ACEC Name	Ranking
Sandy River Gorge	Low
Silt Creek	Low
Snow Peak	Medium
Soosap Meadows	Low
Spencer Creek	Low
Surveyor	Low
Table Rocks	Low/Medium
Tater Hill	High
The Butte	Low
Tunnel Creek	Low
Upper Elk Meadows	Low
Upper Klamath River	Low/Medium
Upper Klamath River Addition	Low
Upper Rock Creek	Low
Upper Willamette Valley Margin	Low/Medium
Valley of the Giants	Low
Walker Flat	Low
Wassen Creek	Low
Waterloo	Low
West Fork Illinois River	Medium/High
White Rock Fen	Low
Wilhoit Springs	Medium
Willamette Valley Prairie Oak and Pine Area	Low
Williams Lake	Low
Woodcock Bog	Medium
Yainax Butte	Low
Yaquina Head	Low
Yellowstone Creek	High

**Table L-11.** Ranking of each Recreational Management Area that is recommended for withdrawal from locatable mineral entry. These recommendations vary by alternative.

<b>Recreation Management Area Name</b>	Ranking
Alder Glen Campground	Low
Armstrong Gulch Trailhead	Medium
Barlow Creek Trail and Trailhead	Low
Bastendorff Beach	Low
Bear Gulch Trailhead	Medium
Bolt Mountain Trail	Medium
Carpenter Bypass Mountain Bike Trail	Low
Carpenter Bypass Staging Area	Low
Cascade View OHV Complex	Low
Cathedral Hills Trails	Medium
Cedar Grove	Low
Clay Creek Recreation Site	Low
Clay Creek Trail	Low
Coos Head	Low
Crooked Creek OHV Staging Site	Low
Culp Creek Expansion Site	Low

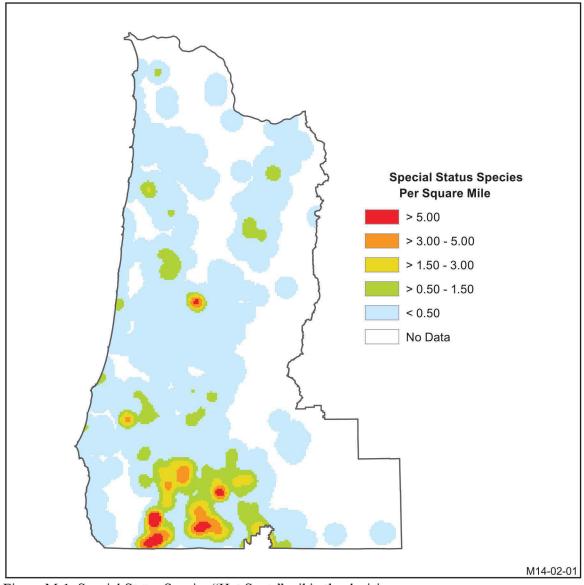
# Appendix L – Energy and Minerals

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Northwest HillsMediumPacific Crest Trail (PCT) 1 and 2Low		
Pacific Crest Trail (PCT) 1 and 2 Low		

Recreation Management Area Name	Ranking
Provolt Seed Orchard	High
Rennie Boat landing	Low
Rocky Peak Trail	Medium
Rogue Wild and Scenic River	Medium/High
Rough and Ready Trail	Medium
Row River Trail	Low/Medium
Row River Trail Expansion	Low/Medium
Sandy Ridge Trailhead	Low
Sawmill Trail	Low
Sharps Creek Recreation Site	Medium
Shotgun Creek Recreation Site	Low
Shotgun Non-Motorized Trail System	Low
Shotgun OHV Trail System	Low
Silver Creek Boat and McKenzie River Watchable	Low
Wildlife Site	LOW
Siuslaw Bend Campground	Low
Sixes River Campground	Medium
Smith Creek	Low
Smith River Falls Campground	Low
Sterling Mine Ditch Trail	High
Stick Beach	Medium
Storm Ranch	Medium
Table Rocks	Low/Medium
Taylor landing Recreation Site	Low
Three Bears- Hardy Creek	Low
Tyrrell Seed Orchard Interpretive Trail	Low
Upper lake Creek ERMA	Low
Vincent Creek Campground	Low
Whitewater Day Use Area	Low
Whittaker Creek Recreation Area	Low
Whittaker Creek Trail	Low
Wild Rogue Canyon	Low/Medium/High
Wilhoit Springs	Medium
Willamalane Non-Motorized Trails	Low
Willamette River Greenway (R&PP lease)	Low
Wolf Creek Environmental Education Site and Trail	Low
Wolf Creek Falls Trail	Low

**References** USDI BLM. 2008. Final Environmental Impact Statement for the Revision of the Resource Management Plans of the Western Oregon Bureau of Land Management Districts. Bureau of Land Management, Oregon State Office, Portland, OR.



## Appendix M – Special Status Species – Botany

Figure M-1. Special Status Species "Hot Spots" wihin the decision area

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
FU	Albatrellus avellaneus	Fungus	CF	Endemic to coastal lowlands from Northern California to Canada; occurs principally in coastal Sitka spruce, western hemlock and in Pacific silver fir old growth forest, at elevations of 112-1,260 (472) feet.
FU	Alpova alexsmithii	Fungus	CF	Endemic to the Pacific Northwest. Known from Mountain Hemlock, Pacific Silver Fir, and Western Hemlock vegetation zones at elevations of 2,852-5,805 feet.
FU	Arcangeliella camphorata	Fungus	CF	Known from approximately 20 sites in Oregon. Occurs principally in soil and litter in western hemlock, tan oak, live oak, sugar pine, Douglas-fir, Pacific madrone, California black oak, Port Orford cedar and Sitka spruce series at elevations of 3-3,385 (1,847) feet.
FU	Boletus pulcherrimus	Fungus	CF	Endemic to western North America. Populations have been located in white fir (79%), mountain hemlock (12%), developed (5%), Douglas fir (2%), western hemlock (2%). Subzones included moist-wet ABCO-ABGR, wet-dry western hemlock and wet Douglas-fir. Populations range from 42-5,620 feet in elevation and are found in equal numbers on south, east, and west-facing slopes.
FU	Bridgeoporus nobilissimus	Fungus	CF	Ranges from the Olympic Mountains and the western Cascade Range. Fruiting bodies occur on large, dying and dead noble fir and Pacific silver fir in late-successional old-growth forests and on remnant stumps and snags in young and mature second-growth forests in the Pacific silver fir and western hemlock zones in western Washington and Oregon (Cowden 2002, Redberg <i>et al.</i> 2003).
FU	Chamonixia caespitosa	Fungus	CF	Known from Europe, Asia, and North America. In the Pacific Northwest it is found with <i>Tsuga</i> species and Pacific silver fir at high elevation and western hemlock, Douglas-fir, and Sitka spruce in coastal forests.
FU	Choiromyces venosus	Fungus	CF	Known from Europe and both North American coasts; however, it is known from only three sites in North America. The one Oregon population occurs in the western hemlock wetlands association at 1,677 feet elevation.
FU	Cortinarius barlowensis	Fungus	CF	Widely distributed in the western Cascades of both Oregon and Washington and the coast of Washington. In OR and WA principally in montane Pacific silver fir and coastal western hemlock series at elevations of 25-4,729 feet.
FU	Cystangium idahoensis	Fungus	CF	Known from only two locations in Oregon and one location in Idaho. Found in wetland areas within Pacific silver fir, and western hemlock plant association from 2,738-3,455 feet in elevation.
FU	Dermocybe humboldtensis	Fungus	CF	Known from Humboldt County, CA, to Douglas County, OR. Occurs in White Fir- Grand Fir vegetation zones at elevations of 1,337-1,781 feet. Associated species include

#### Table

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
				Douglas fir and ponderosa pine within Klamath and Oregon Coast Range provinces.
FU	Gastroboletus vividus	Fungus	CF	Known from the Sierra Nevada in California to the Washington Cascades. Found in Mountain Hemlock (67%), Douglas-fir (17%) and White Fir-Grand Fir (17%) vegetation zones at elevations of 4,266-6,747 feet.
FU	Gymnomyces fragrans	Fungus	CF	Known from California, Idaho, and Oregon in the Pacific silver fir, mountain hemlock and Shasta red fir plant associations. Populations range from 4,803-6,853 feet in elevation.
FU	Helvella crassitunicata	Fungus	CF	Known from the Pacific Northwest and occurs primarily in Mountain Hemlock and Pacific Silver Fir vegetation zones at elevations of 1,533-9,673 feet.
FU	Mythicomyces corneipes	Fungus	CF, RI	Known from the Pacific Northwest, Canada, England, and Scandinavia primarily in Western Hemlock and Pacific Silver Fir vegetation zones at elevations of 969-6,081 feet.
FU	Phaeocollybia californica	Fungus	CF	Endemic to the Pacific Northwest from western central Oregon, south to extreme northern California. In coastal to inland lowlands associated with the roots of Pacific silver fir, Sitka spruce, Douglas-fir, and Western hemlock within an elevation range of 206-3855 feet.
FU	Phaeocollybia gregaria	Fungus	CF	Endemic to Oregon and Northern California, in coastal rainforests. Associated with the roots of western hemlock, Sitka spruce and Douglas-fir in coastal rainforests at 486-3,628 feet elevation.
FU	Phaeocollybia oregonensis	Fungus	CF	Known from western Oregon to British Columbia Soil in association with roots of Douglas fir, western hemlock, and Pacific silver fir; 721-3,916 feet elevation.
FU	Pseudorhizina californica	Fungus	CF	Known from Oregon and Washington primarily in Pacific Silver Fir, White Fir-Grand Fir, and Mountain Hemlock vegetation zones at elevations of 668-6,515 feet.
FU	Ramaria amyloidea	Fungus	CF	Endemic to western Oregon and Washington and northwest California. Occurs in Mountain Hemlock, Pacific Silver Fir, Western Hemlock, and White Fir-Grand Fir vegetation zones at elevations of 1,592-5,729 feet.
FU	Ramaria rubella var. blanda	Fungus	CF	Known from the Pacific Northwest and Tennessee. Associated with western hemlock rainforest from 442- 1,813 feet elevation.
FU	Ramaria spinulosa var. diminutiva	Fungus	CF	Known from the Pacific Northwest from very few sites. It is associated pine and Douglas-fir (Exeter <i>et al.</i> 2006; GeoBOB database).
FU	Rhizopogon chamaleontinus	Fungus	CF	Known from the Klamath Mountains Physiographic Province within Douglas-fir/Tanoak series/Incense cedar forests at approximately 1,050 feet elevation.
FU	Rhizopogon ellipsosporus	Fungus	CF	Known in Oregon in the Klamath Mountains Physiographic Province and in California in the Sierra Nevada Mountains. In Oregon, it is found primarily within Douglas-fir, western red cedar, and white fir-grand fir associations from 1,040 to 4,116 feet elevation.
FU	Rhizopogon exiguus	Fungus	CF	Known from Oregon and Washington within Douglas-fir, white fir/grand fir, western red cedar, and western hemlock associations at 54-3,844 feet elevation.
FU	Rhizopogon inquinatus	Fungus	CF	Known in western Oregon and Idaho within mountain hemlock and western hemlock

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
				associations from 1,490-4,507 feet elevation.
FU	Stagnicola perplexa	Fungus	CF	Known from the boreal forests of North America and Europe. Associated with Pacific silver fir and more moist forest, but has also been documented in shrub-steppe habitat.
FU	Thaxterogaster pavelekii	Fungus	CF	Endemic to coastal forests in the Pacific Northwest under mature Sitka spruce and lodgepole pine from sea level (17 ft.) to around 588 ft.in Oregon.
BR	Anastrophyllum minutum	Liverwort	CF	Circumboreal on peaty soil at relatively high elev. (>5,500 ft.), ledges of N-facing cliffs of peaks and ridges.
BR	Andreaea schofieldiana	Moss	CF, RK	Endemic to the Pacific Northwest from southwestern British Columbia to Siskiyou and Del Norte Counties, California. Forming mats on dry and exposed to moist, shaded igneous rocks, montane to subalpine within Pacific silver fir, subalpine fir, noble fir, Douglas-fir, western hemlock, and mountain hemlock associations.
BR	Anthelia julacea	Liverwort	SW	Widespread around the northern hemisphere in boreal and montane regions, reaching its southern limit in western North America in Oregon. Grows on peaty soil, in Oregon associated with low ericaceous shrubs.
BR	Blepharostoma arachnoideum	Liverwort	CF	Known from the Pacific Northwest in moist habitats within old growth forests, where it most often grows on rotten logs.
BR	Bruchia flexuosa	Moss	MG	Occurs in North America and Europe. In the Pacific Northwest, it is restricted to low elevation prairie and mud flats around reservoirs in the interior valleys west of the Cascade Range.
BR	Bryum calobryoides	Moss	RI, RK	Endemic to western North America. Occurs on both acid and basic rocks and soil in shaded to exposed boulder fields, montane to alpine meadows, cliffs, and outcrops from 3000-7,000 ft. elevation.
BR	Calypogeia sphagnicola	Liverwort	SW, SE	Circumboreal and bipolar. Occurs in poor fens containing Sphagnum, acidic fen habitats, and in a fen on ultramafic soils.
BR	Campylopus schmidii	Moss	CF, RI, SW, MZ	Known from coastal Oregon (Lane County) and northern California (Del Norte and Mendocino Counties), Mexico, Hawaii, Asia, Africa, Australia. Occurs on nutrient-poor sandy substrates near coast.
BR	Cephaloziella spinigera	Liverwort	SW	Occurs in bogs and fens around the northern hemisphere in boreal and montane regions. In western North America reaching the southern edge of its range in northern California.
BR	Codriophorus depressus	Moss	CF, RI, OHW	Known only from the Sierra Mountains of California and Nevada, and the southern Cascade and Klamath mountains of southwestern Oregon and northwestern California. It forms mats on rocks in perennial or intermittent streams, and in the spray zone of waterfalls at 400-11,000 feet elevation. Habitats are subject to scour at high water.
BR	Cryptomitrium tenerum	Liverwort	CF, RK, RI	Known from southwestern Oregon and California, west of the Cascade Range and Sierra Nevada, Mexico, South America, and India. Occurs on bare, usually shaded and humid soil on hillsides, rock outcrops, and streambanks.
BR	Encalypta brevicollis	Moss	RK	Known from the Pacific Northwest, Canada, Greenland, and Europe. Occurs on soil in

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
				shaded crevices and overhanging rock outcrops.
BR	Encalypta brevipes	Moss	RK	Interruptedly circumboreal. In the Pacific Northwest known from Alberta, British Columbia, Washington, and Oregon on soil in shaded crevices in igneous rocks, along ridge tops subject to frequent fog penetration.
BR	Entosthodon fascicularis	Moss	RI, MG, OHW, SC, RK	Known from British Columbia, Idaho, Washington, Oregon, California, Arizona, Europe, and North Africa. Occurs on seasonally wet, exposed soil in seeps or along intermittent streams below 3,000 ft.
BR	Ephemerum crassinervium	Moss	SW	Known from Oregon, eastern North America, Germany, Japan, and New Zealand. Occurs on damp disturbed soil, often in old fields, paths, river banks or spots of open bare ground.
BR	Ephemerum serratum	Moss	SW, ME	Known from North America, Brazil, Sardinia, China, South Africa, and New Zealand. Occurs on damp disturbed soil, often in old fields, pastures, and along the edges of ponds.
BR	Fissidens fontanus	Moss	RI	Known from North America, Mexico, West Indies, Central America, Europe, and Africa. It is an aquatic species attached to rocks, logs, sticks in stagnant or slow-moving water or in areas where the water level fluctuates.
BR	Gymnomitrion concinnatum	Liverwort	CF, RK	Circumboreal and bipolar, in both eastern and western North America. Occurs on peaty soil of cliffs and rock outcrops.
BR	Haplomitrium hookeri	Liverwort	CF	Occurs in both northern and southern hemispheres. In western North American reaches its southern limit in Oregon. Grows on soil in full sun, intermixed with other liverworts and hornworts.
BR	Harpanthus flotovianus	Liverwort	SW	Widespread around the northern hemisphere in boreal and montane regions. In western North America reaching the southern edge of its range in Oregon. Occurs in bogs and fens.
BR	Helodium blandowii	Moss	CF, SW, MG	Circumboreal, extending south in the Cascade Range and Sierra Nevada to California, and south in the Rocky Mountains to Arizona. Grows in medium to rich montane fens with calcareous groundwater and around the edges of fens from 5,000-6,000 ft. elevation.
BR	Herbertus aduncus	Liverwort	CF, RK	Endemic to Pacific coastal area of North America. This species is found only on cliffs in Oregon.
BR	Limbella fryei	Moss	CF, RI, MZ	Endemic to the Pacific Northwest and known only from two sites in coastal Oregon (Lane and Curry Counties). On wet rotten wood, leaf litter and lower trunks of tall shrubs, in dense coastal shrub swamps below 200 ft.
BR	Lophozia gillmanii	Liverwort	SW, RK	Widespread around the northern hemisphere in boreal and montane regions, in western North America south to Tulare County, California. Occurs on peaty soil, usually associated with cliffs or ledges. It requires lime or alkaline soil.
BR	Lophozia laxa	Liverwort	MZ, SW	Interruptedly circumboreal, in North America as far south as Oregon, Michigan, and New Jersey. Occurs in well-developed hummocks of <i>Sphagnum</i> in fens and bogs along

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Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
				coast and in Cascades, 0-5,000 ft. elevation.
BR	Marsupella emarginata var. aquatica	Liverwort	RI	Known from North America, northern Europe, Great Britain, and Greenland. Restricted to streams with relatively fast moving water and rocky bottoms in subalpine, montane situations.
BR	Meesia uliginosa	Moss	MG, RI	Circumboreal. In the Pacific Northwest, known from British Columbia, Washington, Montana, Oregon, and California. Occurs in medium to rich montane fens from 5,000- 6,000 ft. elevation.
BR	Metzgeria violacea	Liverwort	CF, MZ	Known from northwestern and southeastern North America, Europe, and Asia. Occurs on tree trunks and shrubs in coastal rainforest at 0-1,000 ft. elevation.
BR	Orthodontium pellucens	Moss	CF, MZ	Known from southeastern and western United States, Central and South America, Caribbean, and the Hawaiian Islands. Occurs on stumps, rotten logs, bark of living redwood trees, confined to redwood groves near the ocean.
BR	Phymatoceros phymatodes	Liverwort	SW	Known from the central coast and Sierra Nevada of California to Curry and Douglas Counties, Oregon. Occurs on bare, mineral soil which remains moist until late spring or summer, from near sea level to 650 m.
BR	Porella bolanderi	Liverwort	CF, RK, OHW	Endemic to western North America and known only from California, Oregon, and Utah. Occurs on variety of rock types and trunks of oak, California bay laurel, and big leaf maple, 500-3,000 ft. elevation.
BR	Preissia quadrata	Liverwort	RK	Circumboreal in temperate to boreal regions. In western North America extending south to California. Occurs on soil with little organic material, typically on ledges on cliffs or in crevices in rocky areas.
BR	Pseudocalliergon trifarium	Moss	SW	Circumboreal but rare throughout much of its range. In the Pacific Northwest, known from British Columbia, Alberta, Montana, and Oregon. Occurs in medium to rich montane fens where it grows submerged to emergent in pools or on saturated ground, usually in full sunlight. Elevations range from 5,000-6,000 feet.
BR	Schistidium cinclidodonteum	Moss	RK, RI	Known from Washington, Idaho, Oregon, California, Nevada, and Europe. Occurs on wet or dry rocks or on soil in crevices of rocks and boulders, often along intermittent streams, at elevations of 5,000-11,000 feet.
BR	Schistostega pennata	Moss	CF	Known from the Pacific Northwest, northeast North America, and China. Grows on mineral soil in crevices on lower, sheltered parts of upturned tree root wads, ceilings of caves, crevices in soil banks, along the upper banks of perennial streams, occasionally on rock (Harpel 2007 - Flora of North America, vol. 27, p. 475).
BR	Splachnum ampullaceum	Moss	RI	Circumboreal. In the Pacific Northwest, reported from Alaska, British Columbia, Alberta, Washington, and Oregon. Occurs on old dung or soil enriched by dung, in peatlands or wetland (fens).
BR	Tetraphis geniculata	Moss	CF	Known from northern California to Alaska. Grows on rotten stumps and logs in shaded, humid locations (USDA FS and USDI BLM 2005).
BR	Tomentypnum nitens	Moss	CF, RI	Circumboreal and in North America south in the Rocky Mountains to New Mexico. In

