas are the very best for elk, they alone do not "carry" an entire sub-basin, but are only part of the complex of upland and lowland sites. Landtypes 14 and 15 occur thoughout the forest and in each of the ECA's. It is the combination of meadowlands coupled with the varying levels of potential in the uplands sites that ultimately produce the High, Moderate, and Low ECA's.

Appendix D.14 Sequenced Selection of High Priority Watersheds for Restoration

Appendix D.14 shows the sequencing used to identify the 10 most critical watersheds for restoration of interior late seral coniferous forest and mature coniferous forest. The sequencing is based on amount of interior and mature forest by watershed accompanied by a display of riparian reserve health and owl and murrelet nest area condition.

Appendix D.14 Sequenced Selection of High Priority Watersheds for Restoration							
Fourth Order Watershed	Fifth Order Watershed	Percent of WS that is Federal	Percent of Federal that is Interior	Percent of Federal that is Mature	Riparian Reserve Health (N/N+M) in LSR	Percent Mature Murrelet Habitat (FS Only)	% Owl Habitat in Median HR (All Federal)
SILETZ-YAQUINA	Upper Siletz	28%	2%	10%	0%	0.0%	34.6%
SIUSLAW	Upper Lake	46%	1%	12%	81%	0.0%	16.6%
ALSEA	Blodgett	58%	1%	12%	17%	51.1%	16.5%
SIUSLAW	Upper Siuslaw	34%	2%	13%	0%	0.0%	43.2%
SILTCOOS	Tahkenitch	29%	5%	19%	68%	67.9%	56.4%
ALSEA	North Fork Alsea	51%	3%	25%	75%	0.0%	32.7%
WILSON-TRASK-NESTUCCA	Sandlake	42%	4%	25%	73%	32.2%	0.0%
ALSEA	South Fork Alsea	57%	2%	25%	63%	0.0%	32.1%
WILSON-TRASK-NESTUCCA	East Beaver	38%	5%	29%	56%	23.1%	76.5%
WILSON-TRASK-NESTUCCA	Nestucca River	73%	2%	29%	0%	0.0%	40.8%
ALSEA	Alsea Frontal	33%	2%	30%	59%	0.0%	50.3%
SIUSLAW	Wolf Creek	41%	4%	30%	0%	0.0%	35.1%
SILETZ-YAQUINA	Yaquina/Big Elk	50%	3%	32%	61%	17.9%	26.1%
ALSEA	Berry	55%	2%	33%	95%	40.2%	0.0%
UPPER WILLAMETTE*	Tumtum	23%	4%	33%	72%	61.5%	59.1%
ALSEA	Lobster/Lobster_Cr	75%	5%	33%	58%	41.5%	31.7%
WILSON-TRASK-NESTUCCA	Little Nestucca	50%	4%	33%	59%	43.1%	37.8%
WILSON-TRASK-NESTUCCA	Three Rivers	82%	5%	34%	84%	0.0%	0.0%
SIUSLAW	Middle Siuslaw	47%	8%	34%	0%	0.0%	37.5%
ALSEA	Mercer	44%	5%	35%	76%	41.6%	49.8%
WILSON-TRASK-NESTUCCA	Lower Nestucca	61%	6%	40%	80%	46.0%	56.6%
SIUSLAW	Wildcat Creek	37%	7%	22%	0%	0.0%	35.2%
ALSEA	Five Rivers	86%	7%	41%	55%	46.7%	44.0%
SIUSLAW	Lower Lake (incl. Lake)	48%	7%	25%	0%	0.0%	55.9%
SILTCOOS	Siltcoos	40%	8%	37%	69%	46.9%	41.6%
SILETZ-YAQUINA	Salmon	27%	8%	35%	61%	47.7%	47.0%
ALSEA	Fall	47%	9%	43%	61%	27.3%	48.6%
SIUSLAW	Deadwood	81%	9%	38%	54%	39.0%	46.9%
SILETZ-YAQUINA	Toledo	55%	11%	53%	63%	44.0%	54.0%
ALSEA	Beaver	48%	11%	39%	53%	87.3%	51.9%
ALSEA	Alsea	71%	12%	45%	66%	43.2%	47.7%
SILETZ-YAQUINA	Schooner/Drift (Siletz)	54%	13%	44%	54%	49.2%	56.7%
ALSEA	Big/Rock/Cape	84%	13%	45%	67%	54.3%	46.8%
ALSEA	Yachats	72%	14%	46%	56%	56.0%	40.0%
SIUSLAW	North Fork Siuslaw	77%	14%	51%	66%	50.1%	51.4%
SIUSLAW	Indian	82%	15%	49%	63%	54.6%	51.2%
YAMHILL	Yamhill	23%	15%	57%	69%	0.0%	0.0%
SIUSLAW	Esmo Whitt	52%	15%	44%	0%	0.0%	43.0%
SIUSLAW	Lower Siuslaw	47%	16%	53%	70%	56.7%	53.6%
WILSON-TRASK-NESTUCCA	Neskowin	52%	17%	54%	61%	40.9%	55.2%
ALSEA	Tenmile/Cummins	86%	19%	58%	84%	60.1%	62.1%
UPPER WILLAMETTE*	Marys Peak	56%	23%	55%	71%	68.4%	56.9%
ALSEA	Drift (Alsea)	67%	24%	59%	77%	23.1%	60.0%
SILETZ-YAQUINA	Siletz	23%	25%	66%	75%	71.0%	68.6%

	Population data for Study Area and individual counties (1980, 1990, 1993)				
	Sources: 1) Center for Population Research and Census, Portland State				
	University, 1994. 2) Oregon Census Abstract, Oregon Housing and				
	Community Services Department, 1993.				
	1990: Oregon contained 1.1% of U.S. population				
	1990: 9-county area contained 35% of Oregon population				
				(10 years)	(3 years)
	Apr-80	Apr-90	Jul-93	80-90	90-93
County	Census	Census	Est. Pop	% Increase	% Increase
Tillamook	21,164	21,570	22,900	1.9%	6.2%
Inc.	7,892	7,969	8,505	1.0%	6.7%
Uninc.	13,272	13,601	14,395	2.5%	5.8%
Washington	245,860	311,554	351,000	26.7%	12.7%
Inc.	105,162	162,544	180,344	54.6%	11.0%
Uninc.	140,698	149,010	170,656	5.9%	14.5%
Yamhill	55,332	65,551	70,900	18.5%	8.2%
Inc.	34,840	43,965	48,161	26.2%	9.5%
Uninc.	20,492	21,586	22,739	5.3%	5.3%
Polk	45,203	49,541	53,600	9.6%	8.2%
Inc.	30,054	34,310	36,554	14.2%	6.5%
Uninc.	15,149	15,231	17,046	0.5%	11.9%
Lincoln	35,264	38,889	40,000	10.3%	2.9%
Inc.	19,619	21,493	22,690	9.6%	5.6%
Uninc.	15,645	17,396	17,310	11.2%	-0.5%
Benton	68,211	70,811	73,300	3.8%	3.5%
Inc.	44,640	48,757	54,220	9.2%	11.2%
Uninc.	23,571	22,054	19,080	-6.4%	-13.5%
Lane	275,226	282,912	298,000	2.8%	5.3%
Inc.	172,859	184,583	194,295	6.8%	5.3%
Uninc.	102,367	98,329	103,705	-3.9%	5.5%
Douglas	93,748	94,649	96,400	1.0%	1.8%
Inc.	39,171	39,811	41,970	1.6%	5.4%
Uninc.	54,577	54,838	54,430	0.5%	-0.7%
Coos	64,047	60,273	62,500	-5.9%	3.7%
Inc.	37,727	35,866	36,475	-4.9%	1.7%
Uninc.	26,320	24,407	26,025	-7.3%	6.6%
9-County area	904,055	995,750	1,068,600	10.1%	7.3%
Inc.	491,964	579,298	623,214	17.8%	7.6%
Uninc.	412,091	416,452	445,386	1.1%	6.9%
State of OR	2,633,156	2,842,321	3,038,000	7.9%	6.9%
Inc.	1,472,007	1,761,985	1,896,858	19.7%	7.7%
Uninc.	1,161,149	1,080,336	1,141,142	-7.0%	5.6%
U.S.	226,504,825	248,709,873		9.8%	