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
				the Pacific Northwest known from Alaska, British Columbia, Washington, Idaho,
				Montana, and Oregon. Occurs in montane fens, elev. 5,000-6,000 feet.
BR	Tortula mucronifolia	Moss	CF, RK	Known throughout the Northern Hemisphere, Turkey, Africa, and New Zealand. Occurs on soil, tree roots, and sheltered ledges and crevices of rock outcrops, 5,000-7,000 ft. elevation.
BR	Trematodon asanoi	Moss	RI	Known from British Columbia, California, Oregon, Newfoundland, and Japan. on moist bare soil along the edges of trails, streams and ponds in the subalpine zone.
BR	Tritomaria exsectiformis	Liverwort	CF, RI	Circumboreal species that is missing in Eastern Asia. Within Western North America, it is known from Alaska, British Columbia, Colorado, Idaho, Montana, Oregon, Washington, and Wyoming. Occurs on peaty or humic soil, or rotting wood, within riparian zones from 3,200-5,200 feet elevation.
LI	Bryoria spiralifera	Lichen	CF	Known from Oregon and California. Occurs on coastal trees, snags, and shrubs within 2 miles of the ocean.
LI	Bryoria subcana	Lichen	CF	Known from coastal western North America between south-central Alaska and central California and from Great Britain. Found on bark and wood of conifers in Sitka spruce, western hemlock, wet Douglas-fir, wet noble fir ( <i>Abies procera</i> ), and mixed hardwood-coniferous forests.
LI	Calicium adspersum	Lichen	CF	Known from North America, Scandinavia, and Europe. In the Pacific Northwest, known from British Columbia south to California. Grows on bark of living (older than 200 years) grand fir, Douglas-fir, oaks, redwood and western red cedar at or below 2,000 feet elevation.
LI	Cladidium bolanderi	Lichen	RK, OHW, SE	Known from along the immediate coast of Alaska, Oregon, and California. On a variety of rock types on coastal bluffs and coastal grasslands from sea level to 1,000 ft. elevation.
LI	Erioderma sorediatum	Lichen	CF	Known from New Zealand and North America, where it is rare from southeast Alaska through British Columbia, Washington, and Oregon. Grows on shrubs and trees within the coastal fog zone, in broken shore pine and Sitka spruce or shrub thickets.
LI	Heterodermia leucomelos	Lichen	CF	Found in the Americas, Europe, Africa, and Asia, and is widespread in the tropics and subtropics. In North America, it is known from the Pacific coastal fog zone in British Columbia, Oregon, and California. Grows on Sitka spruce and shore pine.
LI	Hypogymnia pulverata	Lichen	CF	Interruptedly bipolar. Pacific Northwestern and eastern North America, Japan, Australia, New Zealand, and Argentina. Rare in North America, widespread in Australia and New Zealand. The single known site in the Pacific Northwest is in coastal forest, where it was collected in litter fall from branches of Sitka spruce near the top of a forested dune on BLM property in Tillamook County.
LI	Hypotrachyna revoluta	Lichen	CF	Known from coastal Alaska to California in hypermaritime environments and sporadically throughout the rest of North America; also in Europe, South America and China. Occurs on headlands and ridges or in marine estuaries and dune landforms.

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
LI	Leioderma sorediatum	Lichen	CF	Known mainly from the South Pacific, New Zealand, Australia, Sri Lanka, and mainland India, with disjunct populations on the Pacific coasts of North and South America. In Oregon, it is found in semi-open coastal thickets, and deflation plains and ericaceous shrub thickets of shore pine on stabilized dunes and deflation plains.
LI	Leptogium cyanescens	Lichen	CF, OHW	Found worldwide in both temperate and tropical regions. In the Pacific Northwest, known from Alaska to Oregon, but rare throughout the region. Occurs on shaded twigs of deciduous trees and shrubs in humid habitats, rarely in exposed situations. The two Oregon sites are on the immediate coast at elevations of 15-30 feet.
LI	Lobaria linita	Lichen	CF	Occurs sporadically in the European Alps, Norway, Siberia, eastern Asia, and North America. It is strongly associated with old-growth and climax forests, prefers the lower boles of conifers, especially Pacific silver fir, but in drier habitats or at higher elevations it may also grow on moss-covered boulders or rock outcrops in cool, shaded, humid microsites.
LI	Microcalicium arenarium	Lichen	CF	Found in the Pacific Northwest from Alaska south to California, Scandinavia, Europe, Asia, eastern North America, Australasia, and southern South America. Occurs on free- living green algae or leprose lichens growing in drier microhabitats such as bark, wood, root, and rock faces that are sheltered from precipitation.
LI	Niebla cephalota	Lichen	CF	Endemic to western North America, ranging from Baja California, north to Washington along the immediate coast. In the Pacific Northwest, it is found on exposed Sitka spruce, Hooker's willow, Monterey cypress and shore pine in open forests, forest edges, and scrublands along windswept coastal headlands, sand dunes, stabilized deflation plains, and marshy swales of the immediate coast.
LI	Pannaria rubiginosa	Lichen	CF	Known from the Americas and western Europe. Grows on wood and bark of trees and shrubs within a few kilometers of ocean at or near sea-level.
LI	Pilophorus nigricaulis	Lichen	CF	Occurs in Japan and on the west coast of North America, from Alaska south to Oregon, west of the Cascade crest. Grows on rock substrates primarily in non-forest communities from 130-4,700 ft. elevation.
LI	Pseudocyphellaria mallota	Lichen	CF	Known from southwestern South America and northwestern North America. Occurs within humid stands of Douglas-fir and western hemlock including stands as young as 40 years.
LI	Ramalina pollinaria	Lichen	CF, MZ, RI	Known in the Pacific Northwest from Alaska south to California and east to the Rocky Mountains, Arizona, New Mexico, Texas, eastern North America, Scandinavia, Europe, and Israel. In the Pacific Northwest, it occurs on bark and wood of various trees and shrubs, shaded rocks at low elevation.
LI	Stereocaulon spathuliferum	Lichen	CF	Circumboreal. In the Pacific Northwest from Alaska south to Oregon, in and west of the Cascade Range. Grows on basalt blocks of talus slopes, 3,000-5,000 ft. elevation.
LI	Teloschistes flavicans	Lichen	CF, MZ	Known from mostly tropical and subtropical areas. In the Pacific Northwest it occurs in Oregon and California on exposed headlands and dunes of the immediate coast.

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Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
LI	Texosporium sancti- jacobi	Lichen	SC, MG	Endemic to western North America and known from only a few extremely small, localized and widely scattered populations in south-central Washington, central Oregon, southern Idaho, and central and southern California. It occurs on soil in arid to semi-arid shrub-steppe, grassland or savannah communities up to 3,281 ft.
LI	Tholurna dissimilis	Lichen	CF	Known from western Canada and Washington and Oregon and Scandinavia. In the Pacific Northwest, grows on krummholz or flag-form subalpine fir and Engelmann spruce on windswept ridges in the upper montane and subalpine zones up to timberline.
LI	Usnea nidulans	Lichen	CF	Known from the Pacific Northwest and South America. Grows on conifers and deciduous trees exclusively in hypermaritime forests on the immediate coast and in the Coast Ranges.
VA	Abronia umbellata ssp. breviflora	Pink sand-verbena	MZ	On sandy beaches and foredunes within the Coast Range from California to British Columbia
VA	Adiantum jordanii	California maiden-hair	CF	On seasonally moist, shaded, rocky banks, cliffs, canyons, and ravines in the Coast Range and Klamath Mountains in Oregon and California
VA	Agoseris elata	Tall agoseris	MG, OHW, CF	Meadows, shrubby slopes and open woodlands, 1,600-3,200 ft. elevation; East Cascade Range and West Cascade Range and Crest
VA	Agrostis howellii	Howell's bentgrass	RK, CF	Shady woodlands at base of cliffs; West Cascade Range and Crest and Willamette Valley
VA	Allium peninsulare	Peninsular onion	СН	Dry slopes, flats, <1,100 m; Klamath Mountains, West Cascade Range and Crest, and California
VA	Anemone oregana var. felix	Bog anemone	RI, SW	<i>Sphagnum</i> bogs and marshes; Coast Range, West Cascade Range and Crest, and Washington
VA	Arabis koehleri var. koehleri	Koehler's rockcress	RK	Dry, rocky cliffs, 225-280 m; Klamath Mountains
VA	Arctostaphylos hispidula	Hairy manzanita	SE, SC, CF	Rocky serpentine soils or sandstone, open shrub and forests, not fire tolerant; Coast Range, Klamath Mountains, and California
VA	Arnica viscosa	Shasta arnica	RK	Scree, talus gullies, and slopes w/ seasonal water runoff, 1,750-2,500 m; West Cascade Range and Crest, and California
VA	Artemisia pycnocephala	Coastal sagewort	MZ, RK	Rocky or sandy soils, coastal strand; Coast Range, and California
VA	Asplenium septentrionale	Grass-fern	RK	Cliffs of various substrates, 700-2,900 m; West Cascade Range and Crest, and California
VA	Astragalus californicus	California milk-vetch	MG	Dry, open areas in scrub, woodland, valleys and canyons, 1,000-2,700 ft.; Klamath Mountains, and California
VA	Astragalus gambelianus	Gambel milk-vetch	MG, SC	Open, grassy areas, scrub, 50-900 m; Klamath Mountains, and California
VA	Astragalus peckii	Peck's milk-vetch	RK, MG	Very dry sites, on loose sandy soil or pumice, 900-1,100 m; Blue Mountains and East Cascade Range
VA	Bensoniella oregana	Bensonia	CF, RI,	Wet meadows, bogs and streams in deep soils under conifer forests; Coast Range,

Appendix M-Special Status Species - Botany

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
			SW	Klamath Mountains, and California
VA	Botrychium montanum	Mountain grape-fern	CF, RI	Shady coniferous forest, edges of bogs, cedar swamps, 1,000-2,000 m; Blue Mountains, East Cascade Range, West Cascade Range and Crest; California, Montana, Washington, and British Columbia
VA	Botrychium pumicola	Pumice grape-fern	RK, CF	Fine pumice gravel on open slopes, dense lodgepole pine stands, 1,900-2,500 m; East Cascade Range, West Cascade Range and Crest; California
VA	Brodiaea terrestris	Dwarf brodiaea	MZ, MG	Grassland, open woodlands, 0-1,500 m; Coast Range; California
VA	Calamagrostis breweri	Brewer's reedgrass	RI	Moist subalpine and alpine meadows, lake margins, streambanks, 1,300-3,800 m; West Cascade Range and Crest; California
VA	Callitriche marginata	Winged water-starwort	RI	In water or on wet ground; Columbia Basin, Klamath Mountains; British Columbia, and California
VA	Calochortus coxii	Crinite mariposa-lily	SE, MG	serpentine open grassy slopes or woods, 200-1,000 m; Klamath Mountains
VA	Calochortus greenei	Greene's mariposa-lily	SC, MG	Shrubby hillsides, open woodlands, dry soils and slopes, 700-1,100 m; East Cascade Range, Klamath Mountains; California
VA	Calochortus howellii	Howell's mariposa-lily	SE	Dry, rock serpentine soils, 300-500 m; Klamath Mountains
VA	Calochortus monophyllus	One-leaved mariposa- lily	RK, MG	Wooded slopes, clay-loam soils, 400-1,200 m; East Cascade Range, West Cascade Range and Crest; California
VA	Calochortus nitidus	Broad-fruit mariposa- lily	RK, RI, MG	Low meadows along creeks, 700-900 m; West Cascade Range; Idaho; West Cascade Range; Idaho
VA	Calochortus umpquaensis	Umpqua mariposa-lily	SE, MG	Grassland-forest ecotones on serpentine soils, 300-500m; Klamath Mountains, West Cascade Range and Crest
VA	Camassia howellii	Howell's camas	SE, OHW, MG	Serpentine open, seasonally wet slopes; Klamath Mountains
VA	Camissonia graciliflora	Slender-flowered evening-primrose	MG, SC, OHW	Open or shrubby slopes, grassland, oak; Klamath Mountains; California
VA	Cardamine pattersonii	Saddle mountain bittercress	RI, MG	Moss mats over bare rocks, moist cliffs and other rocky slopes, grassy balds, and wet, mossy-gravelly creek banks, 840-960 m; Coast Range
VA	Carex brevicaulis	Short stemmed sedge	MZ, RI	Dry, open, sandy or rocky slopes, cliffs, and dunes, 0-90 m; Coast Range; Washington, California
VA	Carex capitata	Capitate sedge	RI, SW	Wet places, meadows, slopes, 1,900-3,900 m; Northern Basin and Range, East Cascade Range, West Cascade Range and Crest; Idaho, Nevada, Washington
VA	Carex comosa	Bristly sedge	RI, SW	Swamps and wet thickets, stream, pond, and lakeshores, 0-700 m; East Cascade Range, Klamath Mountains, Willamette Valley; California, Idaho, Washington
VA	Carex crawfordii	Crawford's sedge	RI, SW	Often in standing water, moist to wet places, open, sandy, disturbed areas, 100-1,500 m; Coast Range, West Cascade Range and Crest; Idaho, Washington
VA	Carex diandra	Lesser panicled sedge	RI	Swampy, marshy, or boggy areas, 0-2,800 m; East Cascade Range, West Cascade Range and Crest; California, Nevada, Washington

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Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
VA	Carex klamathensis	A sedge	RI	Boreal fens, calcarious floating mats, 0-1,100m; Klamath Mountains; California
VA	Carex lasiocarpa var. americana	Slender sedge	RI	Bogs, calcareous fens, sedge meadows, and shallow marshes; Blue Mountains, East Cascade Range, West Cascade Range and Crest; California, Idaho, Washington
VA	Carex livida	Pale sedge	RI	Boreal fens, calcarious floating mats, 0-1,100m; Coast Range, West Cascade Range and Crest; California, Idaho, Washington
VA	Carex macrocephala	Bighead sedge	CD	coastal sand dunes; Coast Range; Washington, Alaska, British Columbia
VA	Carex macrochaeta	Large-awn sedge	RI	in spray zone of waterfalls or on seepy, N-facing cliffs; Coast Range, West Cascade Range; Washington
VA	Carex nervina	Sierra nerved sedge	MG	Subalpine meadows, 1,200-3,000 m; Klamath Mountains; California, Nevada
VA	Carex retrorsa	Retrorse sedge	SW, RI	Swamps, wet thickets, often along streams, marshes, sedge meadows, 0-1,900 m; Blue Mountains, Columbia Basin, West Cascade Range and Crest, Willamette Valley; Idaho, Washington
VA	Castilleja chlorotica	Green-tinged paintbrush	CF	In loose sandy soils, often in ponderosa pine woods, 1,400-2,500 m; Blue Mountains, East Cascade Range
VA	Cheilanthes covillei	Coville's lip-fern	RK	Rocky slopes, cliffs, and ledges, 100-2,500 m; West Cascade Range and Crest; California, Nevada
VA	Cheilanthes intertexta	Coastal lipfern	RK	Rocky slopes and ledges, 500-2,800 m; Klamath Mountains; California
VA	Chlorogalum angustifolium	Narrow-leaved amole	MG, OHW	Heavy soils of grassland or woodland, 0-500 m; Klamath Mountains; California
VA	Cicendia quadrangularis	Timwort	RI, OHW, SW, MG, RK	Crevices, bases of rocks, coastal wetlands, vernal pools, moist valley grassland and oak woodland, 0-2,700 m; Coast Range, Klamath Mountains, Willamette Valley; California
VA	Collomia mazama	Mt. Mazama collomia	CF, RI, MG	Alpine meadows and slopes and dry rocky places in black hemlock, fir, or lodgepole forest, 900-1,850 m; West Cascade Range and Crest
VA	Coptis trifolia	Three-leaf goldthread	CF, RI	Wet to mesic, coniferous and mixed forests, bogs, willow scrub, and tundra, 0-1,500 m; West Cascade Range and Crest; British Columbia
VA	Corydalis aquae- gelidae	Cold-water corydalis	RI, CF	Perennial streams, seep, and springs; West Cascade Range; Washington
VA	Cordylanthus maritimus ssp. palustris	Point reyes bird's beak	RI	Coastal salt marshes, inland alkaline flats; Oregon and California
VA	Cryptantha leiocarpa	Seaside cryptantha	MZ	Sandy soils, dunes, <200 m; Coast Range; California
VA	Cryptantha milo-bakeri	Milo baker's cryptantha	RK	Rocky or gravelly soils, generally coniferous forest; Coast Range, Klamath Mountains; California
VA	Cryptogramma stelleri	Steller's rockbrake	RK	Sheltered calcareous cliff crevices and rock ledges, typically in coniferous forest, 0-3,000 m; Blue Mountains; Nevada, Washington
VA	Cupressus bakeri	Baker's cypress	CF, SE	Mixed evergreen forests, often serpentine; Klamath Mountains, West Cascade Range and Crest; California

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>
VA	Cyperus acuminatus	Short-pointed cyperus	RI, SW	Wet, often sandy shores, and damp, disturbed soils, 0-1,500 m; Klamath Mountains, Willamette Valley; California, Washington
VA	Cypripedium fasciculatum	Clustered lady's-slipper	CF	Coniferous forest, often late-successional; Blue Mountains, East Cascade Range, West Cascade Range and Crest; California, Colorado, Idaho, Montana, Washington, Wyoming
VA	Delphinium nudicaule	Red larkspur	RK, OHW	Wooded, rocky slopes, moist talus, cliff faces, 0-2,600 m; Klamath Mountains; California
VA	Delphinium nuttallii	Nutall's larkspur	RI, MG	Rock outcrops, rocky meadows, 20-300 m; East Cascade Range, West Cascade Range and Crest, Willamette Valley; Washington, British Columbia
VA	Dicentra pauciflora	Few-flowered bleedingheart	RK, CF	Openings in coniferous forests, in volcanic and granitic soils, 1,200-2,700 m; Klamath Range; California
VA	Dodecatheon austrofrigidum	Frigid shootingstar	RI	Steep basalt slopes along rivers, 30-915 m; Coast Range; Washington
VA	Draba howellii	Howell's whitlow-grass	RK	Rock crevices, 2,000-3,000 m; Klamath Mountains; California
VA	Epilobium oreganum	Oregon willow-herb	SW, RI	Ultramafics, bogs, small streams, ditches, 500-1600 m; Klamath Mountains; California
VA	Ericameria arborescens	Golden fleece	CF, OHW, SC	Woodland, open forest, chaparral, esp. after fire, <1,200 m; Coast Range, Klamath Mountains; California, Nevada
VA	Erigeron cervinus	Siskiyou daisy	SE, MG, RK	Open, rocky slopes, meadows, pine to fir woods, 900-1,900 m; Klamath Mountains; California
VA	Erigeron howellii	Howell's daisy	RK, MG	Moist, often rocky places w/in mixed coniferous forest with Columbia River Gorge; West Cascade Range; Washington
VA	Eriogonum lobbii	Lobb's buckwheat	RK, MG, SC	Gravelly to rocky or talus slopes, mixed grassland, shrub, and sagebrush communities, montane, subalpine, or alpine conifer woodlands; Klamath Mountains; California, Nevada
VA	Eriogonum umbellatum var. glaberrimum	Green buckwheat	MG	Sand or gravel, 1,600-2,300 m; East Cascade Range; California
VA	Eriophorum chamissonis	Russet cotton-grass	RI	Peat, bogs, marshes, muskegs, 0-3,000 m; Coast Range; British Columbia
VA	Erythronium elegans	Coast range fawn-lily	MG, CF, SC, RK	Meadows and open coniferous forest, 800-1,000 m; Coast Range
VA	Erythronium howellii	Howell's adder's-tongue	CF, SE, SC, MG	Serpentine influence, meadows, open woodlands, mixed conifer; Klamath Mountains; California
VA	Eschscholzia caespitosa	Gold poppy	RK, MG, SC	Open chaparral, rocky slopes, 0-1,500 m; Klamath Mountains; California
VA	Eucephalus gormanii	Gorman's aster	RK, CF	Open rocky slopes and exposed cliffs, 1,200-1,900 m; West Cascade Range and Crest
VA	Eucephalus vialis	Wayside aster	CF, MG, OHW	Dry open oak or coniferous woods, gen. harsher clay soils, 200-500 m; Klamath Mountains, West Cascade Range and Crest, Willamette Valley; California
VA	Filipendula occidentalis	Queen-of-the-forest	CF, RI	Bedrock crevices with water seeping throughout much of the year; Coast Range;

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Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>		
				Washington		
VA	Frasera umpquaensis	Umpqua swertia	CF	Coniferous forests dominated by true firs; in damp, shaded sites under forest canopy, forest edges, occasionally in the open,3,000-6,100 (6,500) feet; Klamath Mountains, West Cascade Range and Crest; California		
VA	Fritillaria camschatcensis	Black lily	MG, RI	Moist areas from near tidal flats to mountain meadows, 0-1000 m; Coast Range, West Cascade Range; Washington		
VA	Gentiana newberryi var. newberryi	Newberry's gentian	SW, MG	sites under forest canopy, forest edges, occasionally in the open; East Cascade Range, West Cascade Range and Crest; California		
VA	Gentiana plurisetosa	Elegant gentian	SW	Coniferous forest, meadows, mesic, 1,230-1,938 m; Klamath Mountains; California		
VA	Gentiana setigera	Waldo gentian	SW, SE, MG	Serpentine bogs and wet meadows; Klamath Mountains; California		
VA	Gilia millefoliata	Seaside gilia	MZ	Stabilized coastal dunes, <10 m; Coast Range; California		
VA	Hackelia bella	Beautiful stickseed	MG	Streambanks, roadsides, forest opening, 900-2,000 m; Klamath Mountains, West Cascade Range and Crest; California		
VA	Hastingsia bracteosa var. atropurpurea	Purple-flowered rush- lily	SW, SE	Ultramafic riverbeds that have year-round water in rooting horizon and wet, open, sunny bogs, 500-700 m; Klamath Mountains		
VA	Hastingsia bracteosa var. bracteosa	Large-flowered rush- lily	SW, SE	Bogs, moist open meadows, seeps and wetlands often overlying serpentine or peridotite rock formations, <240 m; Klamath Mountains		
VA	Heliotropium curassavicum	Salt heliotrope	SW	Moist to dry saline soils, <2,100 m; Blue Mountains, Northern Basin and Range, Columbia Basin, East Cascades Range, Willamette Valley; California, Nevada		
VA	Hieracium horridum	Shaggy hawkweed	RK	Boulders, gravels, meadows, pine forests, 1,500-3,700 m; Klamath Mountains, West Cascade Range and Crest; California		
VA	Horkelia congesta ssp. congesta	Shaggy horkelia	MG, OHW	Grassland and oak savannah remnants, grassy balds; Klamath Mountains, Willamette Valley		
VA	Horkelia tridentata ssp. tridentata	Three-toothed horkelia	MG, OHW, CF	Dry, open coniferous forest, 300-2,500 m; Klamath Mountains; California		
VA	Hydrocotyle verticillata	Whorled marsh- pennywort	MZ, RI	Along edges of coastal and inland lakes, swampy ground, wetlands, <100 m; Coast Range, Willamette Valley; California		
VA	Iliamna latibracteata	California globe- mallow	CF, RI	Moist ground and stream sides in conifer forests, 500-2,000 m; Coast Range, Klamath Mountains, West Cascade Range and Crest; California		
VA	Iris tenax var. gormanii	Gorman's iris	MG	Dry soils in fields and open woods; Willamette Valley		
VA	Kalmiopsis fragrans	Fragrant kalmiopsis	RK, CF	Mixed coniferous forest, commonly on or closely adjacent to talus slopes, boulder piles, or pillars of silicified tuff, 450-1,350 m; West Cascade Range and Crest		
VA	Keckiella lemmonii	Bush beardtongue	CF, OHW, SC	Rocky slopes, coniferous and mixed forests, chaparral, 200-1,900 m; Klamath Mountains; California, Nevada		
VA	Lasthenia ornduffii	Large-flowered goldfields	MZ, MG	Seaward slopes, cliff faces; Coast Range		

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Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>		
VA	Lathyrus holochlorus	Thin-leaved peavine	OHW, CF, MG	Open forests and thickets, margins of woods, roadsides; Willamette Valley		
VA	Lewisia columbiana var. columbiana	Columbia lewisia	RK	Rocky slopes and crevices, 500-2,300 m; West Cascade Range and Crest; Washington		
VA	Lewisia leeana	Lee's lewisia	RK, CF	Sandy, rocky places, pine forests, 1,300-3,300 m; Klamath Mountains; California		
VA	Limnanthes floccosa ssp. bellingeriana	Bellinger's meadow- foam	SW, SC, OHW	Edges of vernal pools or seasonally wet, rocky, open meadows and grassy openings in oak/pine/buckbrush chaparral; East Cascade Range, Klamath Mountains, West Cascade Range and Crest; East Cascade Range, Klamath Mountains, West Cascade Range and Crest; California		
VA	Limnanthes floccosa ssp. pumila	Dwarf meadow-foam	SW	Edges of vernal pools and wet meadows; Klamath Mountains		
VA	Limnanthes gracilis ssp. gracilis	Slender meadow-foam	SW	Wet, open, serpentine valley bottomlands, meadows, intermittent creeks; Klamath Mountains, West Cascade Range; Klamath Mountains, West Cascade Range		
VA	Limonium californicum	Western marsh- rosemary	SW, RI	Coastal strand, salt marshes, beaches, alkaline flats, 0-50 m; Oregon and California		
VA	Lomatium engelmannii	Englemann's desert- parsley	SE	Gravelly serpentine slopes w/in conifer forests, usu. Jeffrey pine, 1,150-2,300 m; Klamath Mountains; California		
VA	Lotus stipularis	Stipuled trefoil	CF, RI, SC	Open pine forests, streambeds, chaparral, mixed conifer forest, chaparral, 0-4,000 ft; Klamath Mountains; California		
VA	Lupinus tracyi	Tracy's lupine	CF	Dry, open montane forest, 1,500-2,000 m; Klamath Mountains; California		
VA	Lycopodiella inundata	Bog club-moss	SW, RI	Peat bogs, lakeshores, marshes, 0-2,000 m; Coast Range, East and West Cascade Range; California, Idaho, Montana		
VA	Lycopodium complanatum	Ground cedar	CF	Moist coniferous forest; Blue Mountains, West Cascade Range; Idaho, Washington		
VA	Meconella oregana	White fairypoppy	OHW, MG, SW	Open ground, moist sandy, gravelly areas, 0-300 m; East and West Cascade Range, Klamath Mountains; Washington, British Columbia		
VA	Microseris bigelovii	Coast microseris	MZ, RI, MG	Open sandy soil, grasslands, <100 m; Coast Range; California, Washington		
VA	Mimulus bolanderi	Bolander's monkeyflower	RK, SC, OHW	Burns, openings in chaparral, foothill woodland, yellow pine forest, <6500 ft.; Klamath Mountains; California		
VA	Mimulus congdonii	Congdon's monkeyflower	RK	Disturbed areas or seepage, gen. granitic soils, 120-1,100 m; Klamath Mountains; California		
VA	Mimulus evanescens	Disappearing monkeyflower	SW, RI	Moist gravelly, rocky areas, stream edges, in sagebrush-juniper zones; Blue Mountains, Northern Basin and Range, Columbia Basin, East Cascade Range; California, Idaho		
VA	Mimulus tricolor	Three-colored monkey- flower	RI, SW	Vernally wet depressions, streambanks, <600 m; Northern Basin and Range, East Cascade Range, Willamette Valley; California		
VA	Nemacladus capillaris	Slender nemacladus	RK	Dry slopes, burned areas in chaparral, yellow pine forest, 2,000-4,500 ft.; Klamath		

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>		
				Mountains, West Cascade Range; California		
VA	Oenothera wolfii	Wolf's evening primrose	MZ, MG	Coastal sand, bluffs, gen. moist, <100 m; Coast Range; California		
VA	Ophioglossum pusillum	Adder's-tongue	MZ, RI, SW	Marsh edges, low pastures, 1,100-2,000 m; Blue Mountains, Coast Range, West Cascade Range; California, Idaho, Washington		
VA	Pellaea andromedifolia	Coffee fern	RK, SE, OHW, SC	Rocky outcrops or dry areas, 30-1,800 m; Coast Range, Klamath Mountains, Willamette Valley; California		
VA	Pellaea mucronata ssp. mucronata	Bird's-foot fern	RK, OHW, SC	Rocky outcrops, dry areas, yellow pine, foothill woodland, chaparral, coastal sage scrub, 20-2,400 m; Klamath Mountains; California		
VA	Penstemon glaucinus	Blue-leaved penstemon	CF, RK	Open understory of lodgepole or white-bark pine, occ. Ponderosa; East Cascade Range		
VA	Perideridia erythrorhiza	Red-rooted yampah	MG, OHW, SW	Moist meadows, poor drained soils, open woodlands and pine forests, <1,525 m; East Cascade Range, Klamath Mountains, West Cascade Range		
VA	Phacelia argentea	Silvery phacelia	MZ	Coastal sand dunes and sandy bluffs; Coast Range; California		
VA	Phacelia leonis	Siskiyou phacelia	CF, SE	Moist to wet meadows, gravelly serpentine soils, openings in conifer forests, 1200-1900 m; Klamath Mountains; California		
VA	Pilularia americana	American pillwort	SW	Vernal pools, mud flats, lake margins, 50-600 m; Blue Mountains, Northern Basin and Range, East Cascade Range, Klamath Mountains; California		
VA	Plagiobothrys austiniae	Austin's plagiobothrys	SW	Vernal pools, wet sites, <500 m; Klamath Mountains; California		
VA	Plagiobothrys figuratus ssp. corallicarpus	Coral seeded allocarya	SW, RI	Wet meadows, riparian areas, intermittent streams, valley floor; Klamath Mountains, West Cascade Range		
VA	Plagiobothrys greenei	Greene's popcorn flower	SW, RI	Wet sites, grassland to woodland; Klamath Mountains, West Cascade Range; California		
VA	Poa rhizomata	Timber bluegrass	CF, MG	Shady, moist slopes in forest, rich, loose soils, <100 m; Klamath Mountains, West Cascade Range; California		
VA	Pogogyne floribunda	Profuse-flowereed mesa mint	SW	Vernal pools and edges of seasonal ponds and intermittent flooded drainages, <1,500 m; Northern Basin and Range, East Cascade Range; California, Idaho		
VA	Polystichum californicum	California sword-fern	RI, RK	Woods, streambanks to rocky open slopes w/ moisture, <800 m; Coast Range, Klamath Mountains, West Cascade Range, Willamette Valley; California, Washington		
VA	Potamogeton diversifolius	Rafinesque's pondweed	RI	Shallow water, ditches, ponds, lakes, <2,500 m; Northern Basin and Range, East Cascade Range; California, Idaho, Nevada, Washington		
VA	Pyrrocoma racemosa var. racemosa	Racemose pyrrocoma	SW, MZ	Coastal valleys and marshes, 0-300 m; Willamette Valley; California		
VA	Rafinesquia californica	California chicory	CH, OHW	open sites in scrub, woodland; often common after fire; 100-1500 m; Klamath Mountains; California, Nevada		
VA	Ranunculus austrooreganus	Southern Oregon buttercup	OHW, MG	Open oak savannahs and grasslands and along margins of rocky vernal pools; Klamath Mountains, West Cascade Range		
VA	Rhamnus ilicifolia	Redberry	SC	Chaparral, montane forests, <2,000m; Klamath Mountains; California		

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>	
VA	Rhynchospora alba	White beakrush	RI	Acid, sphagnous, boggy, open sites, 0-2000m; Coast Range, West Cascade Range; California, Idaho, Washington	
VA	Ribes divaricatum var. pubiflorum	Straggly gooseberry	CF	Coastal bluffs, forest edges, <650 m; Coast Range, Klamath Mountains, West Cascade Range; California	
VA	Romanzoffia thompsonii	Thompson's mistmaiden	MG, SW, RK, RI	Moist rocky areas, wet cliffs, 750-6,000 ft.; Coast Range, Klamath Mountains, West Cascade Range, Willamette Valley	
VA	Rorippa columbiae	Columbia cress	RI, SW	Meadows, playas, river margins; Blue Mountains, Northern Basin and Range, Columbia Basin, East and West Cascade Range, Willamette Valley; California, Washington	
VA	Rotala ramosior	Lowland toothcup	RI, SW	Wet places, lake and pond margins, streams, <1900 m; Northern Basin and Range, East Cascade Range, Willamette Valley; California, Washington	
VA	Saxifragopsis fragarioides	Joint-leaved saxifrage	RK	Rock crevices, 1,500-3,000 m; Klamath Mountains; California, Washington	
VA	Scheuchzeria palustris ssp. americana	Scheuchzeria	RI, SW	Bogs, lake margins, Cascades, 1400-2,000m; East Cascade Range, West Cascade Range; California, Idaho, Washington	
VA	Schoenoplectus subterminalis	Water clubrush	RI, SW	Submerged to emergent in water, 10-2,200 m; Coast Range, East Cascade Range, Klamath Mountains, West Cascade Range; California, Idaho, Washington	
VA	Scirpus pendulus	Drooping bulrush	RI, SW	Marshes, wet meadows, 0-600 m; East Cascade Range, Klamath Mountains, West Cascade Range, Willamette Valley; California	
VA	Sedum moranii	Rogue river stonecrop	RK, SE	Open, dry serpentine outcrops and cliffs, 180-830 m; Klamath Mountains	
VA	Sericocarpus rigidus	White-topped aster	MG	Open grassland in lowlands of WV-Puget Trough, 100-550 ft.; Willamette Valley; Washington, British Columbia	
VA	Sidalcea hendersonii	Henderson's sidalcea	RI	Tidally influenced areas; Coast Range, Marine; Washington, British Columbia	
VA	Sidalcea hickmanii ssp. nov. (hickman's)	Hickman's checkerbloom	MG, RK, SC	Where fresh water from lakes or streams; Klamath Mountains	
VA	Sidalcea malviflora ssp. patula	Coast checker bloom	MZ, MG	Open coniferous forest, coastal prairie, and coastal bluff scrub. Below 2,300 ft.; Coast Range, Klamath Mountains; California	
VA	Silene hookeri ssp. bolanderi	Bolander's catchfly	SE, OHW	Serpentine, rocky slopes, northern oak woodlands to yellow pine forests, <5,000 ft.; Klamath Mountains; California	
VA	Sisyrinchium hitchcockii	Hitchcock's blue-eyed grass	MG	Grassy areas, openings in woods, WV and Umpqua V, 200-1,000 m; Klamath Mountains, Willamette Valley; California	
VA	Sisyrinchium sarmentosum	Pale blue-eyed grass	MG, SW	Wet meadows in forest openings, primarily Pacific Silver and Grand Fir zones, 490- 1,200 m; West Cascade Range; Washington	
VA	Solanum parishii	Parish's horse-nettle	CF, OHW, SC	Dry chaparral, oak/pine woodland, pine forest, <2,000 m; Klamath Valley, West Cascade Range; California	
VA	Sophora leachiana	Western sophora	OHW, CF	Open, disturbed sites (often in clearcuts) w/in mixed conifer/oak, often serpentine; Klamath Mountains	
VA	Streptanthus	Common jewel flower	SW, CF,	Dry, open grasslands, chaparral, open conifer/oak woodland, sometimes on serpentine,	

Taxon Group <sup>i</sup>	Scientific Name	Common Name	Habitat Group <sup>ii</sup>	Habitat <sup>iii</sup>	
	glandulosus		OHW, MG, SC	15-1,300 m; Klamath Mountains; California	
VA	Streptanthus howellii	Howell's streptanthus	SE, OHW	Rocky serpentine in open conifer/hardwood forest, 600-1,500 m; Klamath Mountains; California	
VA	Streptopus streptopoides	Kruhsea	CF	Dense, damp coniferous forests, 0-1600 m; West Cascade Range; British Columbia	
VA	Sullivantia oregana	Oregon sullivantia	RK	Moist cliffs, esp. near waterfalls, 250-1,600 ft.; West Cascade Range, Willamette Valley; Washington	
VA	Thelypodium brachycarpum	Short-podded thelypody	MG, SW, SE	Damp meadows and open flats, 800-2,320 m; East Cascade Range; California	
VA	Trillium kurabayashii	Siskiyou trillium	CF, RI, SC, OHW	Moist conifer/hardwood forest, predominantly deciduous flat woods along streams, 20- 500 m; Coast Range, Klamath Mountains; California	
VA	Utricularia gibba	Humped bladderwort	SW, RI	Shallow water, mud, 10-2,300 m; Coast Range, West Cascade Range, Willamette Valley; California, Idaho, Washington	
VA	Utricularia minor	Lesser bladderwort	SW, RI	Shallow acidic waters, 800-2,900 m; Blue Mountains, North Basin and Range, Coast Range, East Cascade Range, Klamath Mountains, West Cascade Range; California, Idaho, Nevada, Washington	
VA	Utricularia ochroleuca	Northern bladderwort	RI	Shallow acidic waters, 1,300-2,400 m; West Cascade Range; California, Washington, British Columbia	
VA	Viola primulifolia ssp. occidentalis	Western bog violet	SE, SW	Serpentine bogs, fens, swamps, or marshes, below 800 m; Klamath Mountains; California	
VA	Wolffia borealis	Dotted water-meal	RI, SW	Freshwater wetlands, ponds, sloughs, <1,000m; West Cascade Range, Willamette Valley; Washington	
VA	Wolffia columbiana	Columbia water-meal	RI, SW	Freshwater wetlands, ponds, sloughs, <200 m; Klamath Mountains, West Cascade Range, Willamette Valley; California	
VA	Zigadenus fontanus	Small-flowered death camas	MG, SW, SE		