	1980-1990:Nature of Population Change				1990-1993: Nature of Population change						% Residing in other county or out-of-state 5 years ago			
	Natural Increase		Net Migration		Natural Increase		Net Migration				1980		1990	
County	#s	% of tot.	#s	% of tot.	#s	% of tot.	#s	% of tot.	#s 65+	% 65+	ST	CTY	ST	CTY
Tillamook	393	97%	13	3%	57	4%	1,273	96%	(77)	-6%	17%	16%	12%	16%
Inc.														
Uninc.														
Washington	27,316	42%	38,430	58%	11,109	28%	28,337	72%	2,622	9%	23%	18%	18%	15%
Inc.														
Uninc.														
Yamhill	4,371	43%	5,848	57%	1,525	29%	3,824	71%	459	12%	16%	17%	16%	15%
Inc.														
Uninc.														
Polk	2,657	61%	1,681	39%	767	19%	3,292	81%	921	28%	19%	27%	13%	22%
Inc.														
Uninc.														
Lincoln	666	18%	2,959	82%	73	7%	1,038	93%	89	9%	18%	18%	19%	16%
Inc.														
Uninc.														
Benton	5,051	194%	(2,451)	-94%	1,362	55%	1,127	45%	212	19%	26%	23%	20%	20%
Inc.														
Uninc.														
Lane	18,298	238%	(10,612)	-138%	4,764	32%	10,324	68%	2,019	20%	21%	10%	16%	9%
Inc.														
Uninc.														
Douglas	5,463	54%	4,562	46%	904	52%	847	48%	923	109%	17%	9%	14%	8%
Inc.														
Uninc.														
Coos	2,397	-64%	(6,171)	164%	150	7%	2,077	93%	283	14%	18%	10%	16%	10%
Inc.														
Uninc.														
9-County area	66,612	66%	34,259	34%	20,711	28%	52,139	72%	7,451	14%				
Inc.														
Uninc.														
State of OR	172,506	82%	36,710	18%	56,895	29%	138,784	71%	12,822	9%				
Inc.														
Uninc.														
U.S.														

	Other Population Characteristics (1990)							1980	1990	1993 est.
	Median HH	Race (%)					% Hisp.	% of pop	% of pop	% of pop
County	Income	W	B	NA	API	Other	Origin	that is 65+	that is 65+	that is 65+
Tillamook	$21,965	97.4%	0.2%	1.1%	0.8%	0.6%	1.7%	16%	21%	21%
Inc.										
Uninc.										
Washington	$35,554	91.9%	0.7%	0.6%	4.3%	2.5%	4.6%	8%	10%	10%
Inc.										
Uninc.										
Yamhill	$28,303	94.8%	0.6%	1.3%	1.2%	2.2%	6.3%	12%	13%	13%
Inc.										
Uninc.										
Polk	$26,292	93.3%	0.4%	1.5%	1.4%	3.5%	5.7%	13%	15%	16%
Inc.										
Uninc.										
Lincoln	$22,883	96.1%	0.2%	2.4%	0.9%	0.4%	1.5%	17%	20%	21%
Inc.										
Uninc.										
Benton	$27,295	92.0%	0.9%	0.8%	5.5%	0.9%	2.5%	8%	10%	10%
Inc.										
Uninc.										
Lane	$25,268	95.4%	0.7%	1.1%	2.0%	0.8%	2.4%	10%	13%	14%
Inc.										
Uninc.										
Douglas	$23,693	96.9%	0.2%	1.6%	0.7%	0.7%	2.4%	11%	15%	17%
Inc.										
Uninc.										
Coos	$22,146	95.9%	0.2%	2.3%	1.0%	0.6%	2.2%	12%	17%	18%
Inc.										
Uninc.										
9-County area	NA	94.2%	0.6%	1.1%	2.6%	1.5%	3.5%	10%	13%	13%
Inc.										
Uninc.										
State of OR		92.8	1.6	1.4	2.4	1.8	4.0%	12%	14%	14%
Inc.										
Uninc.										
U.S.										

Appendix F.2 Employment Statistics for Study Area (aggregated and by county).
Includes Tillamook, Washington, Yamhill, Polk, Lincoln, Benton, Lane, Douglas, and Coos counties.

Source:
Oregon Covered Employment and Payrolls (1982 and 1992)
(see page 1 of publication for list of employment not covered;
includes self-employment and others)

NINE-COUNTY AREA AND STATE OF OREGON
1992 AND 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR

	1992 Oregon	Percent 1992 total	1982 Oregon	Percent 1982 total	1992 9-county	Percent 1992 total	1982 9-county	Percent 1982 total
ALL INDUSTRY	1,257,679		932,415		392,481		283,439	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	10,959	2.8 %	6,364	2.2 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	5,385	1.4 %	**	NA
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	456	0.1 %	**	NA
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	2,773	0.7 %	**	NA
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	1,848	0.5 %	**	NA
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	497	0.1 %	**	NA
Mining	1,642	0.1 %	1,848	0.2 %	665	0.2 %	**	NA
Construction	50,266	4.0 %	28,760	3.1 %	15,924	4.1 %	9,076	3.2 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	79,691	20.3 %	73,760	26.0 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	22,030	5.6 %	25,874	9.1 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	13,661	3.5 %	10,405	3.7 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	22,982	5.9 %	14,333	5.1 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	78,824	20.1 %	55,315	19.5 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	16,601	4.2 %	11,629	4.1 %
Services	295,006	23.5 %	171,395	18.4 %	89,128	22.8 %	48,508	17.1 %
Government	214,659	17.1 %	180,137	19.3 %	63,221	16.1 %	53,362	18.8 %
Federal	33,206	2.6 %	29,445	3.2 %	7,064	1.8 %	6,313	2.2 %
State	51,569	4.1 %	42,229	4.5 %	13,311	3.4 %	11,648	4.1 %
Local	129,884	10.3 %	108,463	11.6 %	42,846	10.9 %	35,401	12.5 %
SUM	1,256,695	100%	932,381	100%	391,656	100%	283,439	100%

TILLAMOOK COUNTY and STATE OF OREGON

1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR

	1992	Percent	1982	Percent	1992	Percent	1982	Percent
	Oregon	1992 total	Oregon	1982 total	Tillamook	1992 total	Tillamook	1982 total
ALL INDUSTRY	1,257,679		932,415		6,504		5,191	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	274	4.2 %	105	2.0 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	0	0.0 %	other-31	NA
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	150	2.3 %	other-31	NA
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	51	0.8 %	27	0.5 %
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	46	0.7 %	other-31	NA
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	27	0.4 %	48	0.9 %
Mining	1,642	0.1 %	1,848	0.2 %	0	0.0 %	incl. w/Constr.	NA
Construction	50,266	4.0 %	28,760	3.1 %	161	2.5 %	165	3.2 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	1,136	17.5 %	1,063	20.5 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	434	6.7 %	576	11.1 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	236	3.6 %	181	3.5 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	222	3.4 %	169	3.3 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	1,497	23.1 %	1,135	21.9 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	179	2.8 %	155	3.0 %
Services	295,006	23.5 %	171,395	18.4 %	1,277	19.7 %	763	14.7 %
Government	214,659	17.1 %	180,137	19.3 %	1,509	23.2 %	1,448	27.9 %
Federal	33,206	2.6 %	29,445	3.2 %	149	2.3 %	168	3.2 %
State	51,569	4.1 %	42,229	4.5 %	230	3.5 %	194	3.7 %
Local	129,884	10.3 %	108,463	11.6 %	1,130	17.4 %	1,086	20.9 %
SUM	1,256,695	100%	932,381	100%	6,491	100%	5,184	100%