<sup>1</sup> Taxon Groups: FU = Fungi, BR = Bryophyte, LI = Lichen, VA = Vascular Plant

<sup>ii</sup> Habitat Groups: MG = Meadows/Grassland, SC = Shrub Community, OHW = Oak/Hardwood Woodlands, CF = Conifer/Mixed Evergreen Forest, SW = Seasonal Wetland Fens/Vernal Pools, RI = Riparian and Aquatic, SE = Serpentine Areas, RK = Rocky Areas Outcrops/Scree, MZ = Maritime Zone

<sup>iii</sup> Habitat Descriptions from: Interagency Special Status/Sensitive Species Program Species Fact Sheets and Conservation Planning Documents

http://www.fs.fed.us/r6/sfpnw/issssp/planning-documents/species-guides.shtml

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District/	Map	RMA Name	RMA	Alt. A	Alt. B	Alt. C	Alt. D
Field Office	No.		Туре				
	1	Bastendorff Beach	SRMA	39	39	39	39
	2	Blue Ridge Trail System	ERMA	-	1,405	1,405	1,405
	3	Coos Head	ERMA	-	-	11	11
	4	Dean Creek Elk Viewing Area	SRMA	14	14	14	1,146
	5	Doerner Fir Trail	ERMA	-	17	17	17
	6	Edson Creek Campground	SRMA	46	45	45	45
	7	Euphoria Ridge Trail	ERMA	-	-	-	473
	8	Fawn Creek Campground	SRMA	3	3	3	3
	9	Flores Lake	ERMA	-	50	50	50
	10	Hinsdale Garden	SRMA	11	11	11	11
	11	Hunter Creek Trail System	ERMA	-	1,408	198	198
Coos Bay	12	Loon Lake Recreation Area	SRMA	77	76	76	76
5	13	Lost Lake	SRMA	-	14	-	-
	14	North Spit Beach and Ponds Unit	ERMA	-	-	336	336
	15	North Spit Boat Ramp	SRMA	5	5	5	5
	16	North Spit Trail System	ERMA	-	1,317	1,317	-
	17	Park Creek Campground	SRMA	4	4	4	4
	18	Rocky Peak Trail	ERMA	-	1,948	1,948	1,948
	19	Sixes River Campground	SRMA	27	27	27	27
	20	Smith River Corridor	ERMA	-	-	9,505	9,505
	21	Smith River Falls Campground	SRMA	4	4	4	4
	22	Storm Ranch	SRMA	235	236	236	236
	23	Vincent Creek Campground	SMRA	4	4	4	4
	24	Wasson Creek	ERMA	-	-	-	5,813
	25	Barlow Creek Trail and Trailhead	ERMA	-	-	-	100
	26	Calapooya Divide Backcountry Byway	ERMA	-	-	270	270
	27	Carpenter Bypass Mountain Bike Trail	ERMA	-	1,160	1,160	1,160
	28	Carpenter Bypass Staging Area	SRMA	1	1	1	l
	29	Cascade View OHV Complex	SRMA	6	6	6	6
	30	Clay Creek Recreation Site	SRMA	10	10	10	10
	31	Clay Creek Trail	ERMA	-	14	14 2,019	14
	32	Coburg Hiking Trail System	ERMA	-	-	/	2,019
	33 34	Coburg Hills Backcountry Byway	ERMA	-	-	79	79
	34	Crooked Creek OHV Staging Site	SRMA	-	1	1	<1
Eugana		Culp Creek Expansion Site Culp Creek Trailhead	SRMA			-	
Eugene	36 37	Dorena Dam Trail Access Site	SRMA SRMA	1	<1	<1	<1
				3	3	3	3
	38 39	Eagles Rest Hiking/Biking Trail Esmond Lake Trailhead and Trail	ERMA	-	3		158
	40		ERMA SRMA	-	- 1	-	138
	40	Hult Equestrian Staging Area Hult Reservoir Non-motorized Trail	ERMA	-	213	1 213	213
	41 42	Hult Reservoir Recreation Area	SRMA	21	213	213	213
	42		ERMA	21	21	145	145
	43	Lost Creek Backcountry Byway Lost Creek Trails	ERMA	-	20	20	20
	44	Lost Creek Trans Low Pass OHV Emphasis Area	ERMA	-	20	511	511
	45	Low Pass OHV Emphasis Area Lower Lake Creek Falls	SRMA	- 2	- 2	2	2
	40	Martin Rapids Overlook	SRMA SRMA	3	3	3	2
	4/	Iviaruni Kapius Oventook	SKIVIA	3	3	3	3

 Table N-287. Decision Area Recreation Management Areas information.

# · (4) · · · Appendix N – Recreation

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District/	Map	DMA Nama	RMA	Alt. A	Alt. B	Alt. C	Alt. D
Field Office	No.	RMA Name	Туре	Alt. A	All. D	Alt. C	AIL D
	48	McGowan Creek Environmental	ERMA	_	80	80	80
	10	Education Area Trail	Littini		00	00	00
	49	McGowan Creek Environmental Education Area	SRMA	1	1	1	1
	50	McKenzie River Campground	SRMA		_	146	146
		McKenzie River Dispersed Recreation					
	51	Corridor	ERMA	-	-	276	276
	52	McKercher Park	SRMA	2	<1	<1	<1
	53	Mosby Creek Trailhead	SRMA	10	10	10	10
	54	North Bowl Campground	ERMA	-	-	83	83
	55	Rennie Boat Landing	SRMA	1	1	1	1
	56	Row River Trail	ERMA	-	67	67	67
	57	Row River Trail Expansion	ERMA	-	-	3	3
	58	Sharps Creek Expansion Site	ERMA	-	-	-	5
	59	Sharps Creek Recreation Site	SRMA	3	3	3	3
	60	Shotgun Creek Backcountry Byway	ERMA	-	-	169	169
	61	Shotgun Creek Recreation Site	SRMA	16	16	16	16
	62	Shotgun Non-Motorized Trail System	ERMA	-	64	64	64
	63	Shotgun OHV Trail System	ERMA	-	5,755	5,753	5,753
	64	Silver Creek Boat and McKenzie River Watchable Wildlife Site	SRMA	2	1	1	1
	65	Siuslaw Bend Campground	ERMA	-	-	-	483
	66	Siuslaw River	SRMA	-	-	-	8,403
	67	Smith Creek	SRMA	3	1	1	1
	68	Taylor Landing Recreation Site	SRMA	3	3	3	3
	69	Tyrrell Seed Orchard Interpretive Trail	ERMA	-	8	8	8
	70	Upper Lake Creek	ERMA	-	13,021	13,021	13,021
	71	Whitewater Day Use Area	SRMA	8	6	6	6
	72	Whittaker Creek Recreation Area	SRMA	2	2	2	2
	73	Whittaker Creek Trail	ERMA	-	13	13	13
	74	Willamalane Non-Motorized Trails	ERMA	-	-	-	1,057
	75	Willamette River Greenway	SRMA	4	4	4	4
	76	Wolf Creek Environmental Education Site and Trail	ERMA	-	-	-	549
	77	Barnes Valley Boat Ramp	ERMA	8	8	8	8
	78	Bryant Mountain	ERMA	-	-		9,094
	79	Frog Camp	SRMA	7	7	7	7
	80	Gerber	ERMA		41,332	41.332	39,917
	81	Gerber Recreation Area	SRMA	473	272		272
	82	Hogback Mountain	SRMA	-	2,284		
	83	KFRA	ERMA	-		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	140,576
	84	Klamath River Campground	SRMA	38	26	26	26
Klamath	85	Klamath River WSR	ERMA	-	2,663	2,663	2,663
Falls	86	Lower Klamath Hills	B=E, CD=S	-	1,596	1,596	1,596
	87	Miller Creek Camp	SRMA	2	2	2	2
	88	North Bryant Mountain	SRMA	-	-	5	-
	89	Pacific Crest Trail Corridor	SRMA	7	7	7	7
	90	Potholes Camp	SRMA	8	8	8	8
	91	South Bryant Mountain	SRMA	-	-	3	-
	92	Spring Island River Access	SRMA	6	2	2	2
	93	Stan H Spring	SRMA	6	2	2	-

District/	Map	RMA Name	RMA	Alt. A	Alt. B	Alt. C	Alt. D
Field Office	No.		Туре	Alt. A	Alt. D		
	94	Stukel Mountain	C=E, D=S	-	-	9,622	9,622
	95	Surveyor Campground	SRMA	28	28	28	28
	96	Surveyor Mountain	ERMA	-	18,033	18,033	-
	97	Swan Lake Rim	ERMA	-	-	9,106	9,106
	98	Topsy Recreation Site	SRMA	14	14	14	14
	99	Willow Valley Reservoir Boat Ramp	SRMA	12	12	12	12
	100	Wood River Wetland	A,C,D=S, B=E	1	3,174	3,174	3,174
	101	Anderson-Little Apple	ERMA	-	-	7,483	7,483
	102	Anderson Addition	ERMA	-	-	10,076	10,076
	103	Armstrong Gulch Trailhead	SRMA	1	1	1	1
	104	Baker Cypress Trail	ERMA	-	3	3	3
	105	Bald-Wagon	ERMA	-	-	3,124	-
	106	Beacon Hill Trail	ERMA	-	12	12	12
	107	Bear Gulch Trailhead	SRMA	<1	<1	<1	<1
	108	Bell Forest	ERMA	-	-	3,800	-
	109	Bolt Mountain Trail	ERMA	-	10	392	392
	110	Buck-Berry Rock	ERMA	-	-	6,504	6,504
	111	Buck Prairie II XC Ski Trailhead	SRMA	1	1	1	1
	112	Buck Prairie II XC Ski Trails	SRMA	-	967	-	-
	113	Buck Prairie Toilet	SRMA	<1	<1	<1	<1
	114	Buck Prairie XC Ski Trails	SRMA	-	967	-	-
	115	Buck Prairie/Hyatt	ERMA	-	-	11,845	16,817
	116	Buckhorn Mountain	ERMA	-	-	8,284	8,284
	117	Bunny Meadows	A=S, BCD=E	8	8	8	8
	118	Burma Pond Campground and Trailhead	SRMA	2	2	2	2
	119	Burma Pond Trail	ERMA	-	4	4	4
	120	Cathedral Hills Trail System	B=E, CD=S	-	545	546	546
	121	Chicken Foot	SRMA	<1	-	-	-
Medford	122	China Gulch	SRMA	<1	-	-	-
	123	Cow Creek Backcountry Byway	ERMA	-	88	-	-
	124	Coyote Creek OHV Area	ERMA	-	-	-	14,569
	125	Deer Creek Education/Interpretive Area	SRMA	-	-	41	41
	126	Deming Gulch Equestrian Trailhead	SRMA	1	1	-	-
	127	Deming Gulch Trailhead	SRMA	<1	<1	-	-
	128	East Applegate Ridge Trail	ERMA	-	-	44	44
	129	East Fork Illinois Trails	C=E, D=S	-	-	1,441	1,441
	130	Eight Dollar Accessible Boardwalk Trailhead	SRMA	<1	-	-	-
	131	Eight Dollar Mountain	ERMA			C=2,095	C=2,134
	131	Eight Dollar Mountain Boardwalk Trail	ERMA		1	C-2,093	0-2,134
	132	Eight Dollar Mountain Interpretive Site	ERMA	-	1	-	39
	133	Eight Dollar Mountain Parking Area	SRMA	<1	<1	-	37
	134	Elderberry Flat Campground	SRMA	23	23	23	23
	135	Enchanted-Timber	ERMA	23	23	23	13,774
	130	Enchanted Forest and Felton Trails	ERMA	-	36	37	37
	137	Enchanted Forest and Felton Trails	SRMA	2	2	57	57
	138	Enchanted Forest Trainead	ERMA	2	2	-	- 8,641
	139	Espy Trailhead	SRMA	- 1	- 1	-	0,041
	140	Evans Creek Hang Gliding Launch site	ERMA	1	1	-	26
	141	Galice Hellgate Backcountry Byway	ERMA	-	258	258	258
	142	Gance Religate Backcountry Byway	EKWA	-	238	238	238

District/ Field Office	Map No.	RMA Name	RMA Type	Alt. A	Alt. B	Alt. C	Alt. D
	143	Gold Nugget Waysides	SRMA	11	11	49	49
	144	Grants Pass Peak Non-motorized Trails	ERMA	-	-	11,927	11,834
	145	Grave Creek to Marial Backcountry Byway	ERMA	-	348	348	348
	146	Grayback Mountain Trail	ERMA	-	76	76	76
	147	Grayback Mountain Trailhead	SRMA	<1	<1	<1	<1
	148	Green Springs Mtn. Loop Trailhead	SRMA	<1	<1	-	-
	149	Green Top Mountain	ERMA	-	-	-	5,316
	150	Grizzly Peak	SRMA	-	-	-	3,593
	151	Grizzly Peak Trail	SRMA	-	-	2,954	-
	152	Grizzly Peak Trailhead	SRMA	1	506	-	-
	153	Hidden Creek Trail	ERMA	-	7	7	7
	154	Hidden Creek Trailhead	SRMA	<1	-	-	-
	155	Hyatt Lake Campground	SRMA	37	149	149	149
	156	Hyatt Watchable Wildlife Site	SRMA	-	2	2	2
	157	Illinois Forks Park	ERMA	-	-	79	79
	158	Isabella	SRMA	<1	-	-	-
	159	Jack Ash Trail and Connector Trail	ERMA	-	-	203	203
	160	Jackson Creek	ERMA	-	-	507	-
	161	Jacksonville Woodlands Trailhead	SRMA	1	1	-	-
	162	Jacksonville Woodlands Trails	ERMA	-	105	103	103
	163	Jeffrey Pine Loop Trail	ERMA	-	4	-	
	164	Kane Creek	SRMA	<1		_	-
	165	Kenney Meadows Recreation Site	SRMA	20	20	20	20
	166	Kerby	ERMA		-	654	654
	167	Kerby Peak Trail	ERMA	_	36	36	36
	168	Kerby Peak Trailhead	SRMA	<1	<1	<1	<1
	169	King Mountain Trail	SRMA	-	5	5	5
	170	King Mountain Trailhead	SRMA	1	1	1	1
	171	Lake Selmac Trails	B=E, CD=S	-	440	443	443
	172	Layton Ditch Trail	ERMA	-	43		
	173	Layton Ditch Trailhead	SRMA	<1	-	-	-
	174	Left Right Center Foots	ERMA	-	-	7,657	7,657
	175	Little Applegate Trailhead	SRMA	1	1	-	-
	176	Lodgepole	SRMA	<1	<1	<1	<1
	177	Logan Cut	ERMA	-	-	527	527
	178	London Peak Trail	ERMA	-	14	14	14
	179	Lower Table Rock Trailhead	SRMA	2	-	-	-
	180	Medco RR Trail	ERMA	-	-	-	106
	181	Mount Bolivar Trailhead	SRMA	<1	<1	<1	<1
	182	Mountain of the Rogue	SRMA	-	-	5,069	5,069
	183	Mungers Butte	ERMA	-	-	11,873	11,873
	184	Northwest Hills	ERMA	-	-	480	2,620
	185	Nugget Falls	ERMA	-	5	-	-
	186	Pacific Crest Trail 1 and 2	SRMA	1,094	955	951	951
	187	Pacific Crest Trailhead at Little Hyatt Lake	SRMA	<1	-	-	-
	188	Provolt Seed Orchard	SRMA	-	-	295	295
	189	Quartz Creek OHV Area	SRMA	_	-	8,344	8,344
	190	Rainie Falls Overlook	SRMA	1	1	<1	<1
	191	Rattlesnake	ERMA	-	21	56	56

District/	Мар		RMA				
<b>Field Office</b>	No.	RMA Name	Туре	Alt. A	Alt. B	Alt. C	Alt. D
	192	Rock Creek Trails	ERMA	-	-	6,793	6,793
	193	Rockydale	ERMA	-	-	186	186
	194	Rogue Greenway	ERMA	-	-	370	370
	195	Rogue Timber	ERMA	-	-	7,906	-
	196	Rogue Wild and Scenic River	SRMA	15,949	11,409	11,409	11,409
	197	Rough and Ready Trail	ERMA	-	2	2	2
	198	Roundtop Mountain	SRMA	-	-	13,168	13,168
	199	Section 29	ERMA	-	-	203	203
	200	Silver Creek	ERMA	-	-	57	57
	201	Skull Creek Campground	SRMA	8	7	7	7
	202	Skycrest Trailhead	SRMA	<1	<1	-	-
	203	Sterling Mine Ditch Trail	SRMA	-	1,322	1,279	1,279
	204	Table Mountain Snow Play Area	SRMA	9	9	9	9
	205	Table Rock Trailheads	SRMA	-	4	-	-
	206	Table Rock Trails	ERMA	-	52	-	-
	207	Table Rocks	SRMA	-	-	1,329	1,329
	208	Thompson-Cantrall	ERMA	-	-	23,317	23,317
	209	Timber Mountain Recreation Area	ERMA	-	10,160	-	-
	210	Tucker Flat Campground	SRMA	9	8	8	8
	211	Tunnel Ridge Trailhead	SRMA	1	1	-	-
	212	Upper Table Rock Trailhead	SRMA	2	-	-	-
	213	Wagner Creek Trail	ERMA	-	2	2	2
	214	Wagner Creek Trailhead	SRMA	<1	<1	-	-
	215	Wellington Mine Trail	ERMA	-	-	44	44
	216	West Applegate Ridge Trail	ERMA	-	-	-	210
	217	West Fork Evans Creek	ERMA	-	-	3,042	3,042
	218	Whiskey Creek Overlook	SRMA	<1	<1	<1	<1
	219	Wild Rogue Canyon	ERMA	-	-	-	50,451
	220	Wildcat Campground and Horse Camp	SRMA	-	47	47	47
	221	Williams Creek Wayside	SRMA	1	1	-	-
	222	Wolf Gap Trailhead Woodrat	SRMA	1	1	-	-
	223 224		ERMA	-	-	3,876	3,876
	224	Woodrat Mtn. Gliding Sites Baker Park	SRMA SRMA	7 12	7 12	-	-
	223	Bohemia Trail			12	12	12 16
	220	Boomer Hill OHV	ERMA ERMA	-	-	4,635	4,635
Roseburg	227	Cavitt Creek Falls Recreation Site	SRMA	- 16	- 16	4,033	4,033
	228	China Ditch	ERMA	10	62	62	62
	230	Cow Creek Backcountry Byway	ERMA	-		88	88
	230	Cow Creek Backcountry Byway Kiosk	SRMA	- 1	- 1	1	1
	232	Cow Creek Recreation Gold Panning Area	SRMA	4	4	4	4
	233	E-Mile Day-Use Area	SRMA	5	5	5	5
	234	Eagleview Group Campground	SRMA	12	12	12	12
	235	Emerald Trail	B=E	- 12	12	12	12
	236	Hill Creek Trail	CD=S B=E,	_	2	2	2
	230		CD=S	1	1		- 1
	237	Hill Creek Wayside Honeycombs	SRMA ERMA	1	1	1	63
	238	Hubbard Creek OHV	ERMA	-	-	- 11,587	11,587
	239	Island Creek Day-Use Area	SRMA	- 1	-	28	28
	240	Lone Pine Group Campground	SRMA SRMA	9	9	28	28
	241	Lone Fine Group Campground	SKIVIA	9	9	9	9