WASHINGTON COUNTY and STATE OF OREGON

1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR

	1992 Oregon	Percent 1992 total	1982 Oregon	Percent 1982 total	1992 Washington	Percent 1992 total	1982 Washington	Percent 1982 total
ALL INDUSTRY	1,257,679		932,415		146,974		91,013	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	4,157	2.8 %	2,292	2.5 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	2,667	1.8 %	1,696	1.9 %
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	0	0.0 %	36	0.0 %
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	1,375	0.9 %	538	0.6 %
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	90	0.1 %	other-21	NA
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	24	0.0 %	other-21	NA
Mining	1,642	0.1 %	1,848	0.2 %	219	0.1 %	134	0.1 %
Construction	50,266	4.0 %	28,760	3.1 %	7,365	5.0 %	3,362	3.7 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	34,661	23.6 %	30,102	33.1 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	1,792	1.2 %	1,151	1.3 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	4,518	3.1 %	2,581	2.8 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	13,679	9.3 %	6,990	7.7 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	27,878	19.0 %	17,684	19.4 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	7,716	5.3 %	4,140	4.5 %
Services	295,006	23.5 %	171,395	18.4 %	34,372	23.4 %	14,650	16.1 %
Government	214,659	17.1 %	180,137	19.3 %	12,309	8.4 %	9,078	10.0 %
Federal	33,206	2.6 %	29,445	3.2 %	811	0.6 %	580	0.6 %
State	51,569	4.1 %	42,229	4.5 %	602	0.4 %	439	0.5 %
Local	129,884	10.3 %	108,463	11.6 %	10,896	7.4 %	8,059	8.9 %
SUM	1,256,695	100%	932,381	100%	146,874	100%	91,013	100%

YAMHILL COUNTY and STATE OF OREGON								
1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR								
	1992	Percent	1982	Percent	1992	Percent	1982	Percent
	Oregon	1992 total	Oregon	1982 total	Yamhill	1992 total	Yamhill	1982 total
ALL INDUSTRY	1,257,679		932,415		22,116		14,854	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	1,986	9.0 %	594	4.0 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	1,618	7.3 %	378	2.5 %
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	117	0.5 %	other-35	NA
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	214	1.0 %	61	0.4 %
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	37	0.2 %	120	0.8 %
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	0	0.0 %	other-35	NA
Mining	1,642	0.1 %	1,848	0.2 %	97	0.4 %	66	0.4 %
Construction	50,266	4.0 %	28,760	3.1 %	906	4.1 %	400	2.7 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	5,463	24.7 %	4,496	30.3 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	1,199	5.4 %	1,398	9.4 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	802	3.6 %	400	2.7 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	623	2.8 %	472	3.2 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	3,705	16.8 %	2,724	18.3 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	795	3.6 %	789	5.3 %
Services	295,006	23.5 %	171,395	18.4 %	4,132	18.7 %	2,373	16.0 %
Government	214,659	17.1 %	180,137	19.3 %	3,589	16.2 %	2,540	17.1 %
Federal	33,206	2.6 %	29,445	3.2 %	540	2.4 %	125	0.8 %
State	51,569	4.1 %	42,229	4.5 %	177	0.8 %	139	0.9 %
Local	129,884	10.3 %	108,463	11.6 %	2,872	13.0 %	2,276	15.3 %
SUM	1,256,695	100.0 %	932,381	100%	22,098	100.0 %	14,854	100%

POLK COUNTY and STATE OF OREGON								
1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR								
	1992	Percent	1982	Percent	1992	Percent	1982	Percent
	Oregon	1992 total	Oregon	1982 total	Polk	1992 total	Polk	1982 total
ALL INDUSTRY	1,257,679		932,415		11,294		8,714	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	901	8.0 %	566	6.5 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	413	3.7 %	406	4.7 %
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	44	0.4 %	80-other ag/mi	NA
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	145	1.3 %	80-other ag/mi	NA
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	300	2.7 %	86	1.0 %
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	0	0.0 %	80-other ag/mi	NA
Mining	1,642	0.1 %	1,848	0.2 %	0	0.0 %	80-other ag/mi	NA
Construction	50,266	4.0 %	28,760	3.1 %	553	4.9 %	290	3.3 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	2,336	20.7 %	2,785	32.0 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	725	6.4 %	1,145	13.1 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	308	2.7 %	191	2.2 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	319	2.8 %	233	2.7 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	1,974	17.5 %	1,287	14.8 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	237	2.1 %	380	4.4 %
Services	295,006	23.5 %	171,395	18.4 %	2,259	20.1 %	1,138	13.1 %
Government	214,659	17.1 %	180,137	19.3 %	2,376	21.1 %	1,839	21.1 %
Federal	33,206	2.6 %	29,445	3.2 %	110	1.0 %	112	1.3 %
State	51,569	4.1 %	42,229	4.5 %	822	7.3 %	630	7.2 %
Local	129,884	10.3 %	108,463	11.6 %	1,444	12.8 %	1,097	12.6 %
SUM	1,256,695	100%	932,381	100%	11,263	100%	8,709	100%

LINCOLN COUNTY and STATE OF OREGON								
1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR								
	1992	Percent	1982	Percent	1992	Percent	1982	Percent
	Oregon	1992 total	Oregon	1982 total	Lincoln	1992 total	Lincoln	1982 total
ALL INDUSTRY	1,257,679		932,415		14,920		11,349	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	408	2.7 %	460	4.1 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	66	0.4 %	other-56	NA
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	0	0.0 %	other-56	NA
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	42	0.3 %	other-56	NA
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	29	0.2 %	82	0.7 %
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	271	1.8 %	322	2.8 %
Mining	1,642	0.1 %	1,848	0.2 %	30	0.2 %	60	0.5 %
Construction	50,266	4.0 %	28,760	3.1 %	540	3.6 %	377	3.3 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	1,868	12.5 %	1,891	16.7 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	487	3.3 %	600	5.3 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	434	2.9 %	400	3.5 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	203	1.4 %	196	1.7 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	4,531	30.4 %	2,750	24.2 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	500	3.4 %	393	3.5 %
Services	295,006	23.5 %	171,395	18.4 %	3,303	22.2 %	2,252	19.8 %
Government	214,659	17.1 %	180,137	19.3 %	3,083	20.7 %	2,570	22.6 %
Federal	33,206	2.6 %	29,445	3.2 %	224	1.5 %	240	2.1 %
State	51,569	4.1 %	42,229	4.5 %	449	3.0 %	307	2.7 %
Local	129,884	10.3 %	108,463	11.6 %	2,410	16.2 %	2,023	17.8 %
SUM	1,256,695	100%	932,381	100%	14,900	100%	11,349	100%

BENTON COUNTY and STATE OF OREGON								
1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR								
	1992	Percent	1982	Percent	1992	Percent	1982	Percent
	Oregon	1992 total	Oregon	1982 total	Benton	1992 total	Benton	1982 total
ALL INDUSTRY	1,257,679		932,415		27,671		22,895	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	625	2.3 %	293	1.3 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	175	0.6 %	94	0.4 %
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	30	0.1 %	other-76	NA
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	131	0.5 %	other-76	NA
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	289	1.0 %	123	0.5 %
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	0	0.0 %	other-76	NA
Mining	1,642	0.1 %	1,848	0.2 %	14	0.1 %	38	0.2 %
Construction	50,266	4.0 %	28,760	3.1 %	579	2.1 %	388	1.7 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	5,318	19.2 %	4,605	20.1 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	1,133	4.1 %	1,297	5.7 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	738	2.7 %	722	3.2 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	732	2.6 %	478	2.1 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	4,463	16.1 %	3,806	16.6 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	836	3.0 %	738	3.2 %
Services	295,006	23.5 %	171,395	18.4 %	6,498	23.5 %	4,113	18.0 %
Government	214,659	17.1 %	180,137	19.3 %	7,837	28.4 %	7,712	33.7 %
Federal	33,206	2.6 %	29,445	3.2 %	716	2.6 %	712	3.1 %
State	51,569	4.1 %	42,229	4.5 %	4,728	17.1 %	4,807	21.0 %
Local	129,884	10.3 %	108,463	11.6 %	2,393	8.7 %	2,193	9.6 %
SUM	1,256,695	100%	932,381	100%	27,640	100%	22,893	100%

LANE COUNTY and STATE OF OREGON								
1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR								
	1992	Percent	1982	Percent	1992	Percent	1982	Percent
	Oregon	1992 total	Oregon	1982 total	Lane	1992 total	Lane	1982 total
ALL INDUSTRY	1,257,679		932,415		112,123		85,356	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	1,566	1.4 %	1,152	1.3 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	303	0.3 %	309	0.4 %
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	99	0.1 %	93	0.1 %
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	554	0.5 %	292	0.3 %
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	590	0.5 %	446	0.5 %
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	21	0.0 %	11	0.0 %
Mining	1,642	0.1 %	1,848	0.2 %	177	0.2 %	156	0.2 %
Construction	50,266	4.0 %	28,760	3.1 %	4,281	3.8 %	2,788	3.3 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	17,739	15.9 %	16,888	19.8 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	8,387	7.5 %	10,502	12.3 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	3,837	3.4 %	3,448	4.0 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	5,686	5.1 %	4,526	5.3 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	24,426	21.9 %	18,083	21.2 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	4,880	4.4 %	3,569	4.2 %
Services	295,006	23.5 %	171,395	18.4 %	28,060	25.1 %	16,925	19.8 %
Government	214,659	17.1 %	180,137	19.3 %	20,981	18.8 %	17,820	20.9 %
Federal	33,206	2.6 %	29,445	3.2 %	2,304	2.1 %	2,227	2.6 %
State	51,569	4.1 %	42,229	4.5 %	5,162	4.6 %	4,210	4.9 %
Local	129,884	10.3 %	108,463	11.6 %	13,515	12.1 %	11,383	13.3 %
SUM	1,256,695	100%	932,381	100%	111,633	100%	85,355	100%

DOUGLAS COUNTY and STATE OF OREGON								
1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR								
	1992	Percent	1982	Percent	1992	Percent	1982	Percent
	Oregon	1992 total	Oregon	1982 total	Douglas	1992 total	Douglas	1982 total
ALL INDUSTRY	1,257,679		932,415		31,456		26,348	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	587	1.9 %	484	1.8 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	115	0.4 %	172	0.7 %
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	16	0.1 %	other-53	NA
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	173	0.6 %	other-53	NA
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	276	0.9 %	247	0.9 %
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	6	0.0 %	12	0.0 %
Mining	1,642	0.1 %	1,848	0.2 %	80	0.3 %	180	0.7 %
Construction	50,266	4.0 %	28,760	3.1 %	860	2.7 %	904	3.4 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	8,012	25.5 %	7,663	29.1 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	6,043	19.3 %	6,096	23.1 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	1,438	4.6 %	1,059	4.0 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	811	2.6 %	647	2.5 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	6,048	19.3 %	4,615	17.5 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	765	2.4 %	825	3.1 %
Services	295,006	23.5 %	171,395	18.4 %	5,916	18.9 %	3,718	14.1 %
Government	214,659	17.1 %	180,137	19.3 %	6,847	21.8 %	6,253	23.7 %
Federal	33,206	2.6 %	29,445	3.2 %	1,731	5.5 %	1,655	6.3 %
State	51,569	4.1 %	42,229	4.5 %	632	2.0 %	540	2.0 %
Local	129,884	10.3 %	108,463	11.6 %	4,484	14.3 %	4,058	15.4 %
SUM	1,256,695	100%	932,381	100%	31,364	100%	26,348	100%

COOS COUNTY and STATE OF OREGON								
1992 and 1982 COVERED EMPLOYMENT (Annual averages) BY SECTOR								
	1992	Percent	1982	Percent	1992	Percent	1982	Percent
	Oregon	1992 total	Oregon	1982 total	Coos	1992 total	Coos	1982 total
ALL INDUSTRY	1,257,679		932,415		19,423		17,719	
Agriculture,Forestry, Fishing	36,803	2.9 %	20,358	2.2 %	455	2.3 %	418	2.4 %
SIC 01-Crops	20,388	1.6 %	11,827	1.3 %	28	0.1 %	other-42	NA
SIC 02-Livestock	2,184	0.2 %	1,525	0.2 %	0	0.0 %	other-42	NA
SIC 07-Ag. Services	9,415	0.7 %	3,703	0.4 %	88	0.5 %	45	0.3 %
SIC 08-Forestry	4,076	0.3 %	2,469	0.3 %	191	1.0 %	159	0.9 %
SIC 09-Fishing, Hunting, Trap	738	0.1 %	834	0.1 %	148	0.8 %	172	1.0 %
Mining	1,642	0.1 %	1,848	0.2 %	48	0.2 %	38	0.2 %
Construction	50,266	4.0 %	28,760	3.1 %	679	3.5 %	402	2.3 %
Manufacturing	208,831	16.6 %	186,226	20.0 %	3,158	16.3 %	4,267	24.1 %
SIC 24-Lumber, Wood Product	55,064	4.4 %	55,728	6.0 %	1,830	9.4 %	3,109	17.5 %
Transport., Comm., Utilities	62,026	4.9 %	50,568	5.4 %	1,350	7.0 %	1,423	8.0 %
Wholesale Trade	80,749	6.4 %	62,555	6.7 %	707	3.6 %	622	3.5 %
Retail Trade	240,075	19.1 %	175,989	18.9 %	4,302	22.2 %	3,231	18.2 %
Finance, Insurance, Real Estate	66,638	5.3 %	54,545	5.9 %	693	3.6 %	640	3.6 %
Services	295,006	23.5 %	171,395	18.4 %	3,311	17.1 %	2,576	14.5 %
Government	214,659	17.1 %	180,137	19.3 %	4,690	24.2 %	4,102	23.2 %
Federal	33,206	2.6 %	29,445	3.2 %	479	2.5 %	494	2.8 %
State	51,569	4.1 %	42,229	4.5 %	509	2.6 %	382	2.2 %
Local	129,884	10.3 %	108,463	11.6 %	3,702	19.1 %	3,226	18.2 %
SUM	1,256,695	100%	932,381	100%	19,393	100%	17,719	100%

Appendix F.3 Scenic Features in Study Area

Natural Landmarks

Particularly scenic features are the headlands including Cape Meares, Cape Lookout, Cape Kiwanda, Cascade Head, Cape Foulweather, Yaquina Head, Cape Perpetua, Heceta Head which are recognized as an outstanding resource by the State under Goal 5 of the Land Conservation and Development Commission's statewide planning goals. Cascade Head is a National Scenic Research Area. Otter Rock and Seal Rock are picturesque features. "Bald" peaks are also landmarks: Mount Hebo, Saddleback Mountain, Marys Peak, and Prairie Mountain. Travel and orientation in the Study Area is also relative to rivers and bays.

Scenic Areas

Areas with high scenic value to the public and managing agency, and specific sites managed for scenic values are listed below. In describing the scenic value of Coos District of the Bureau of Land Management, all of the land was considered scenic, but hard to see (Coos BLM 1995). This statement is true of most of the Study Area: sight distances are generally short, and the land is generally seen from low points, so that viewing opportunities inland are limited.