District/	Map	RMA Name	RMA	Alt. A	Alt. B	Alt. C	Alt. D
Field Office	No.		Туре				
	242	Lone Rock Drift Boat Launch	SRMA	2	<1	<1	<1
	243	Millpond/Lone Pine Recreation Site	SRMA	- 21	- 21	23	23
	244 245	Millpond Recreation Site Narrows	SRMA ERMA		21	- 16	- 16
	243	North Bank-Western Trailhead	SRMA	- 1	- 1	10	10
	240	North Bank-Comstock Day Use Area	SRMA	2	2	2	2
	247	North Bank Habitat Management Area	ERMA	-	6,586	6,586	6,586
	249	North Umpqua Trail-Swiftwater	B=E, CD=S	-	65	65	65
	250	North Umpqua Trail-Tioga	B=E, CD=S	-	33	33	33
	251	North Umpqua Wild Scenic River Corridor	SRMA	-	-	2,058	2.058
	252	Olalla Creek OHV	ERMA	-	-	4,752	4,752
	253	Osprey Boat Ramp	SRMA	2	3	3	3
	254	Red Top Pond	ERMA	-	11	11	11
	255	Rock Creek Recreation Site	SRMA	19	19	21	21
	256	Rock Creek Trail	ERMA	-	-	-	14
	257	Sawmill Trail	B=E, CD=S	-	20	20	20
	258	Scaredman Recreation Site	SRMA	10	10	10	10
	259	Smith River Corridor-Roseburg	ERMA	-	-	140	140
	260	South Fork Deer Creek OHV	ERMA	-	-	1,402	1,402
	261	South Umpqua	ERMA	-	-	-	4
	262	Stick Beach	B=E, CD=S	-	1	1	1
	263	Susan Creek Day Use Area	SRMA	2	2	2	2
	264	Susan Creek Falls Trail	B=E, CD=S	-	8	8	8
	265	Susan Creek Falls Trailhead	SRMA	1	1	1	1
	266	Susan Creek Recreation Site	SRMA	25	25	25	25
	267	Swiftwater Day-Use Area	SRMA	4	4	4	4
	268	Swiftwater Trailhead	SRMA	2	2	2	2
	269	Tinhat Pond	ERMA	-	-	-	5
	270	Tyee Recreation Area	SRMA	14	14	14	14
	271	Upper Susan Creek Falls Trail	ERMA	-	-	-	1,318
	272	White Rock OHV Area	ERMA	-	-	9,846	9,846
	273	Wolf Creek Falls Trail	B=E, D=S	-	14	-	14
	274 275	Wolf Creek Falls Trailhead	SRMA SRMA	2	2	-	2
	275	Wolf Creek Falls Trailhead and Trail Alder Glen	SRMA	- 5	-	16	-
	270	Alder Glen Campground	SRMA	5	4	4	- 4
Salem	278	Alsea Falls Hiking Trails	ERMA	-	272	272	272
	278	Alsea Falls Recreation Site	SRMA	36	31	31	31
	280	Alsea Falls Shared Use Trail System	ERMA		1,510	2,923	2,923
	281	Aquila Vista	SRMA	178	178	178	178
	282	Baty Butte Trail	ERMA	-	551	-	
	283	Canyon Creek	SRMA	13	13	13	13
	284	Cedar Grove	SRMA	5	5	5	5
	285	Crabtree Valley	ERMA	-	-	914	914
	286	Crazy Cougar	ERMA	-	-	1,444	1,444
	287	Crooked Finger	ERMA	-	-	-	451
	288	Crown Zellerbach Trail (CZ Mainline)	ERMA	_	-	23	23
	289	Dogwood	SRMA	6	6	6	6
	290	Dovre	SRMA	4	4	4	4

District/ Field Office	Map No.	RMA Name	RMA Type	Alt. A	Alt. B	Alt. C	Alt. D
	291	Eagle Creek Trail	ERMA	-	160	160	160
	292	Elk Bend	SRMA	4	4	4	4
	293	Elkhorn Creek WSR	ERMA	-	-	-	1,103
	294	Elkhorn Valley Campground	SRMA	78	78	78	78
	295	Fan Creek	SRMA	3	3	3	3
	296	Fishermen's Bend Recreation Site	SRMA	183	184	184	184
	297	Green Peter Peninsula	ERMA	-	-	1,557	2,056
	298	High Peak-Grindstone	ERMA	-	-	-	976
	299	Highland	ERMA	-	-	-	844
	300	Ivors Wayside	SRMA	2	2	2	2
	301	Kilchis Glider Launch Site	ERMA	-	-	38	38
	302	Little North Fork Wilson	ERMA	-	-	1,160	1,160
	303	Marmot Recreation Site	SRMA	-	26	92	92
	304	Marmot Trail System	ERMA	-	-	576	-
	305	Mary's Peak	ERMA	-	-	-	3,774
	306	Mill Creek	SRMA	6	6	469	6
	307	Mill Creek-Gooseneck	ERMA	-	-	7,416	7,878
	308	Missouri Bend	SRMA	3	3	3	3
	309	Table Rock Fork – Molalla River	ERMA	-	5,907	13,997	19,906
	310	Monument Peak Trail System	ERMA	-	909	909	909
	311	Nasty Rock Trail	ERMA	-	135	135	135
	312	Nestucca Backcountry Byway	ERMA	-	323	322	322
	313	North Fork Eagle Creek Campground	SRMA	-	-	-	68
	314	North Fork Santiam County Park	SRMA	12	12	12	12
	315	Old Miner's Meadow	SRMA	3	3	-	3
	316	Oxbow Regional Park	SRMA	265	260	260	260
	317	Pacific City	ERMA	-	-	79	79
	318	Quartzville Backcountry Byway	ERMA	-	34	34	34
	319	Quartzville Creek and Yellowstone Trail	ERMA	-	-	2,731	2,727
	320	Quartzville Creek Corridor	ERMA	-	2,060	-	-
	321	Salmon/Sandy WSR Corridor	ERMA	-	785	-	-
	322	Salmonberry Rail to Trail	ERMA	-	-	14	14
	323	Sandy-Salmon River Corridor	ERMA	-	-	1,824	2,400
	324	Sandy Ridge Trail System	ERMA	-	1,260	2,239	3,802
	325	Sandy Ridge Trailhead	SRMA	29	29	52	52
	326	Scaponia Park	SRMA	8	8	8	8
	327	Shellburg Trail System	ERMA	-	-	283	283
	328	Sheridan Peak Overlook	SRMA	4	3	3	3
	329	Silver Falls State Park	SRMA	237	237	237	237
	330	Snow Peak/Neal Creek	ERMA	-	-	-	6,763
	331	South Fork Alsea Backcountry Byway	ERMA	-	88	88	88
	332	South Fork Clackamas Waterfalls	ERMA	-	-	-	1,116
		Table Rock Wilderness-Pechuck			6 171	(171	
	333	Lookout	ERMA	-	6,171	6,171	6,171
	334	Three Bears-Hardy Creek	SRMA	14	14	14	14
	335	Upper Nestucca OHV Trail System	ERMA	-	6,713	6,494	10,663
	336	Wildcat Creek	ERMA	-	-	-	2,444
	337	Wildcat Creek Trail System	ERMA	-	-	2,444	-
	338	Wildwood Recreation Site	SRMA	311	553	553	553
	339	Wilhoit Springs	ERMA	-	-	-	571
	340	Yaquina Head ONA	SRMA	91	91	91	91
	341	Yellowbottom	SRMA	13	13	13	13

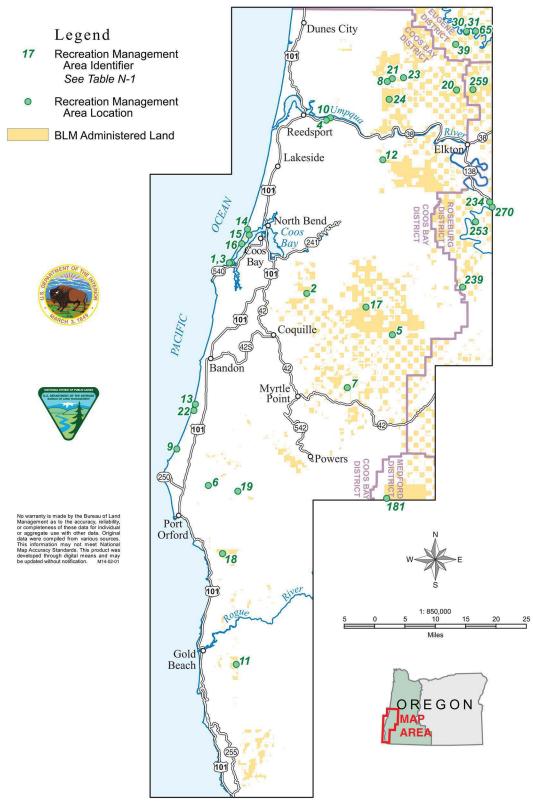


Figure N-1: Coos Bay District Recreation Management Areas

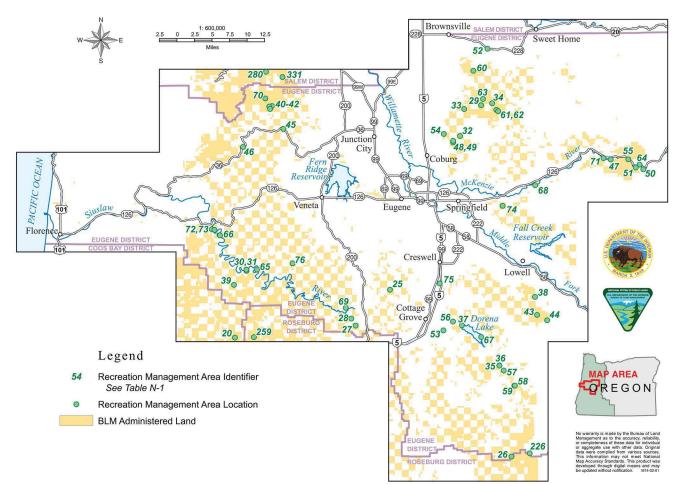


Figure N-2: Eugene District Recreation Management Areas

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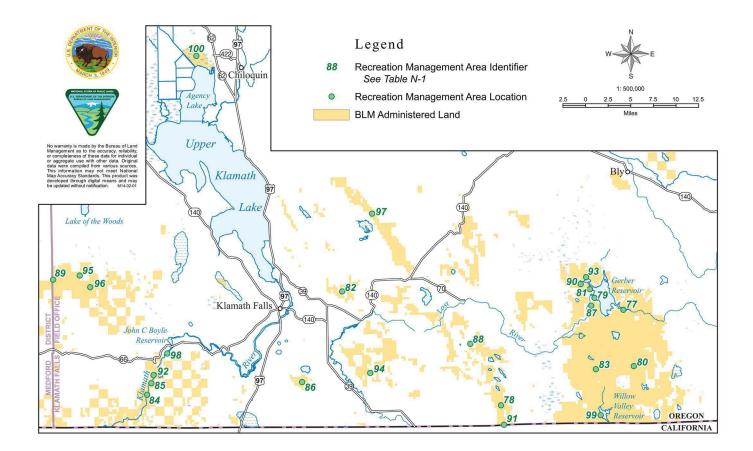
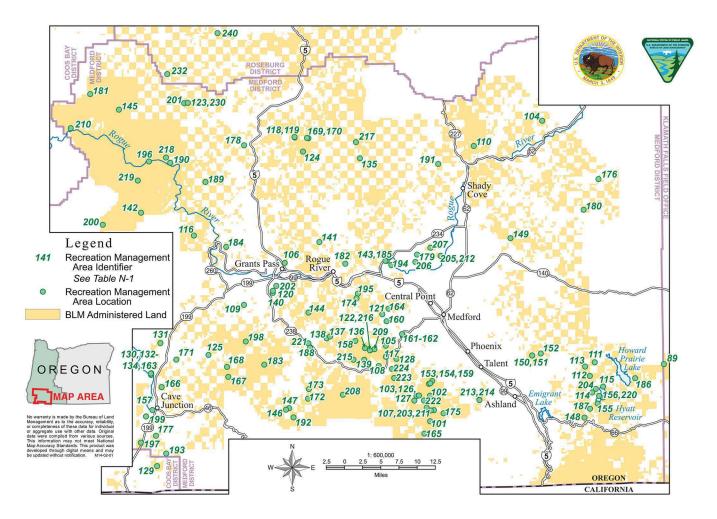


Figure N-3: Klamath Falls Field Office Recreation Management Areas



Map N-4: Medford District Recreation Management Areas

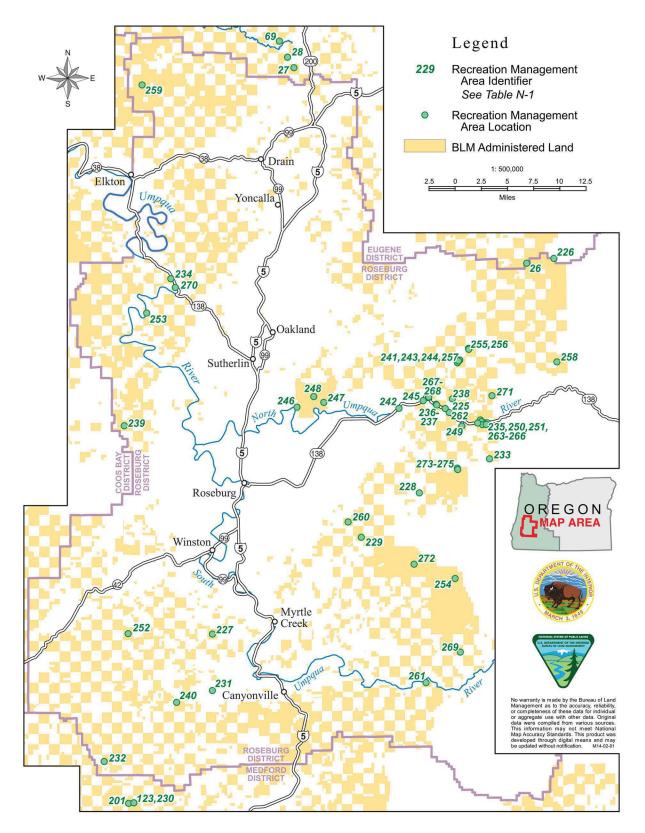


Figure N-5: Roseburg District Recreation Management Areas

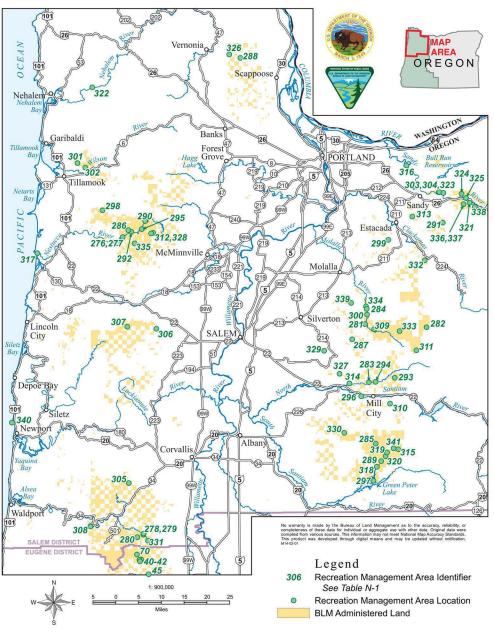


Figure N-6: Salem District Recreation Management Areas

The remainder of Appendix N is located on the BLM website at http://www.blm.gov/or/plans/rmpswesternoregon/recreation.php.

At this location is a description of each Recreation Management Area using the RMA Frameworks. Each RMA description includes the recreation values, what type of visitors are targeted, the outcome objectives, the Recreation Setting Characteristics, and the applicable management actions and allowable use restrictions

The socioeconomic analysis and this appendix were prepared for the BLM by a team of specialists at Environmental Resources Management (ERM) and subcontractors, under the project management of Clive Graham, ERM, and the direction of Stewart Allen of the interdisciplinary team.

### Issue 1

How would the alternatives affect the supply, demand, and value of goods and services derived from *BLM*-administered lands?

# Western Oregon Timber Market Model

The BLM modeled timber markets<sup>136</sup> in western Oregon using stumpage supply and demand functions that incorporate existing information, linear functions, and the economic constructs of supply, derived demand, and market arbitrage. In this analysis, the BLM described the stumpage market using linear equations for demand ( $Q_d$ ) and supply ( $Q_s$ ):

$$Q_d = a_1 - a_2 * P$$
 (1)  
 $Q_s = b_1 + b_2 * P$  (2)

The parameters  $a_1, a_2, b_1, and b_2$  can be estimated from the observed market price, quantity, estimates of the stumpage supply, and demand elasticities. Key is the relation for estimating elasticity ( $\in$ ) as:

$$\epsilon = \frac{\Delta Q}{\Delta P} \times \frac{p}{q} \tag{3}$$

Equation 3 can be rewritten to solve for the slope of equations 1 and 2  $(a_2, b_2)$  as:

$$slope = \in \times \frac{q}{p} \tag{4}$$

The intercept terms of equations 1 and 2  $(a_1, b_1)$  can be solved as:

$$intercept = \frac{q}{slope \times p}$$
(5)

The development of the supply and demand relations each involve additional steps described in the following paragraphs. Once the equations are parameterized, they can be solved as simultaneous equations for market equilibrium (where  $q_s = q_d$  and  $p_s = p_d$ ). In this analysis, the BLM assumed that market arbitrage following changes in BLM timber harvest would lead to new market equilibrium prices and private harvest levels.

<sup>&</sup>lt;sup>136</sup> Timber markets are regional in nature defined by available species and mix of manufacturing facilities. Traditionally western Oregon is considered part of the larger Douglas-fir region, or the Pacific Northwest, Westside. For more detailed discussion, see Haynes (2008).

### Stumpage Supply

The supply curve is constructed as a composite of the behavior of different groups of timberland owners. In this case, it represents the timber harvest behavior of five different timberland owners/agencies: private entities, State agencies, the U.S. Forest Service, the BLM, and other public entities. Of these five owner groups, only the private timberland owners are known to be responsive to different price levels. The BLM assumed in this analysis that the four public owner groups set harvest levels through various planning processes that are generally unresponsive to price levels. In the context of equation 2, this means that the slope coefficient is based solely on the elasticity of private timberland owners. Public owners contribute only to the intercept term; the q in equation 5 includes both public and private timber harvest.