General areas of high scenic value:

Scenic road and river corridors, land at or seen from recreation sites (Siuslaw National Forest);

Places where land is associated with water bodies and where there is a vista, such as when upslope (BLM);

High altitudes and meadows, rivers and ridges in general (Oregon Dept. of Forestry).

Scenic sites (north to south by county):

Tillamook County	Salmonberry River Canyon
	Little North Fork of Willis
	Bart's Shanty
	Wilson River Corridor
	Elk Creek
	Hardscabble Mountain
	Nestucca River
	Mount Hebo Special Interest Area
	Cascade Head Scenic-Research Area
Lincoln County	Marys Peak
	Grass Mountain
Polk County	Valley of the Giants
Lane County	Cape Perpetua Scenic Area
	Whittaker Creek
	Clay Creek
	Oregon Dunes National Recreation Area

Douglas County	Roman Nose Smith River Road, especially the western half, and the eastern quarter where the road goes up a pass and down into the community of Gunter. Elk Viewing Area and Smith River Falls along the Smith River Road Late second-growth area in the Wassen Creek area Oregon Dunes National Recreation Area
Coos County	Oregon Dunes National Recreation Area

Scenic Viewpoints

The Oregon Coast Highway Corridor Master Plan (1994) calls views from the Coast Highway, "world class scenic views." The State recently renamed waysides as viewpoints, in recognition of the importance of scenery to recreation use in the state. Major state and federally managed viewpoints are listed below.

Coastal viewpoints	**Boiler Bay State Scenic Viewpoint, Devil's Elbow State Scenic Viewpoint, Muriel O. Ponsler Memorial State Scenic Viewpoint, Neptune State Scenic Viewpoint, Otter Crest State Scenic Viewpoint, Rocky Creek State Scenic Viewpoint, the long ocean view looking south from the Oregon Department of Transportation pull out north of Florence.** **Yaquina Head and Cape Perpetua are major viewpoints along the coast. Oregon Dunes Overlook and Holman Vista are others off Highway 101.**
Inland viewpoints	**Marys Peak Observation Site, Mount Hebo, Roman Nose.**

Scenic Corridors

Most scenery in the Study Area is viewed from scenic corridors. Scenic river corridors are unusually important in the assessment landscape as compared to other Pacific Northwest landscapes because of the number of rivers and the importance of corridors here. Scenic roadways and rivers are listed below.

Scenic Road Corridors

Designated scenic roadways in the Study Area:

Highway 101, National Scenic Byway; views from the byway are considered in Oregon Department of Transportation planning.

A portion of Highway S431 along the Nestucca River, National Backcountry Byway, this road segment is BLM land.

H.B. Van Duzer State Scenic Corridor, following Route 18.

Bolan Island State Scenic Corridor.

Proposed Back Country Byways (Coos BLM):
Smith River Road and alternate route "B2P".

Scenic Rivers

Designated scenic waterways in the Study Area:
Nestucca River, an Oregon Scenic Waterway.

River segments that are eligible for Wild and Scenic River Status, but not designated:
Nestucca on the Siuslaw National Forest, Drift Creek of the Siletz, the Alsea River, the Siuslaw River, Wassen Creek, the Umpqua River, and the North Fork of the Smith River.

Rivers that may be found eligible for Wild and Scenic River Status, but have not been formally studied:
Siletz, Tenmile Creek, Lower Siuslaw, Lake Creek and Smith River.

Potential Recreational Rivers:
A portion of the Nestucca River, Salem District, BLM, and of the Siuslaw River, Eugene District, BLM.

Appendix F.4 Scenic Condition of Federal Lands

Siuslaw National Forest

A large proportion is managed to heavily managed. (Based on scenic inventory, see the Final Environmental Impact Statement, Siuslaw National Forest Land and Resource Management Plan, 1990, and Recreation Opportunity Spectrum map, 1995, based on ca. 1990 data.)

Bureau of Land Management

Eugene District

No preservation-quality scenery was found; 12% of BLM was retention quality; 24% was partial retention quality; and 64% was obviously modified. (Eugene District, inventoried in late 1970s to early 1980s.)

Salem District

Four percent is of preservation quality. The preservation areas, called Class I, are less than a square mile and scattered. They are in the vicinity of Grass Mountain (southwest of Marys Peak), the Valley of the Giants on the North Fork of the Siletz, along the Nestucca River, along the headwaters of Elk Creek, and in the vicinity of Hardscabble Mountain, which is west of Tillamook State Forest. Fourteen percent is retention quality, 15% is partial retention quality, and 67% of Salem Bureau of Land Management land is assigned a scenery management classification that allows major modification of the existing landscape. (From Salem District Proposed Resource Management Plan/ Final Environmental Impact Statement, Volume I, Salem: Bureau of Land Management, 1994, p. 3-60.)

Coos District

Less than 1% of the land is preservation quality, 5% is retention quality, 20% is partial retention quality, and 75% is allowed obvious modification. (From Coos Bay District Proposed Resource Management Plan Environmental Impact Statement, Volume I, North Bend: Bureau of Land Management, 1994, p. 3-86.)

Appendix F.5 Developed Recreation Sites within the Assessment Area and Total Number of Visitors to the Site by County

Note: Not all sites have visitor use information.

BENTON COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
Campbell Boat Landing	Benton Cty			
Clemens Park	Benton Cty			
Mill Crk Boat Ldg	Benton Cty			
Salmonberry Boat Ld/CG	Benton Cty			

No individual site use information for Benton Cty Adm. sites. Use estimated at 215,000 (94) for all Benton County Park sites.

Alsea Falls	BLM	7,500(93)		
Missouri Bend	BLM	1,500(94) 4,000(93)		
Mary's Wayside	FS, A	25,000(94)		
Mary's Peak Observ	FS, A	82,800(94)		

COOS COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
Wm M Tugman St Pk	St Pk & Rec	207,471	185,312	22,159

in Coos and Douglas Cty, listed here only under Coos.

Coos Bay Shorelands	BLM	65,500(90)		

Site is located just outside the assessment area.

Bluebill Lake CG	FS, ODNRA	24,392(93)		
Bluebill Lake Trl	FS, ODNRA	6,891(93)		
Hauser Overflw Cp	FS, ODNRA	3,253(93)		
Horsfall	FS, ODNRA	213,900(93)		
Horsfall Beach	FS, ODNRA	92,880(93)		

Sand Track	FS, ODNRA	6,891(93)
North Eel Crk CG	FS, ODNRA	12,860(93)
Spin Reel CG	FS, ODNRA	114,571(93)
Wild Mare Horse Cp	FS, ODNRA	14,860(93)
Beale Lake CG	FS, ODNRA	729(93)

Dispersed site

DOUGLAS COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
W. Cove CG	Douglas Cty	No use records		
Bolon J Tideways WS	St Pk			
Umpqua Lghthse St Pk	" "	336,467	315,892	20,575
Umpqua Myrtle St Pk	" "			
Umpqua River Lghthse	" "			
Umpqua Wayside	" "	65,500		
Big Bend CG	BLM	listed as potential site		
Dean Creek Elk Vw	BLM	450,000(90)		

Site is located just outside the assessment area, viewed from within area.