### Stumpage Demand

In the case of sawtimber, the largest product markets are for solidwood products like lumber and panel products.<sup>137</sup> In this case, the BLM derived stumpage demand function from product demand. In agricultural literature,<sup>138</sup> factor and product markets are linked through a concept called the "elasticity of price transmission" (*∂*), defined as:

$$\partial = \frac{\Delta P^p}{\Delta P^s} \times \frac{P^s}{P^p} \tag{6}$$

where  $P^p$  is product price and  $P^s$  is the stumpage price. The elasticity of price transmission is calculated in two steps. First, a marketing margin can be estimated as:

$$P^s = c_1 + c_{2\times} P^p \tag{7}$$

Second, using the results from equation 7,  $\partial$  is calculated as:

$$\partial = \frac{1}{c_2} \times \frac{P^s}{P^p} \tag{8}$$

The elasticity of price transmission is necessary to estimate the elasticity of demand for stumpage, consistent with product markets as shown in equation 9.

$$\epsilon_s = \epsilon_p \times \partial \tag{9}$$

With  $\in_s$ , equation 4 can estimate the slope of the stumpage demand function, and equation 5 can estimate the slope coefficient.

### Parameterizing the Model

In this analysis, the BLM estimated the model using data for 2012. Price data (\$/Mbf) and harvest volume data (MMbf) are in long log scale, and were collected from the 2012 Production, Prices, Employment and Trade report (Zhou 2013).

<sup>&</sup>lt;sup>137</sup> See the discussion in Adams and Haynes (1980). Also see Adams and Haynes (2007).

<sup>&</sup>lt;sup>138</sup> See George and King (1971) for a summary of derived demand as it is used here.

Owner	Harvest (MMbf)	Price (\$/Mbf)	Weights	Weighted Price
Private	2,664.2	-	-	-
State	234.4	\$301.55	0.362	\$109.28
USFS	268.1	\$94.65	0.414	\$39.23
BLM	144.3	\$146.41	0.223	\$28.74
Other Public	43.2	-	-	-
Total/Average	3,354.2	\$180.87	1.000	177.26

Table O-288. Price data	a and harvest volume data.
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In this analysis, the BLM estimated  $\partial$  as  $0.838^{139}$  and, from the literature, used values for  $\in$  of 0.277 for private timber supply and  $0.685^{140}$  for softwood lumber and panels. Using this information, the BLM developed the following supply and demand functions:

 $q_s = 2,615.84 + 4.1655 P$  $q_d = 5,279.59 - 10.8619 P$ 

The solution of these two equations is the equilibrium price and quantity observed in 2012.

## **Issue 2**

How would the alternatives affect economic activity in the planning area derived from BLM-administered lands?

<sup>&</sup>lt;sup>139</sup> The BLM estimated this by estimating the market margin (Equation 7) using lumber price data (**Table O-7**) and BLM stumpage price (Table 96) from PPET, 1986-2011. The elasticity of price transmission was computed using equation 8. <sup>140</sup> Both elasticity estimates are weighted averages taken from Table 3.4 and 3.3 in Adams and Haynes (2007).

Tuble O 209. Employment o	<b>289.</b> Employment by industry by district model area, 2012 (jobs).         District Model Area Name and Counties									
			District M	odel Area Na	ame and Cou	inties				
	Coos Bay	Eugene	Klamath Falls	Medford	Roseburg	Salem- Other	Salem- Portland MSA	Planning	Oregon	
Industry (Sector)	Coos, Curry	Lane	Klamath	Jackson, Josephine	Douglas	Benton, Clatsop, Lincoln, Linn, Marion, Polk, Tillamook	Clackamas, Columbia, Multnomah, Washington, Yamhill	Area Totals	Totals	
Accommodation and Food Services	3,548	13,739	2,319	11,155	3,038	27,496	80,764	142,059	160,824	
Administrative and Waste Services	2,246	10,172	1,587	7,786	2,668	16,440	66,660	107,560	117,952	
Agriculture	3,237	5,462	2,511	5,479	3,330	23,169	19,389	62,577	90,083	
Arts, Entertainment, and Recreation Services	902	3,825	858	5,014	626	8,245	25,709	45,178	51,711	
Construction	2,089	8,085	1,505	8,154	2,203	17,348	53,287	92,671	105,523	
Education Services	361	3,598	391	2,048	509	7,108	36,728	50,742	53,762	
Finance and Insurance	935	6,041	996	5,722	1,851	9,432	59,627	84,604	92,582	
Governments	7,286	25,283	4,643	14,346	7,275	65,321	116,243	240,396	288,801	
Health and Social Services	4,605	25,433	3,670	21,741	5,276	46,972	121,260	228,956	257,275	
Information	297	4,209	206	2,612	330	3,114	24,267	35,034	38,482	
Management of Companies	341	1,884	624	1,703	434	2,380	22,639	30,005	30,783	
Manufacturing	3,781	12,422	2,132	9,029	4,820	25,976	104,812	162,973	181,427	
Mining	58	104	46	141	117	1,641	2,686	4,793	5,066	
Other Personal Services	2,295	11,722	2,237	9,162	2,966	19,309	58,908	106,599	119,825	
Professional Services	1,465	10,986	1,159	8,046	1,649	17,638	88,560	129,504	143,216	
Real Estate and Leasing	525	9,080	492	4,165	1,928	10,394	68,062	94,646	104,672	
Retail Trade	4,629	24,783	4,288	20,422	4,845	37,659	108,402	205,027	231,382	
Transportation and Warehousing	1,012	2,885	1,251	4,802	1,724	11,998	32,363	56,036	62,888	
Utilities	95	135	118	342	172	573	2,326	3,760	4,759	
Wholesale Trade	569	6,201	848	3,659	766	7,196	54,798	74,037	80,548	
Totals	40,276	186,049	31,881	145,525	46,527	359,408	1,147,490	1,957,157	2,221,563	

### Table O-289. Employment by industry by district model area, 2012 (jobs).

Sources: MIG, Inc. (2013); Oregon Forest Resources Institute (2012) (forest products industries within greater Agriculture and Manufacturing throughout planning area).

				odel Area Na	me and Cou	nties			
	Coos Bay	Eugene	Klamath Falls	Medford	Roseburg	Salem- Other	Salem-Portland MSA		
Industry (Sector)	Coos, Curry	Lane	Klamath	Jackson, Josephine	Douglas	Benton, Clatsop, Lincoln, Linn, Marion, Polk, Tillamook	Clackamas, Columbia, Multnomah, Washington, Yamhill	Planning Area Totals	Oregon Totals
Accommodation and Food Services	\$73.1	\$295.0	\$45.0	\$234.9	\$62.1	\$581.3	\$2,022.5	\$3,313.9	\$3,703.4
Administrative and Waste Services	\$52.8	\$318.6	\$43.4	\$200.7	\$75.9	\$462.7	\$2,489.2	\$3,643.3	\$4,004.7
Agriculture	\$117.3	\$152.5	\$89.2	\$139.6	\$85.4	\$822.9	\$753.0	\$2,160.0	\$2,750.4
Arts, Entertainment, and Recreation Services	\$10.6	\$47.6	\$8.9	\$63.6	\$9.2	\$96.6	\$592.8	\$829.3	\$920.4
Construction	\$73.6	\$443.2	\$52.8	\$432.9	\$89.2	\$839.7	\$3,756.2	\$5,687.7	\$6,253.7
Education Services	\$4.5	\$73.4	\$4.6	\$34.5	\$7.0	\$160.8	\$1,057.4	\$1,342.4	\$1,390.8
Finance and Insurance	\$42.2	\$323.0	\$33.3	\$222.8	\$59.1	\$432.4	\$3,866.1	\$4,978.8	\$5,264.0
Governments	\$393.1	\$1,315.2	\$251.1	\$742.6	\$357.7	\$3,433.6	\$7,471.2	\$13,964.4	\$16,573.0
Health and Social Services	\$175.4	\$1,343.0	\$170.0	\$1,083.3	\$265.3	\$2,382.9	\$7,184.5	\$12,604.4	\$14,006.6
Information	\$13.7	\$243.5	\$8.9	\$117.3	\$17.0	\$182.5	\$2,011.3	\$2,594.1	\$2,769.1
Management of Companies	\$22.2	\$160.1	\$44.1	\$126.6	\$30.6	\$166.9	\$2,488.9	\$3,039.4	\$3,086.4
Manufacturing	\$148.6	\$802.8	\$122.4	\$493.2	\$261.0	\$1,621.9	\$9,827.7	\$13,277.7	\$14,212.3
Mining	\$3.8	\$6.2	\$2.5	\$5.2	\$3.6	\$37.0	\$70.6	\$129.1	\$140.7
Other Personal Services	\$66.5	\$349.6	\$55.1	\$267.4	\$78.7	\$576.4	\$2,564.4	\$3,958.3	\$4,380.6
Professional Services	\$54.1	\$459.8	\$36.5	\$253.0	\$80.6	\$779.7	\$6,486.0	\$8,149.7	\$8,741.6
Real Estate and Leasing	\$17.1	\$127.2	\$14.6	\$101.4	\$23.5	\$285.3	\$1,118.3	\$1,687.4	\$1,910.4
Retail Trade	\$144.2	\$726.6	\$108.4	\$633.7	\$145.0	\$1,103.7	\$3,713.7	\$6,575.1	\$7,374.1
Transportation and Warehousing	\$51.7	\$163.1	\$51.9	\$209.7	\$84.6	\$584.9	\$1,722.7	\$2,868.5	\$3,243.2
Utilities	\$12.6	\$15.3	\$16.6	\$51.2	\$21.8	\$76.6	\$435.8	\$629.8	\$766.7
Wholesale Trade	\$30.6	\$368.1	\$38.7	\$190.5	\$32.3	\$483.9	\$5,434.7	\$6,578.9	\$6,920.3
Totals Sources: MIG, Inc. (2013): Oregon Fore	\$1,507.7	\$7,733.7	\$1,198.0	\$5,604.1	\$1,789.7	\$15,111.7	\$65,067.0	\$98,012.0	\$108,412.3

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Table O-290. Earnings by industry by district model area, 2012 (millions of 2012\$).

Sources: MIG, Inc. (2013); Oregon Forest Resources Institute (2012) (forest products industries within greater Agriculture and Manufacturing throughout planning area)

Table O-291. Employment co					rea Name and			
	Coos Bay	Eugene	Klamath Falls	Medford	Roseburg	Salem-Other	Salem-Portland MSA	Dlausing
Industry (Sector)	Coos, Curry	Lane	Klamath	Jackson, Josephine	Douglas	Benton, Clatsop, Lincoln, Linn, Marion, Polk, Tillamook	Clackamas, Columbia, Multnomah, Washington, Yamhill	Planning Area Totals
Accommodation and Food Services	135	225	29	165	201	72	340	1,167
Administrative and Waste Services	17	27	3	32	25	12	35	151
Agriculture	420	272	73	265	272	255	230	1,788
Arts, Entertainment, and Recreation Services	72	87	12	81	92	38	115	498
Construction	6	6	1	9	8	4	8	42
Education Services	13	18	2	14	12	14	19	92
Finance and Insurance	6	9	2	18	8	5	22	70
Governments	195	227	63	429	287	214	48	1,464
Health and Social Services	21	46	8	62	33	27	37	234
Information	14	10	1	16	9	9	17	75
Management of Companies	11	14	1	12	8	9	17	72
Manufacturing	132	113	7	70	141	76	88	626
Mining	31	6	0	16	16	12	10	92
Other Personal Services	27	34	5	35	26	21	28	177
Professional Services	18	52	4	52	23	30	33	213
Real Estate and Leasing	8	25	3	21	19	11	28	113
Retail Trade	17	25	5	33	27	13	34	153
Transportation and Warehousing	87	141	20	135	126	58	150	717
Utilities	1	0	0	2	1	1	2	7
Wholesale Trade	19	25	4	31	27	10	36	153
Totals	1,249	1,363	245	1,496	1,362	891	1,297	7,904

Note: Totals may not add due to rounding.

			Dist	rict Model A	rea Name an	d Counties		
	Coos Bay	Eugene	Klamath Falls	Medford	Roseburg	Salem-Other	Salem-Portland MSA	Planning
Industry (Sector)	Coos, Curry	Lane	Klamath	Jackson, Josephine	Douglas	Benton, Clatsop, Lincoln, Linn, Marion, Polk, Tillamook	Clackamas, Columbia, Multnomah, Washington, Yamhill	Area Totals
Accommodation and Food Services	\$2.8	\$4.8	\$0.6	\$3.4	\$4.1	\$1.5	\$9.1	\$26.3
Administrative and Waste Services	\$0.5	\$1.0	\$0.1	\$0.9	\$0.8	\$0.4	\$1.6	\$5.2
Agriculture	\$20.4	\$12.7	\$1.6	\$10.1	\$13.1	\$12.6	\$12.2	\$82.6
Arts, Entertainment, and Recreation Services	\$1.6	\$2.6	\$0.3	\$2.0	\$2.5	\$1.3	\$3.6	\$14.0
Construction	\$0.3	\$0.4	\$0.1	\$0.5	\$0.4	\$0.2	\$0.7	\$2.6
Education Services	\$0.3	\$0.5	\$0.0	\$0.3	\$0.3	\$0.3	\$0.6	\$2.4
Finance and Insurance	\$0.3	\$0.5	\$0.1	\$0.7	\$0.3	\$0.3	\$1.4	\$3.6
Governments	\$13.9	\$18.0	\$4.2	\$28.3	\$19.2	\$16.8	\$4.0	\$104.4
Health and Social Services	\$0.8	\$2.4	\$0.4	\$3.0	\$1.6	\$1.3	\$2.1	\$11.6
Information	\$0.6	\$0.5	\$0.1	\$0.7	\$0.4	\$0.4	\$1.1	\$3.8
Management of Companies	\$0.5	\$0.7	\$0.1	\$0.6	\$0.4	\$0.4	\$1.5	\$4.0
Manufacturing	\$7.1	\$6.6	\$0.4	\$3.7	\$7.6	\$4.6	\$5.3	\$35.2
Mining	\$1.0	\$0.2	\$0.0	\$0.5	\$0.2	\$0.5	\$0.3	\$2.7
Other Personal Services	\$0.6	\$1.0	\$0.1	\$1.0	\$0.7	\$0.5	\$1.1	\$5.1
Professional Services	\$1.4	\$1.5	\$0.3	\$2.4	\$1.1	\$1.3	\$2.0	\$10.1
Real Estate and Leasing	\$0.3	\$0.5	\$0.1	\$0.5	\$0.3	\$0.3	\$0.8	\$2.7
Retail Trade	\$0.8	\$1.2	\$0.2	\$1.3	\$1.0	\$0.7	\$2.1	\$7.2
Transportation and Warehousing	\$2.5	\$4.2	\$0.6	\$4.1	\$3.5	\$1.7	\$4.8	\$21.4
Utilities	\$0.1	\$0.0	\$0.0	\$0.2	\$0.1	\$0.1	\$0.2	\$0.8
Wholesale Trade	\$1.1	\$1.5	\$0.2	\$1.7	\$1.2	\$0.7	\$3.3	\$9.7
Totals	\$56.8	\$60.7	\$9.4	\$66.0	\$58.9	\$45.9	\$57.8	\$355.3

Table O-292. Earnings contribution of BLM programs to district model areas by industry, 2012 (millions of 2012\$).

Note: Totals may not add due to rounding.

Table O-293. Employment and ea			mployme		5			nings (Mil	lions of 20	12 Const	ant Dollar	6)
	2012		mpioyine	2018			2012	ings (iiii		2018		3)
Program/Industry	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D
BLM Program												
Recreation	276	295	295	295	295	295	\$7.0	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5
Grazing	=	.=			=		-		=	=		(***) 500
Timber	710	701	446	458	981	228	\$33.3	\$33.0	\$21.0	\$21.5	\$46.2	\$10.7
Minerals	-	14 <b>—</b> 1	-	-	-	-	-		-	-	a <b>-</b> a	-
Agency Expenditures	192	186	135	139	251	82	\$13.1	\$12.7	\$9.2	\$9.5	\$17.1	\$5.6
Federal Payments to Counties <sup>1</sup>	20	50	30	39	73	20	\$1.0	\$2.5	\$1.5	\$2.0	\$3.6	\$1.0
Payments to Coos	13	32	20	25	47	13	\$0.6	\$1.6	\$0.9	\$1.2	\$2.3	\$0.6
Payments to Curry	7	18	11	14	26	7	\$0.4	\$0.9	\$0.6	\$0.7	\$1.3	\$0.4
Totals	1,198	1,232	906	931	1,600	625	\$54.4	\$55.6	\$39.1	\$40.5	\$74.4	\$24.8
Timber-Related Industries												
Forestry, Logging, and Support Activities	232	208	146	146	291	74	\$13.6	\$12.1	\$8.5	\$8.5	\$17.0	\$4.3
Wood Products Manufacturing	131	150	83	89	210	43	\$7.3	\$8.3	\$4.6	\$5.0	\$11.7	\$2.4
Paper Manufacturing	0	0	0	0	0	0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Totals	363	358	229	235	501	117	\$20.8	\$20.5	\$13.1	\$13.5	\$28.7	\$6.7
<b>Recreation-Related Industries</b>												
Arts, Entertainment, and Recreation Services	71	74	65	66	84	58	\$1.6	\$1.7	\$1.3	\$1.3	\$2.0	\$1.0
Accommodation and Food Services	133	142	137	137	148	133	\$2.7	\$2.9	\$2.8	\$2.8	\$3.0	\$2.8

### Table O-293. Employment and earnings in the Coos Bay District model area by alternative.

<sup>1</sup>Federal payments include only those that would be paid under the O&C formula. Current has been modified as if O&C payments had been made in lieu of SRS payments. Note: Totals may not add due to rounding.

		E	mployme	nt (Jobs)			Earı	nings (Mil	lions of 20	12 Consta	ant Dollar	s)
Program/Industry	2012			2018			2012			2018		
r tograni/muusu y	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D
BLM Program												
Recreation	527	563	563	563	563	563	\$16.2	\$17.3	\$17.3	\$17.3	\$17.3	\$17.3
Grazing		=	Ξ	I	Ξ		=	) <del></del>		=	-	<b>H</b>
Timber	480	1,190	891	1,188	2,083	660	\$23.2	\$57.6	\$43.2	\$57.5	\$100.8	\$32.0
Minerals	3	3	3	3	3	3	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2
Agency Expenditures	259	411	336	393	601	288	\$15.2	\$24.1	\$19.7	\$23.1	\$35.3	\$16.9
Federal Payments to Lane County <sup>1</sup>	28	70	42	55	102	28	\$1.9	\$4.9	\$2.9	\$3.8	\$7.1	\$2.0
Totals	1,297	2,237	1,835	2,202	3,352	1,541	\$56.6	\$104.0	\$83.3	\$101.8	\$160.6	\$68.2
Timber-Related Industries												
Forestry, Logging, & Support Activities	118	266	200	255	463	153	\$6.8	\$15.4	\$11.6	\$14.8	\$26.9	\$8.9
Wood Products Manufacturing	81	212	156	221	376	110	\$4.5	\$11.7	\$8.6	\$12.2	\$20.8	\$6.1
Paper Manufacturing	13	39	30	39	67	22	\$1.2	\$3.6	\$2.8	\$3.6	\$6.2	\$2.1
Totals	212	517	386	515	907	286	\$12.5	\$30.7	\$23.0	\$30.6	\$53.8	\$17.0
<b>Recreation-Related Industries</b>												
Arts, Entertainment, and Recreation Services	87	125	110	124	167	99	\$2.6	\$4.4	\$3.7	\$4.4	\$6.6	\$3.1
Accommodation and Food Services	222	249	243	248	265	238	\$4.8	\$5.3	\$5.2	\$5.3	\$5.6	\$5.1
Totals	309	374	353	372	432	338	\$7.4	\$9.7	\$8.9	\$9.7	\$12.2	\$8.3

Table O-294. Employment and earnings in the Eugene District model area by alternative.