Fawn Creek Boat Rp	BLM	listed as potential site		
Roman Nose(Kentky CrkT)	BLM			
Smith River Falls	BLM	2,500(90)		
Smith R Falls Boat Rp	BLM	listed as potential site		
Smith River Log Dump	BLM	listed as potential site		
Vincent Crk	BLM	800 (90)		
Vincent Crk Boat Rp	BLM	listed as potential site		
(Wassen Crk Trail)	BLM			
Kentucky Falls	FS, M	13,000(94)		
Noel Ranch	FS, M	1,500(94)		

Carter Lake Bt Rp	FS, ODNRA	1,965(93)
Carter Lake West	FS, ODNRA	6,268(93)
Oregon Dunes OL	FS, ODNRA	395,229(93)
Tahkenitch	FS, ODNRA	8,011(93)
Tahk. Lake Bt Ramp	FS, ODNRA	6,053(93)
Tahkenitch Lding	FS, ODNRA	17,801(93)
Umpqua No 1	FS, ODNRA	8,678(93)
2	FS, ODNRA	15,111(93)
3	FS, ODNRA	119,004(93)
Fort Umpqua Dispersed site	FS, ODNRA	293(93)

LANE COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
Sea Lion Caves	Private	No use figures available		
Ada	Lane Cty	No use records		
Austa Ldg	Lane Cty	No use records		
Bender Ldg	Lane Cty	No use records		
Camp Lane	Lane Cty	No use records		
Deadwood Ldg	Lane Cty	No use records		
Farnham Lding	Lane Cty	No use records		
Harbor Vista	Lane Cty	6,202(94)		
Heceta Beach	Lane Cty	No use records		
Linslaw Boat Rp	Lane Cty	No use records		
Mapleton Lding	Lane Cty	No use records		
Mercer Lake	Lane Cty	No use records		
Munsel Ldg	Lane Cty	No use records		
Schindler Ldg	Lane Cty	No use records		
Siuslaw Falls	Lane Cty	No use records		
Tide Wayside	Lane Cty	No use records		

Triangle Lake	Lane Cty	No use records			
West Lake	Lane Cty	No use records			
Darlingtonia Waysd St Pk and Rec					
Devil's Elbow St Pk	" "	589,580(93-94)	589,580		
Heceta Head Lghthse	" "				
Honeyman St Pk	" "	1,647,636(93-94)	1,507,976	139,660	
Joaquin Miller WS	" "				
Muriel O. Ponsler WS	" "	60,360	60,360		
Neptune St Pk	" "	459,374	459,374		
Squaw Crk St Pk	" "				
Stonefield Beach St Pk	" "	86,028	86,028		
Washburn Memorial St Pk	" "	148,493	121,389	27,104	
Clay Crk CG on the Siuslaw River	BLM	2,200(90)			
Lake Creek Falls	BLM	closed			Lane
Upper Lake Creek	BLM				Lane
Whittaker Crk CG (OG T)	BLM	16(90)			Lane
Whittaker Landing	BLM				Lane
Alder Dune CG	FS, M	22,000(94)			Lane
Archie Knowles CG	FS, M	5,000(94)			Lane
Baker Beach Day Use	FS, M	10,000(94)			Lane
Dry Lake Horse Camp	FS, M	3,000(94)			Lane
Enchanted Valley TH	FS, M	3,000(94)			Lane
Horse Crk TH	FS, M	7,000(94)			Lane
Indian Crk TH	FS, M	4,500(94)			Lane
Joshua Street	FS, M	13,000(94)			Lane
Mapleton Hill TH	FS, M	700(94)			Lane

Mercer Lke Bt Rp	FS, M	6,000(94)	Lane
N. Fork Siuslaw CG	FS, M	4,500(94)	Lane
Pawn TH	FS, M	7,000(94)	Lane
Sutton CG	FS, M	25,000(94)	Lane
Sutton Beach	FS, M	80,000(94)	Lane
Sutton Lake Bt RP	FS, M	5,700(94)	Lane
Sweet Crk Flls TH	FS, M	2,000(94)	Lane
Sweet Crk Hmstd TH	FS, M	7,000(94)	Lane
Wagon Rd TH	FS, M	2,500(94)	Lane
Cleawox	FS, ODNRA	8,800(93)	Lane
Driftwood II	FS, ODNRA	27,492(93)	Lane
Goosepasture Stge	FS, ODNRA	107,748(93)	Lane
Lagoon CG	FS, ODNRA	15,550(93)	Lane
Lodgepole CG	FS, ODNRA	1,707(93)	Lane
S. Jetty Staging	FS, ODNRA	204,153(93)	Lane
Siltcoos Beach	FS, ODNRA	157,115(93)	Lane
Siltcoos O Flow	FS, ODNRA	1,618(93)	Lane
Siltcoos TH	FS, ODNRA	5,840(93)	Lane
S. Jetty No 1(Day)	FS, ODNRA	14,178(93)	Lane
No 2	FS, ODNRA	3,970(93)	Lane
No 3	FS, ODNRA	3,172(93)	Lane
No 4	FS, ODNRA	396(93)	Lane
No 5	FS, ODNRA	396(93)	Lane
No 6	FS, ODNRA	1,588(93)	Lane
No 7	FS, ODNRA	38,563(93)	Lane
Stage Coach	FS, ODNRA	3,734(93)	Lane
Tyee	FS, ODNRA	3,776(93)	Lane
Waxmyrtle CG	FS, ODNRA	17,623(93)	Lane
Lanham Bike and Hike	FS,W	53(94)	Lane
Ocean Beach Day Use	FS, W	10,000(94)	Lane

Rock Creek CG	FS, W	4,600(94)	Lane
Tenmile Crk CG	FS, W	1,620(94)	Lane
Cleawox Lake, disp Dispersed site	FS, ODNRA	729(93)	Lane
Competition Hill Dispersed site	FS, ODNRA	729(93)	Lane

LINCOLN COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
Hatfield M S Ctr	O.S.U.			
Oregon Coast Aqu *Non-profit	Private*	530,000(94)		
A.W. Jack Morgan CG	Lln Cty	No use records		
Elk City Park	Lincoln Cty	No use records		
Mike Miller Park	Lincoln Cty	No use records		
Moonshine Park CG	Lincoln Cty	No use records		
Agate Beach Wayside	Or Pk & Rec	239,140(93-94)	239,140	
Alsea Bay Int.C.	Or Pk & Rec			
Beachside St.Pk.	Or Pk & Rec	149,970(93-94)	107,268	42,702
Beverly Beach St.Pk	" "	280,655(93-94)	149,292	131,363
Boiler Bay Wayside	" "	585,220(93-94)	585,220	
Collins Crk St Pk	" "			
D River St Wayside	" "	1,460,660(93-94)	1,460,660	
Depoe Bay St. Pk	" "			
Devil's Lake St Pk	" "	42,674(93-94)	42,674	
Devil's Punchbowl	" "	603,500(93-94)	603,500	
Driftwood Beach St Pk	" "	154,254(93-94)	154,254	
East Devil's Lake St Pk	" "	141,762(93-94)	141,762	

Ellmaker St Pk	" "	288,368(93-94)	288,368	
Fishing Rock Wayside	" "			
Fogarty Crk St Pk	" "	227,108(93-94)	227,108	
Gleneden Beach Wayside	" "	227,424(93-94)	227,424	
Lost Creek St Pk	" "	143,744(93-94)	143,744	
L.Presley & VC Gill	" "			
Ocean Shores St Pk	" "			
Ona Beach St Pk	" "	100,240	100,240	
Otter Crest Wayside	" "	690,572	690,572	
Patterson St Pk	" "	195,158	195,158	
Road's End Wayside	" "	399,516	399,516	
Rocky Crk Wayside	" "	251,108	251,108	
San Marina St Pk	" "			
Seal Rock Wayside	" "	199,292	199,292	
Smelt Sands WS	" "	57,574	57,574	
South Beach St Pk	" "	370,256	275,796	94,460
Van Duzer Forest WS	" "	621,116	621,116	
Yachats Ocean Rd WS	" "	162,388	152,388	
Yachats St Pk	" "	483,166	483,166	
Yaquina Bay St Pk	" "	1,461,206	1,461,206	
Yaquina Bay Lghthse	" "			
Yaquina Head Lghthse	" "			
WB Nelson St Park	" "	96,108	96,108	
Mill Creek Rec Site	BLM			
Yaquina Head Nat Area	BLM	446,100(94) for Lighthouse		
Blackberry CG	FS, A	18,000(94)		
Big Elk CG	FS, Harlan			