<sup>1</sup>Federal payments include only those that would be paid under the O&C formula. Current has been modified as if O&C payments had been made in lieu of SRS payments. Note: Totals may not add due to rounding.

Table O-295. Employment and ea	unings in u				ce model	area by a						
		E	mployme	nt (Jobs)				nings (Mil	lions of 20	12 Consta	ant Dollar	s)
Program/Industry	2012			2018			2012			2018		
Frogram/mustry	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D
BLM Program												
Recreation	60	64	64	64	64	64	\$1.6	\$1.7	\$1.7	\$1.7	\$1.7	\$1.7
Grazing	55	55	55	55	55		\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	-
Timber	40	78	25	64	79	49	\$1.9	\$3.6	\$1.2	\$3.0	\$3.7	\$2.3
Minerals	-	-	-	-	-	-	-		-	-	: <b>-</b> :	-
Agency Expenditures	71	81	68	78	85	73	\$4.2	\$4.8	\$4.0	\$4.6	\$5.0	\$4.3
Federal Payments to Klamath County <sup>1</sup>	4	11	7	9	17	5	\$0.2	\$0.6	\$0.3	\$0.5	\$0.8	\$0.2
Totals	231	289	219	270	299	190	\$8.7	\$11.4	\$8.0	\$10.5	\$11.9	\$8.5
Timber-Related Industries												
Forestry, Logging, & Support Activities	15	24	10	21	26	17	\$0.9	\$1.4	\$0.6	\$1.2	\$1.5	\$1.0
Wood Products Manufacturing	6	16	4	12	15	8	\$0.3	\$0.9	\$0.2	\$0.7	\$0.8	\$0.5
Paper Manufacturing	0	0	0	0	0	0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Totals	21	40	13	33	41	26	\$1.2	\$2.3	\$0.8	\$1.9	\$2.3	\$1.5
<b>Recreation-Related Industries</b>												
Arts, Entertainment, and Recreation Services	12	14	12	14	14	13	\$0.3	\$0.3	\$0.2	\$0.3	\$0.3	\$0.3
Accommodation and Food Services	28	31	30	31	31	30	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6
Totals	40	45	42	44	46	42	\$0.8	\$1.0	\$0.8	\$0.9	\$1.0	\$0.9

### Table O-295. Employment and earnings in the Klamath Falls Field Office model area by alternative.

<sup>1</sup>Federal payments include only those that would be paid under the O&C formula. Current has been modified as if O&C payments had been made in lieu of SRS payments. Note: Totals may not add due to rounding.

		En	iployme	nt (Jobs)			Earni	ngs (milli	ions of 20	12 Const	tant Dolla	ars)
Program/Industry	2012	_		2018			2012			2018		
r rogram/ muustry	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D
BLM Program												
Recreation	425	454	454	454	454	454	\$12.2	\$13.0	\$13.0	\$13.0	\$13.0	\$13.0
Grazing	40	40	40	40	40	-	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	-
Timber	340	1,391	599	936	1,010	470	\$15.8	\$65.0	\$28.0	\$43.7	\$47.2	\$22.0
Minerals	1	1	1	1	1	1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Agency Expenditures	454	621	493	548	568	468	\$27.2	\$37.2	\$29.5	\$32.8	\$34.1	\$28.1
Federal Payments to Counties <sup>1</sup>	66	169	102	132	244	68	\$2.9	\$7.3	\$4.4	\$5.8	\$10.7	\$3.0
Payments to Jackson	44	113	68	89	164	46	\$1.6	\$4.0	\$2.4	\$3.2	\$5.9	\$1.6
Payments to Josephine	22	55	33	43	80	22	\$1.3	\$3.3	\$2.0	\$2.6	\$4.8	\$1.3
Totals	1,326	2,675	1,688	2,110	2,318	1,461	\$58.6	\$123.1	\$75.5	\$95.8	\$105.5	\$66.0
Timber-Related Industries												
Forestry, Logging, & Support Activities	80	273	123	187	207	95	\$4.6	\$15.9	\$7.2	\$10.9	\$12.1	\$5.6
Wood Products Manufacturing	59	290	121	192	204	96	\$3.3	\$16.1	\$6.7	\$10.7	\$11.3	\$5.3
Paper Manufacturing	0	0	0	0	0	0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Totals	139	563	244	379	411	191	\$7.9	\$32.0	\$13.9	\$21.6	\$23.4	\$10.9
Recreation-Related Industries												
Arts, Entertainment, & Recreation Services	80	133	96	112	116	90	\$2.0	\$4.4	\$2.6	\$3.4	\$3.5	\$2.3
Accommodation & Food Services	159	187	173	179	184	170	\$3.3	\$3.8	\$3.6	\$3.7	\$3.8	\$3.5
Totals	239	320	269	291	300	259	\$5.3	\$8.2	\$6.2	\$7.0	\$7.3	\$5.8

Table O-296. Employment and earnings in the Medford District model area by alternative.

<sup>1</sup>Federal payments include only those that would be paid under the O&C formula. Current has been modified as if O&C payments had been made in lieu of SRS payments. Note: Totals may not add due to rounding.

Table O-297. Employment and ea	rnings in th	e Rosebi	urg Distri	ct model	area by a	lternativ	e.					
		E	mployme	nt (Jobs)			Earı	nings (Mil	lions of 20	12 Consta	ant Dollar	s)
Program/Industry	2012		_	2018			2012			2018		
Frogram/musury	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D
BLM Program	·											
Recreation	507	541	541	541	541	541	\$13.6	\$14.6	\$14.6	\$14.6	\$14.6	\$14.6
Grazing	-	-	-	-	-	-	-	-		-		-
Timber	488	790	327	467	915	264	\$23.5	\$38.0	\$15.7	\$22.5	\$44.0	\$12.7
Minerals	2	2	2	2	2	2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
Agency Expenditures	176	245	132	179	286	117	\$12.0	\$16.8	\$9.0	\$12.3	\$19.6	\$8.0
Federal Payments to Douglas County <sup>1</sup>	51	131	79	102	189	52	\$2.6	\$6.6	\$4.0	\$5.2	\$9.6	\$2.7
Totals	1,225	1,709	1,081	1,292	1,933	977	\$51.8	\$76.1	\$43.4	\$54.6	\$87.8	\$38.0
Timber-Related Industries												
Forestry, Logging, and Support Activities	147	213	88	139	246	77	\$8.6	\$12.4	\$5.1	\$8.0	\$14.3	\$4.5
Wood Products Manufacturing	133	241	100	131	279	75	\$7.4	\$13.4	\$5.6	\$7.3	\$15.6	\$4.2
Paper Manufacturing	=	1	-		-	-	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Totals	280	454	188	270	526	152	\$16.0	\$25.8	\$10.7	\$15.4	\$29.8	\$8.7
<b>Recreation-Related Industries</b>												
Arts, Entertainment, and Recreation Services	92	108	91	96	113	88	\$2.5	\$3.2	\$2.3	\$2.6	\$3.4	\$2.2
Accommodation and Food Services	197	215	208	211	219	206	\$4.0	\$4.4	\$4.2	\$4.3	\$4.4	\$4.2
Totals	289	324	299	307	332	295	\$6.5	\$7.6	\$6.6	\$6.9	\$7.9	\$6.4

<sup>1</sup>Federal payments include only those that would be paid under the O&C formula. Current has been modified as if O&C payments had been made in lieu of SRS payments. Note: Totals may not add due to rounding.

		E	mployme	nt (Jobs)			Earı	ings (Mil	lions of 20	12 Consta	ant Dollar	·s)
Duo guom/In dustau	2012			2018			2012			2018		
Program/Industry	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D
BLM Program												
Recreation	133	141	141	141	141	141	\$3.8	\$4.1	\$4.1	\$4.1	\$4.1	\$4.1
Grazing	J	Β	( <b>=</b> )			(H)		84.34 (14.44)	=	(H)	Ξ	-
Timber	432	391	467	529	700	418	\$21.3	\$19.4	\$23.2	\$26.2	\$34.7	\$20.7
Minerals	-	-	-	-	-	-		-	-	-	-	-
Agency Expenditures	271	311	294	341	467	255	\$17.4	\$20.0	\$18.9	\$21.9	\$30.0	\$16.4
Federal Payments to Counties <sup>2</sup>	15	37	22	29	54	15	\$0.9	\$2.4	\$1.4	\$1.9	\$3.5	\$1.0
Totals	851	881	925	1,041	1,362	829	\$43.5	\$45.8	\$47.5	\$54.1	\$72.2	\$42.1
Timber-Related Industries												
Forestry, Logging, and Support Activities	125	112	134	154	202	119	\$7.4	\$6.6	\$7.9	\$9.0	\$11.9	\$7.0
Wood Products Manufacturing	56	42	53	60	79	46	\$3.1	\$2.3	\$2.9	\$3.4	\$4.4	\$2.5
Paper Manufacturing	15	18	21	22	31	20	\$1.3	\$1.7	\$1.9	\$2.1	\$2.8	\$1.8
Totals	196	173	208	237	311	184	\$11.8	\$10.6	\$12.7	\$14.5	\$19.1	\$11.3
Recreation-Related Industries												
Arts, Entertainment, and Recreation Services	38	38	41	44	53	38	\$1.3	\$1.3	\$1.4	\$1.6	\$2.0	\$1.3
Accommodation and Food Services	71	77	76	79	87	74	\$1.5	\$1.6	\$1.6	\$1.6	\$1.8	\$1.5
Totals	109	115	117	123	139	112	\$2.8	\$2.9	\$3.0	\$3.2	\$3.8	\$2.9

**Table O-298.** Employment and earnings in the Salem-Other district model area<sup>1</sup> by alternative.

<sup>1</sup> Includes Benton, Clatsop, Lincoln, Linn, Marion, Polk, and Tillamook Counties. <sup>2</sup> Federal payments include only those that would be paid under the O&C formula. Current has been modified as if O&C payments had been made in lieu of SRS payments. Note: Totals may not add due to rounding.

Table O-299. Employment and earling	u inings in u			AL 1. 1993 A. 1997 - 199		ici aica				~~~~		
		E	mployme	nt (Jobs)			Earı	1ings (Mil	lions of 20	012 Consta	ant Dollar	s)
Program/Industry	2012			2018			2012			2018		
	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D
BLM Program					-							
Recreation	854	911	911	911	911	911	\$32.8	\$35.0	\$35.0	\$35.0	\$35.0	\$35.0
Grazing	=	-				=	-			=	-	=
Timber	407	328	404	444	591	366	\$22.8	\$18.4	\$22.7	\$24.9	\$33.2	\$20.6
Minerals	-		-	-	-	-	-		-	-	-	-
Agency Expenditures	-	-	-	-	-	-	-	-	-	-	-	-
Federal Payments to Counties <sup>2</sup>	14	37	22	29	53	15	\$1.0	\$2.4	\$1.5	\$1.9	\$3.5	\$1.0
Totals	1,275	1,276	1,337	1,384	1,555	1,292	\$56.5	\$55.8	\$59.1	\$61.8	\$71.7	\$56.6
Timber-Related Industries												
Forestry, Logging, and Support Activities	78	69	83	95	125	73	\$4.4	\$3.9	\$4.7	\$5.4	\$7.1	\$4.2
Wood Products Manufacturing	51	34	44	47	63	40	\$2.8	\$1.8	\$2.4	\$2.6	\$3.4	\$2.2
Paper Manufacturing	13	12	15	16	22	14	\$1.2	\$1.1	\$1.4	\$1.5	\$2.0	\$1.3
Totals	142	115	142	158	209	127	\$8.5	\$6.9	\$8.5	\$9.4	\$12.5	\$7.6
Recreation-Related Industries												
Arts, Entertainment, and Recreation Services	115	119	122	123	129	120	\$3.6	\$3.6	\$3.8	\$3.9	\$4.2	\$3.7
Accommodation and Food Services	339	362	362	362	365	361	\$9.1	\$9.7	\$9.7	\$9.7	\$9.8	\$9.7
Totals	454	481	484	486	494	482	\$12.7	\$13.3	\$13.5	\$13.6	\$14.0	\$13.4

### Table O-299 Employment and earnings in the Salem-Portland MSA district model area<sup>1</sup> by alternative

<sup>1</sup> Includes Clackamas, Columbia, Multnomah, Washington, and Yamhill Counties. <sup>2</sup> Federal payments include only those that would be paid under the O&C formula. Current has been modified as if O&C payments had been made in lieu of SRS payments. Note: Totals may not add due to rounding.

		E	mployme	nt (Jobs)			Earr	nings (Mil	lions of 20	System         System<	s)	
Drogrom/Industry	2012			2018			2012			2018		
Program/Industry	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified	No Action	Alt. A	Alt. B	Alt. C	Alt. D
BLM Program						-						
Recreation	2,782	2,969	2,969	2,969	2,969	2,969	\$87.2	\$93.0	\$93.0	\$93.0	\$93.0	\$93.0
Grazing	95	95	95	95	95	-	\$1.4	\$1.4	\$1.4	\$1.4	\$1.4	-
Timber	2,897	4,868	3,158	4,086	6,358	2,454	\$141.7	\$235.1	\$154.8	\$199.3	\$309.7	\$121.0
Minerals	6	6	6	6	6	6	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3
Agency Expenditures	1,423	1,855	1,458	1,679	2,259	1,283	\$89.2	\$115.5	\$90.3	\$104.2	\$141.0	\$79.2
Federal Payments to Counties <sup>1</sup>	198	505	305	395	732	203	\$10.5	\$26.7	\$16.2	\$20.9	\$38.8	\$10.7
Totals	7,403	10,298	7,992	9,230	12,419	6,915	\$330.1	\$471.8	\$355.9	\$419.0	\$584.1	\$304.2
Timber-Related Industries												
Forestry, Logging, and Support Activities	795	1,165	783	995	1,559	609	\$46.2	\$67.8	\$45.6	\$57.9	\$90.7	\$35.4
Wood Products Manufacturing	518	985	560	755	1,226	418	\$28.7	\$54.6	\$31.0	\$41.8	\$67.9	\$23.1
Paper Manufacturing	41	70	66	77	120	56	\$3.8	\$6.4	\$6.0	\$7.1	\$11.0	\$5.2
Totals	1,354	2,221	1,409	1,827	2,905	1,083	\$78.7	\$128.9	\$82.6	\$106.8	\$169.6	\$63.7
Recreation-Related Industries	•											
Arts, Entertainment, and Recreation Services	495	611	537	579	676	506	\$13.9	\$18.9	\$15.4	\$17.5	\$22.1	\$14.0
Accommodation and Food Services	1,150	1,263	1,229	1,247	1,299	1,212	\$25.9	\$28.3	\$27.7	\$28.0	\$29.0	\$27.4
Totals	1,645	1,874	1,766	1,826	1,975	1,718	\$39.9	\$47.2	\$43.1	\$45.5	\$51.1	\$41.4

Table O-300. Employment and earnings in the planning area by alternative.

<sup>1</sup>Federal payments include only those that would be paid under the O&C formula. Current has been modified as if O&C payments had been made in lieu of SRS payments. Note: Totals may not add due to rounding.

### For Cumulative Effects Analysis

Only metric projected by and available from state of Oregon at this level of detail is total area employment.

	Area Total Employment (Average Annual Jobs)		В		d Total Ei ge Annua	mploymen l Jobs)	it	BLM-Ba	ised Share	e of Area 7 (Percent)	Fotal Emp	loyment
District Model Area	2012	2018			2018					2018		
	Current	<b>Projected</b> <sup>1</sup>	No Action	Alt. A	Alt. B	Alt. C	Alt. D	No Action	Alt. A	Alt. B	Alt. C	Alt. D
Coos Bay	40,276	33,235	1,232	906	931	1,600	625	3.7%	2.7%	2.8%	4.8%	1.9%
Eugene	186,049	203,072	2,237	1,835	2,202	3,352	1,541	1.1%	0.9%	1.1%	1.7%	0.8%
Klamath Falls	31,881	33,997	289	219	270	299	190	0.9%	0.6%	0.8%	0.9%	0.6%
Medford	145,525	156,964	2,675	1,688	2,110	2,318	1,461	1.7%	1.1%	1.3%	1.5%	0.9%
Roseburg	46,527	50,422	1,709	1,081	1,292	1,933	977	3.4%	2.1%	2.6%	3.8%	1.9%
Salem-Other	359,408	388,098	881	925	1,041	1,362	829	0.2%	0.2%	0.3%	0.4%	0.2%
Salem-Portland MSA	1,147,490	1,258,230	1,276	1,337	1,384	1,555	1,292	0.1%	0.1%	0.1%	0.1%	0.1%
Planning Area Totals	1,957,157	2,124,018	10,298	7,992	9,230	12,419	6,915	0.5%	0.4%	0.4%	0.6%	0.3%

<b>Table O-301.</b> Current and projected employment by district model area by alternative (	average annual jobs, percent).
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<sup>1</sup>Based on total employment projections by Oregon Employment Department (Krumenauer 2014). Note: May not add due to rounding.

Table O-302. Current and projected employment by district model area by alternative (average annual jobs, percent).

		Employment	В		d Total E	•	t	BLM-Ba	sed Sharo	e of Area	Fotal Emp	loyment
	(Average A	nnual Jobs)		(Avera	ge Annua	l Jobs)				(Percent)		
District Model Areas	2012	2018			2018					2018		
	Current	<b>Projected</b> <sup>1</sup>	No	Alt. A	Alt. B	Alt. C	Alt. D	No	Alt. A	Alt. B	Alt. C	Alt. D
	Current	Frojecteu	Action	Increme	ntal Chang	ge from N	o Action	Action	AIL. A	Alt. D	An. C	Alt. D
Coos Bay	40,276	33,235	1,232	-326	-301	368	-607	3.7%	2.8%	2.8%	4.8%	1.9%
Eugene	186,049	203,072	2,237	-402	-35	1,115	-696	1.1%	0.9%	1.1%	1.6%	0.8%
Klamath Falls	31,881	33,997	289	-70	-19	10	-99	0.9%	0.6%	0.8%	0.9%	0.6%
Medford	145,525	156,964	2,675	-987	-565	-357	-1,214	1.7%	1.1%	1.3%	1.5%	0.9%
Roseburg	46,527	50,422	1,709	-628	-417	224	-732	3.4%	2.2%	2.6%	3.8%	2.0%
Salem-Other	359,408	388,098	881	44	160	481	-52	0.2%	0.2%	0.3%	0.4%	0.2%
Salem-Portland MSA	1,147,490	1,258,230	1,276	61	108	279	16	0.1%	0.1%	0.1%	0.1%	0.1%
Planning Area Totals	1,957,157	2,124,018	10,298	-2,306	-1,068	2,121	-3,383	0.5%	0.4%	0.4%	0.6%	0.3%

<sup>1</sup> BLM estimates based on total employment projections by Oregon Employment Department (Krumenauer 2014).