Launching	FS, A	12,000(94)
Mike Bauer	FS, A	22,000(94)
River Edge	FS, A	4,000(94)
Canal Crk CG	FS, W	2,741(94)
Cape Perpetua CG	FS, W	11,700(94)
Cape Perpetua Grp CG	FS, W	2,440(94)
Cape Perpetua VP	FS, W	235,000(94)
Cape Perpetua VC	FS, W	135,000(94)
Devil's Churn	FS, W	315,000(94)
Keller Crk CG	FS, W	5,300(94)
Tillicum Beach CG	FS, W	36,435(94)

POLK COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
No dev sites in assmt area	Polk Cty	No use records		
Valley of the Giants on the N. Fork of Siletz	BLM			

TILLAMOOK COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
Airbase Res Day Use	Tillamook Cty			
Barview Park CG	Tillamook Cty			
Bayocean Pen Day Use	Tillamook Cty			
Bixby Boat Basin	Tillamook Cty			
Cape Kiwanda Day Use	Tillamook Cty			
Demoley/Wilson Day U	Tillamook Cty			
Fisher's Point Bt Rp	Tillamook Cty			

Fraser Boat Ramp	Tillamook Cty			
Happy Camp Access Day	Tillamook Cty			
Island Park CG	Tillamook Cty			
Kilchelo Pt Bt Rp	Tillamook Cty			
Kilchis 101 Bt Rp	Tillamook Cty			
Kilchis Park CG	Tillamook Cty			
Lake Lytle Bt Rp	Tillamook Cty			
Little Nestucca Bt Rp	Tillamook Cty			
Little Nestucca Day U	Tillamook Cty			
Mapes Crk Bt Rp	Tillamook Cty			
Memaloose Pt Bt Rp	Tillamook Cty			
Mills Bridge Bt Rp	Tillamook Cty			
Munson Crk Fall Day	Tillamook Cty			
Netarts Boat Ramp	Tillamook Cty			
Netarts Comm Pk	Tillamook Cty			
Pacific City Bt Rp	Tillamook Cty			
Pacific Cit Neigh Pk	Tillamook Cty			
Siskeyville Bt Rp	Tillamook Cty			
Sollie Smith Boat Rp	Tillamook Cty			
Steiner Boat Ramp	Tillamook Cty			
Three Rivers Basin	Tillamook Cty			
Trask Park CG	Tillamook Cty			
Webb Park CG	Tillamook Cty			
Woods Park CG	Tillamook Cty			
Cape Kiwanda St.Pk	St Pk and Rec			
Cape Lookout St.Pk	" "	342,352(93-94)	238,580	103,772
Cape Meares St. Pk	" "	199,492(93-94)	199,492	

Cape Meares Lght Hs.	" "			
Manhattan Beach WS	" "		67,016	67,016
Neskowin Beach WS	" "		200,940	200,940
Oceanside Beach St Pk	" "		357,340	357,340
Rockaway Beach WS	" "		76,036	76,036
Straub State Park	" "		202,500	202,500
Elk Creek CG & TH (for Elk Mt. Trail,	Or D Forestry Elk Creek Trail, Wilson River Wagon Rt. Trail)			
Jones Creek CG	Or D Forestry			
Kings Mtn TH	Or D Forestry			
Stage Coach Horse Camp	Or D Forestry			
Alder Glen CG	BLM	5,400(93)		
Dovre Peak Wayside/CG	BLM	3,500(93)		
Elk Bend CG	BLM	1,000(93)		
Fan Creek CG	BLM	4,300(93)		
Castle Rock CG	FS, H	11,169(92)		
East Dunes CG	FS, H	39,700(92)		
Fisherman's Day Use	FS, H	25,000(92)		
Hebo Lake CG	FS, H	4,500(92)		
Mt. Hebo CG	FS, H	900(92)		
Rocky Bend CG	FS, H	2,260(92)		
Sand Beach CG	FS, H	53,020(92)		
West Winds CG	FS, H	20,000(92)		

WASHINGTON COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
Hagg Lake	Washington Cty	219,271(94)		

Note: Hagg Lake is just east of the assessment area.

Metzer Park	Washington Cty	No use records
Browns Cp Mtrcyc Pk/St	Or D Forestry	
Gales Creek CG (Gales Creek Trail)	Or D Forestry	
Rogers Camp (Nel Rogers Trail, Gravelle Brothers Trail)	Or D Forestry	
Rogers Camp TH	Or D Forestry	

YAMHILL COUNTY

Site	Agency	Total Visits (Yr)	Day	Overnight
Coast Creek Park	Yamhill Cty	No use records		
South Lake CG	FS, H	600(92)		

Appendix F.6 Highest Recreation Use

Highest Use Recreation Sites - the highest of State Park day use within the assessment area. (1994 data)

J.M. Honeyman State Park - 1,507,976 visits
Yaquina Bay Day Use Area - 1,461,206 visits
D River - 1,460,660 visits
Ottercrest Lookout - 690,572 visits

Other high use sites:

H.B. Van Duzer site, 621,116 visits
Devil's Elbow, 589,580 visits
Boiler Bay Wayside, 585,220
Yachats State Park, 483,166
Neptune, 459,374.
Yaquina Head, BLM, 446,100
Oregon Coast Aquarium, 530,000
Devil's Churn, 630,000
Oregon Dunes Overlook, 494,035
Windy Cove Campground, Douglas County, 467,145 total visits for both loops
Dean Creek Elk Viewing Area, BLM, 450,000 visits in 1990
Hagg Lake, Washington County, 291,271 visitors

Next highest use recreation sites.

Cape Perpetua Viewpoint, 235,000
Cape Perpetua Visitor Center, 135,000
South Jetty Staging Area, 226,840
Horsfall Campground, 213,900, includes overnight use
Ocean Beach Wayside, south of Waldport, 200,000 visitors

The highest camping use at State Parks is listed here. Overnight use at State Parks is figured in camper days:

J.M. Honeyman, 139,660
Beverly Beach, 131,363
Cape Lookout, 103,772

Note: Data for Windy Cove is overnight use.
Data for Hagg Lake includes overnight use. Hagg Lake is immediately east of the Study Area in Washington County, and use there shows the effect of the Portland Metro area on a site close to the Study Area.

Appendix F.7 Recreation Activities

County

Benton County: boating, fishing, camping, picnicing.

Douglas County: camping, playground, stream and pond, fishing and crabbing, ocean viewing, lake, light house, coastal visitors' museum, harbor and sand dunes, whale watching.

Lane County: water sports; boating; swimming; fishing, including fishing from dock; organization camp; hiking; group picnicing; beach access. Fishing and boating are the most common uses.

Lincoln County: boating, picnicing, volleyball and basketball, camping, group camping, hiking, nature walking.

Polk County: picnicing, fishing and boating, viewing historic structures.

Tillamook County: dock and jetty fishing, surf fishing, dory fishing; crabbing; bay clamming; boating - - motor, drift; surfing; swimming; fishing, swimming, boating with children; skin diving, beginning wind surfing; beach combing, walking on the beach, hiking; tent and trailer camping, group picnicing; horseshoe tossing, baseball, playgrounds, volley ball, outdoor basketball, horseback riding; bird watching.

Washington County (Hagg Lake): boating - sailing, rafting, canoeing, or trolling; water skiing; swimming; fishing; picnicing, group picnicing, wildlife viewing, wild flower viewing, bird watching, bicycling, hiking.

Yamhill County: fishing and picnicing opportunities.

State

Parks: picnicing, camping including hiker and biker camping, looking at lighthouses, historical interpretative sites, viewing coast bridges, picnicing, fishing, hiking, beach combing, wildlife viewing, viewing unusual plants, nature viewing and interpretation, nature hiking, boating, swimming, sand dune climbing.

Forests:
Tillamook State Forest: hiking, trail riding, mountain biking, off-highway vehicle use, fishing, camping, picnicing, viewing scenery.

Elliot State Forest: all dispersed recreation use, hunting and fishing are the main recreation uses.

Federal

Bureau of Land Management sites: picnicing and camping; viewing scenery; viewing historic sites; hunting and fishing including warm water fishing; wildlife viewing including whale watching, looking at tide pools and watching a seabird nesting colony, watching a fish ladder for migrating salmon, viewing elk; off-highway vehicle use; mountain biking; swimming; boating - including canoeing, rafting; water sliding; waterskiing; nature hiking including botanical sightseeing, geological sightseeing, viewing

and hiking through old growth; visitor center, natural and cultural history interpretation.

Siuslaw National Forest: camping and picnicing, including group site day use and camping, and horse camping; hiking and nature walking including hiking in Wilderness; wildlife viewing including whale watching, bird watching; off-highway vehicle use; mountain biking; trail riding; fishing and hunting; viewing scenery; viewing cultural resources including middens, homesites, and historic structures; nature and heritage resource interpretation; visitor center, natural and cultural history interpretation.

Private: wildlife and nature viewing and interpretation at sites such as Hatfield Marine Science Center, Sea Lion Caves, Newport Coast Aquarium, Newport Aquarium. Charter boat fishing and whale watching from Depoe Bay.

Recreation uses in Tillamook area include: hiking trails, bicycling, clamming, crabbing, use of beaches. People have a variety of recreation interests, inland to state, forest and coast (Tillamook Chamber of Commerce 2-23-95). Camping, walking on the beach, and clamming are noted in the Coos Bay area (Coos Bay Chamber of Commerce 2-23-95). In the Coos Bay area, as at Tillamook, there is interest in trails inland, in parks, and in coastal areas (Tillamook 2-23-95). A broader range of recreation activities is expected in the future (Chambers of Commerce, Salem BLM).

Appendix F.8 Recreation Activities, BLM Sites

Coos Bay Shorelands: viewing birds and animals, including whales; natural and cultural history; boating.

Dean Creek Elk Viewing Area: viewing elk, a visitor center, historic site investigation.

Lake Creek Falls, near Triangle Lake: water sliding, hiking, watching the fish ladder for migrating salmon, swimming, fishing.

Loon Lake: camping, swimming, fishing, waterskiing, mountain biking, wildlife observation, boating, rafting.

Nestucca River: viewing scenery through the Forest along the river, day use, viewing historic sites, wildlife viewing, hunting and fishing.

Siuslaw River: swimming, mountain biking, hiking, botanical sightseeing, geological sightseeing, wildlife observation, hunting, fishing, boating, rafting, camping, picnicing, swimming. Viewing and hiking through old growth, viewing the coast range, nature hiking. Viewing scenery.

Upper Lake Creek: hiking, off-highway vehicle use, mountain biking, swimming, boating - including canoeing, rafting, picnicing and camping, hunting, warm water fishing.

Yaquina Lighthouse: viewing historic sites, whale watching at Yaquina Head, looking at tide pools and watching seabird nesting colony, hiking, fishing.

Appendix F.9 Definition of Recreation Opportunity Settings

Recreation opportunity settings identify conditions of land that offer a variety of recreation experience opportunities categorized into six classes on a continuum from primitive to urban. Each class is defined in terms of the degree to which it satisfies certain recreation experience needs, based on the degree of naturalness of the environment, the type and amount of facilities provided, the degree of outdoor skills needed to enjoy the area, and the relative density of recreation use. The six classes are:

Primitive - Area is characterized by an essentially unmodified natural environment, generally of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.

Semi-primitive Nonmotorized - Area is characterized by a predominantly natural or natural-appearing environment generally of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but would be subtle. Motorized recreation use is not permitted, but local roads used for other resource management activities may be present on a limited basis. Use of such roads is restricted to minimize impacts on recreational experience opportunities.

Semi-primitive Motorized - Area is characterized by a predominantly natural or natural- appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed with minimum on-site controls and restrictions. Use of local primitive or collector roads with predominantly natural surfaces and trails suitable for motor bikes is permitted.

Roaded Natural - Area is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of man. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.

Rural - Area is characterized by a natural environment that has been substantially modified by development including structures, vegetative manipulation, or pastoral agricultural development. Resource modification and utilization practices may be used to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are design for use by a large number of people. Facilities for intensified motorized use and parking are available

Urban - Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are often used to enhance specific recreation activities. Vegetative cover is often exotic and

manicured. Sights and sounds of humans are predominant on site. Large numbers of users can be expected both on site and in nearby areas. Facilities for highly intensified motor use and parking are available; forms of mass transit may be available to carry people throughout the site.

Appendix F.10 - List of Special Forest Products Permitted by Agency*

State Department of Forestry
Special Forest Products permitted through the Forest Grove District:

vine maple plants
small alder trees
seedlings - noble fir and maple, salal
sword fern
salal branches
Oregon grape
huckleberry plants and branches
manzanita plants
noble fir boughs
Douglas fir boughs
cedar boughs
fern - includes bracken fern
moss
cedar for posts, shakes, shingles, 3- saw
commercial firewood and cedar
personal use firewood
large rock for landscaping
4" poles
corral poles
fir cones
bear grass
cascara
cones
vine maple

Special Forest Products permitted through the Tillamook District:

fern
salal
Oregon Grape
moss
bear grass
cascara
alder poles
Douglas fir and cedar boughs
firewood, commercial
cones
poles - alder, vine maple
transplants

Products permitted through the West Oregon District:

firewood, commercial
(mushrooms, in the past)
moss
cascara
ferns
salal
Vine Maple
miscellaneous products

Products permitted through the West Lane District:

firewood, commercial
mushrooms
personal use firewood
miscellaneous products - sword fern, salal, Oregon grape, moss, huckleberry

Bureau of Land Management

Special Forest Products permitted through the Eugene District

Mushroom, salal and moss, vine maples, and Oregon grape root are main special forest products permitted.

Also, firewood, rail - split, fence stay, boughs, greens and yew bark, christmas trees, wildings, cones, ferns. They are not issuing permits for bear grass now.

Products permitted through the Salem District:

Saw timber, pulp wood, fuel wood , poles and rails, Christmas trees, moss, ferns, greens, mushrooms, burls, boughs, wildings, and miscellaneaous small products.

Products permitted through the Coos Bay District:

Saw timber, pulp wood, fuel wood, poles and rails, christmas trees, ferns, huckleberry, mushrooms, burls, boughs, wildings, and miscellaneous small products.

U.S. Forest Service, Siuslaw National Forest

Special Forest Products permitted through the Alsea District

Firewood (personal use, find your own, free use, and commercial), cedar poles, moss, mushrooms, boughs, cascara bark, and Christmas trees.

Products permitted through the Hebo District

Firewood (personal use, find your own, free use, commercial, and weekend), poles and cedar poles, moss, mushrooms, alder stakes, transplants, boughs, cascara bark, Christmas trees.

Products permitted through the Mapleton District

Firewood (personal use, and free use), poles and cedar poles, moss, mushrooms, alder stakes, transplants, boughs, cascara bark, Christmas trees.

Products permitted through the Oregon Dunes National Recreation Area

Firewood (personal use), mushrooms, transplants, Christmas trees.

Products permitted through the Waldport Ranger District

Firewood (personal use, find your own, free use, commercial use), poles, mushrooms, transplants, boughs, cascara bark, Christmas trees.

***1993-1994 data. See list of sources for sources of information.**