		En	ploymen	t (Jobs)			Ear	nings (Mil	lions of 20	\$40.5 \$74.4 \$101.8 \$160.6	)	
District Model Areas	2012			2018			2012			2018		
District Model Areas	Current-	No	Alt. A	Alt. B	Alt. C	Alt. D	Current-	No	Alt. A	Alt B	Alt C	Alt. D
	Modified	Action	1110.11	int. D	int. C	Ant. D	Modified <sup>1</sup>	Action	1 110. 1 1	Ant. D	mi c	nn. D
Coos Bay	1,198	1,232	906	931	1,600	625	\$54.4	\$55.6	\$39.1	\$40.5	\$74.4	\$24.8
Eugene	1,297	2,237	1,835	2,202	3,352	1,541	\$56.6	\$104.0	\$83.3	\$101.8	\$160.6	\$68.2
Klamath Falls	231	289	219	270	299	190	\$8.7	\$11.4	\$8.0	\$10.5	\$11.9	\$8.5
Medford	1,326	2,675	1,688	2,110	2,318	1,461	\$58.6	\$123.1	\$75.5	\$95.8	\$105.5	\$66.0
Roseburg	1,225	1,709	1,081	1,292	1,933	977	\$51.8	\$76.1	\$43.4	\$54.6	\$87.8	\$38.0
Salem-Other	851	881	925	1,041	1,362	829	\$43.5	\$45.8	\$47.5	\$54.1	\$72.2	\$42.1
Salem-Portland MSA	1,275	1,276	1,337	1,384	1,555	1,292	\$56.5	\$55.8	\$59.1	\$61.8	\$71.7	\$56.6
Planning Area Totals	7,403	10,298	7,992	9,230	12,419	6,915	\$330.1	\$471.8	\$355.9	\$419.0	\$584.1	\$304.2

Table O-303. BLM-based employment and earnings by district model area by alternative.

<sup>1</sup> Current has been modified as if O&C payments had been made in lieu of SRS payments. PILT payments are excluded. Note: Totals may not add due to rounding.

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Table O-304. BLM-based emp	loyment and	earnings	in timbe	r-related	<sup>1</sup> industri	es and re	ecreation-rela	ated <sup>2</sup> indu	stries by o	district mo	odel area b	у
alternative.	72 								- 100 I			-
		En	ploymen					nings (Mi	llions of 2	012 Consta	ant Dollars	5)
Industry/District Model Area	2012			2018			2012			2018		
	Current- Modified <sup>3</sup>	No Action	Alt. A	Alt. B	Alt. C	Alt. D	Current- Modified <sup>3</sup>	No Action	Alt. A	Alt. B	Alt. C	Alt. D
Timber-Related <sup>1</sup> Industries				-								
Coos Bay	363	358	229	235	501	117	\$20.8	\$20.5	\$13.1	\$13.5	\$28.7	\$6.7
Eugene	212	517	386	515	907	286	\$12.5	\$30.7	\$23.0	\$30.6	\$53.8	\$17.0
Klamath Falls	21	40	13	33	41	26	\$1.2	\$2.3	\$0.8	\$1.9	\$2.3	\$1.5
Medford	139	563	244	379	411	191	\$7.9	\$32.0	\$13.9	\$21.6	\$23.4	\$10.9
Roseburg	280	454	188	270	526	152	\$16.0	\$25.8	\$10.7	\$15.4	\$29.8	\$8.7
Salem-Other	196	173	208	237	311	184	\$11.8	\$10.6	\$12.7	\$14.5	\$19.1	\$11.3
Salem-Portland MSA	142	115	142	158	209	127	\$8.5	\$6.9	\$8.5	\$9.4	\$12.5	\$7.6
Planning Area Totals	1,354	2,221	1,409	1,827	2,905	1,083	\$78.7	\$128.9	\$82.6	\$106.8	\$169.6	\$63.7
<b>Recreation-Related<sup>2</sup> Industries</b>	2- 12-						2					
Coos Bay	204	216	202	203	232	190	\$4.4	\$4.6	\$4.2	\$4.2	\$5.1	\$3.8
Eugene	309	374	353	372	432	338	\$7.4	\$9.7	\$8.9	\$9.7	\$12.2	\$8.3
Klamath Falls	40	45	42	44	46	42	\$0.8	\$1.0	\$0.8	\$0.9	\$1.0	\$0.9
Medford	239	320	269	291	300	259	\$5.3	\$8.2	\$6.2	\$7.0	\$7.3	\$5.8
Roseburg	289	324	299	307	332	295	\$6.5	\$7.6	\$6.6	\$6.9	\$7.9	\$6.4
Salem-Other	109	115	117	123	139	112	\$2.8	\$2.9	\$3.0	\$3.2	\$3.8	\$2.9
Salem-Portland MSA	454	481	484	486	494	482	\$12.7	\$13.3	\$13.5	\$13.6	\$14.0	\$13.4
Planning Area Totals	1,645	1,874	1,766	1,826	1,975	1,718	\$39.9	\$47.2	\$43.1	\$45.5	\$51.1	\$41.4

<sup>1</sup> Timber-related industries include forestry, logging and support activities, wood products manufacturing, and paper manufacturing. <sup>2</sup> Receation-related industries include arts, entertainment, and recreation services, and accommodation and food services. Totals include local resident spending whose earnings may be associated with non-recreation BLM programs.

<sup>3</sup> Current has been modified as if O&C payments had been made in lieu of SRS payments. PILT payments are excluded. Note: Totals may not add due to rounding.

# Issue 5

How would the RMP alternatives affect the capacity and resiliency of different types of communities in the planning area?

# **Census Places Random Selection**

# **Census Places Random Selection for Community Capacity and Resiliency** May 29, 2014

Coos Bay	47,218	Roseburg	661,130	Salem	
Powers	689	Sutherlin	7,810	Hubbard	3,173
Port Orford	1,133	Roseburg	21,181	Mount Angel	3,286
Lakeside	1,699	Salem	661,130	Toledo	3,465
Gold Beach	2,253	Johnson City	566	Harrisburg	3,567
Myrtle Point	2,514	Manzanita	598	Aumsville	3,584
Bandon	3,066	Monroe	617	Lafayette	3,742
Coquille	3,866	Gaston	637	Wood Village	3,878
Brookings	6,336	Yachats	690	Philomath	4,584
North Bend	9,695	Maywood Park	752	Tillamook	4,935
Coos Bay	15,967	Garibaldi	779	Warrenton	4,989
Eugene	39,724	Scio	838	Sheridan	6,127
Coburg	1,035	Adair Village	840	Seaside	6,477
Lowell	1,045	Halsey	904	Scappoose	6,592
Dunes City	1,303	Aurora	918	Stayton	7,644
Oakridge	3,205	Falls City	947	Lincoln City	7,930
Veneta	4,561	Donald	979	Molalla	8,108
Creswell	5,031	Yamhill	1,024	Independence	8,590
Junction City	5,392	Lyons	1,161	Fairview	8,920
Florence	8,466	Tangent	1,164	Sweet Home	8,925
Cottage Grove	9,686	Siletz	1,212	Silverton	9,222
Lakeview	23,223	Bay City	1,286	Astoria	9,477
Chiloquin	734	Rockaway Beach	1,312	Monmouth	9,534
Malin	805	Millersburg	1,329	Sandy	9,570
Merrill	844	Durham	1,351	Newport	9,989
Klamath Falls	20,840	Depoe Bay	1,398	Damascus	10,539
Medford	101,776	Gearhart	1,462	Gladstone	11,497
Gold Hill	1,220	Amity	1,614	Cornelius	11,869
Cave Junction	1,883	Brownsville	1,668	St. Helens	12,883
Rogue River	2,131	Cannon Beach	1,690	Happy Valley	13,903
Jacksonville	2,785	Clatskanie	1,737	Dallas	14,583
Shady Cove	2,904	Banks	1,777	Lebanon	15,518
Phoenix	4,538	Turner	1,854	Canby	15,829
Talent	6,066	Mill	1,855	Troutdale	15,962
Eagle Point	8,469	Rainier	1,895	Sherwood	18,194
Central Point	17,169	Columbia City	1,946	Wilsonville	19,509
Ashland	20,078	North Plains	1,947	Milwaukie	20,291
Grants Pass	34,533	Carlton	2,007	Forest Grove	21,083
Roseburg	49,031	Willamina	2,025	Newberg	22,068
Glendale	874	Waldport	2,033	Woodburn	24,080
Oakland	927	Vernonia	2,151	West Linn	25,109
Yoncalla	1,047	Gervais	2,464	Tualatin	26,054
Drain	1,151	Dayton	2,534	Oregon City	31,859
Riddle	1,185	Sublimity	2,681	McMinnville	32,187
Canyonville	1,884	Estacada	2,695	Keizer	36,478
Myrtle Creek	3,439	Jefferson	3,098	Lake Oswego	36,619
Reedsport	4,154	King City	3,111		,
Winston	5,379	Dundee	3,162	Grand To	otal 922,102

 Table O-305. Stratified random sample of communities by population (selected cities highlighted).

# **Community Capacity/Resiliency Baseline**

Data Set	What Does This Tell Us?	<b>Community Base</b>	Data Availability
Data Set	what Does This Ten Us?	County	Sub County
Population 2010, 2012	Size, generally = more community capacity	Y	Y
Population change 2000 to 2010/2012	Growing pop, generally = more capacity	Y	Y
Employment/Unemployment, 2012	High employment/low unemployment, generally = more capacity	Y	Y
Employment volatility (diversity) current at place empt by industry (possibly including change over time)	More employment, employment access = more capacity More diversity in disconnected industries (not all in one sector) = more resiliency	Y	Y
Household income 2010 or most recent from American Community Survey (number of households) Median household income or share in plus 3 to 5 \$ income brackets (\$20-34, 35-50 etc.)	Higher incomes, generally = more capacity, more resiliency.	Y	Y
Poverty rate	Lower poverty = more capacity	Y	Y
Education (% population with High School certificate; with a 4 year degree)	Higher = more capacity, more resiliency.	Y	Y
Community Health Population with health insurance (available from census)	Healthy Communities have more capacity, more resiliency	Y	Y
Community wealth: Assessable tax base? (needs to be expressed in relative terms (e.g., per capita))	More wealth = more capacity, more resiliency	Y	If available
Recreation indicator? Recreation demand/scarcity? (per Rec. Planning Criteria)	Lower scarcity = more capacity	Y - Specifics to be determined	If available

Table O-306. Community capacity/resiliency baseline inputs.

# **Selected Socioeconomic Characteristics**

 Table O-307.
 Selected socioeconomic characteristics for selected cities in western Oregon.

Characteristic	Orego	)n	Coquill	e	Drain		Florence # 8,412 7,263	e
Characteristic	#	%	#	%	#	%	#	%
Population								
Total Population, 2012	3,836,628		3,874		1,142		8,412	
Population, 2000	3,421,399		4,184		1,012		7,263	
Population Change 2000- 2012	415,229	12%	-310	-8%	130	13%	1,149	16%

Characteristic	Orego	on	Coquill	e	Drain		Florenc	e
Characteristic	#	%	#	%	#	%	#	%
Age Distribution (2012)						-		-
Population 19 years and under	967,636	25%	756	20%	296	26%	1,036	12%
Population 20 to 64 years	2,328,465	61%	2,312	60%	594	52%	4,293	51%
Population 65 years and older	540,527	14%	806	21%	252	22%	3,083	37%
Totals	3,836,628	100%	3,874	100%	1,142	100%	8,412	100%
Median age (years)	38.4		47.4		42.2		57.6	
Race								
White alone, 2012	3,272,707	85%	3,460	89%	1,084	95%	7,820	93%
Minority	563,921	15%	414	11%	58	5%	592	7%
Housing								
Total housing units	1,673,593	N/A	1,953	50%	433	38%	5,207	62%
Occupied housing units	1,512,718	100%	1,592	82%	418	97%	4,438	85%
Vacant housing units	160,875	11%	361	18%	15	4%	769	15%
Owner-occupied	945,824	63%	1,104	57%	253	61%	2,766	62%
Renter-occupied	566,894	37%	488	25%	165	39%	1,672	38%
Median housing unit value (\$)	246,100		154,100		133,100		201,200	
Median gross rent (\$)	854		478		151		1,606	
Employment		I					, •	
Workers 16 years and over	3,072,774	80%	3,281	85%	921	81%	7,600	90%
In labor force	1,957,085	67%	1,794	46%	501	44%	3,244	39%
Unemployed	210,379	7%	71	2%	115	10%	258	3%
Occupation	,							
Civilian employed population	1 742 524	570/	1 700	4.407	20(	2.40/	2.0(7	250/
16 years and over	1,743,524	57%	1,723	44%	386	34%	2,967	35%
Management, business,	(27.710	2(0)	200	220/	(2	1.60/	(52)	220/
science and arts occupations	627,719	36%	399	23%	62	16%	653	22%
Service occupations	315,529	18%	474	28%	82	21%	689	23%
Sales and office occupations	426,554	25%	409	24%	96	25%	637	21%
Natural resources,								
construction, and	164,625	9%	343	20%	38	10%	347	12%
maintenance occupations				, .		/ -		
Production,						-		-
transportation, and								
material moving	209,097	12%	98	6%	108	28%	641	22%
-								
occupations								
Jobs in a 5-Mile Radius of			2,086		559		3,651	
the Community by Sector								
Accommodation and Food	145,131	9%	81	4%	33	6%	1,008	28%
Services Administration and Support,								
Waste Management and	84,402	5%	50	2%	20	4%	141	4%
Remediation	04,402	570	50	270	20	470	141	470
Agriculture, Forestry, Fishing								
and Hunting	40,859	3%	182	9%	16	3%	86	2%
Arts, Entertainment, and								
Recreation	26,407	2%	4	0%	2	0%	89	2%
Construction	71,050	4%	85	4%	46	8%	142	4%
Educational Services	158,758	10%	115	4 /0 6%	124	22%	142	5%
Finance and Insurance	57,164	4%	87	4%	124	2270	103	3%
Health Care and Social					10			
Assistance	230,433	14%	254	12%	8	1%	702	19%
Information	33,677	2%	12	1%	0	0%	110	3%
Management of Companies					-			
and Enterprises	32,692	2%	64	3%	13	2%	21	1%
Manufacturing	167,695	10%	378	18%	139	25%	39	1%
manufacturing	107,093	1070	3/8	1070	139	2370	39	1 70
Mining, Quarrying, and Oil	1,596	0%	1	0%				0%

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Chamatanistia	Orego	n	Coquill	e	Drain		Florenc	e
Characteristic	#	%	#	%	#	%	#	%
Other Services (excluding	60,136	4%	81	4%	13	2%	154	4%
Public Administration)	00,130	470	01	470	15	270	134	470
Professional, Scientific, and	77,910	5%	27	1%	2	0%	70	2%
Technical Services	-				_		, .	
Public Administration	91,242	6%	480	23%	29	5%	93	3%
Real Estate and Rental and	25,259	2%	5	0%	0	0%	102	3%
Leasing	-				-			
Retail Trade	181,165	11%	125	6%	61	11%	525	14%
Transportation and	52,036	3%	45	2%	31	6%	43	1%
Warehousing	· ·				_			
Utilities	8,692	1%	9	0%	4	1%	27	1%
Wholesale Trade	74,290	5%	1	0%	0	0%	25	1%
Jobs Distribution								
Variability Compared to				608%		267%		130%
Oregon (3)								
Jobs by Earnings								
\$1,250 per month or less	395,867	24%	458	22%	163	29%	1,240	34%
\$1,251 to \$3,333 per month	621,915	38%	865	41%	257	46%	1,675	46%
More than \$3,333 per month	602,812	37%	763	37%	139	25%	736	20%
Income						r		
Median household income (\$)	50,036		47,714		36,964		35,000	
Persons below poverty level	584,059	15%	185	5%	97	8%	995	12%
Health Insurance Coverage					r	1	r	
Civilian noninstitutionalized population	3,796,881	99%	3,704	96%	1,142	100%	8,377	100%
With health insurance coverage	3,191,034	84%	3,240	84%	911	80%	6,996	83%
No health insurance coverage	605,847	16%	464	12%	231	20%	1,381	16%
Education (highest level obtain	ned)							
High School certificate	635,670	17%	2,371	61%	466	41%	3,541	42%
4 year degree	760,816	20%	682	18%	0	0%	0	0%
Assessed Value of Property								
Total assessed value for tax			202,372,480		52,373,224		837,548,331	
year 2013-14 (\$)			202,372,480		52,575,224		037,340,331	
Assessed Value Per Capita			52,239		45,861		99,566	
(dollars)			52,239		45,001		<i>77,5</i> 00	
Recreation								
Outdoor recreation land in the								
county where the community	8,605		5,012		16,069		5,098	
is located (acres per 1,000	0,005		5,012		10,009		5,070	
population)								

Characteristic	Gold Be	each	Grants P		Junction	City	Klamath F	alls
	#	%	#	%	#	%	#	%
Population								
Total Population, 2012	2,563		34,454		5,445		20,943	
Population, 2000	1,897		23,003		4,721		19,462	
Population Change 2000-2012	666	35%	11,451	50%	724	15%	1,481	8%
Age Distribution (2012)								
Population 19 years and under	664	26%	8,918	26%	1,551	28%	5,425	26%
Population 20 to 64 years	1,401	55%	18,533	54%	3,110	57%	12,989	62%
Population 65 years and older	498	19%	7,003	20%	784	14%	2,529	12%
Totals	2,563	100%	34,454	100%	5,445	100%	20,943	100%
Median age (years)	41.1		40		36.3		35	
Race								
White alone, 2012	2,334	91%	32,246	94%	5,032	92%	17,985	86%
Minority	229	9%	2,178	6%	413	8%	2,958	14%
Housing								
Total housing units	1,327	52%	15,760	46%	2,250	41%	10,190	49%
Occupied housing units	1,029	78%	14,545	92%	2,049	91%	9,054	89%
Vacant housing units	298	22%	1,215	8%	201	9%	1,136	11%
Owner-occupied	674	66%	7,308	50%	990	48%	4,280	47%
Renter-occupied	355	34%	7,237	50%	1,059	52%	4,774	53%
Median housing unit value (\$)	220,100	, .	196,900		179,400	/ -	148,600	
Median gross rent (\$)	336		6,959		984		4,551	
Employment	220		0,707		,,,,	<u> </u>	1,001	
Workers 16 years and over	2,103	82%	27,321	79%	4,188	77%	16,844	80%
In labor force	1,195	47%	14,892	55%	2,747	50%	10,539	50%
Unemployed	123	5%	1,771	6%	386	7%	1,354	6%
Occupation	125	570	1,771	070	500	770	1,554	070
Civilian employed population								1
16 years and over	1,072	42%	13,092	38%	2,361	43%	9,118	44%
Management, business,								
science and arts occupations	284	26%	3,138	24%	443	19%	2,836	31%
Service occupations	257	24%	3,273	25%	461	20%	2,213	24%
Sales and office occupations	304	28%	3,687	28%	565	24%	2,002	22%
Natural resources,	501	2070	5,007	2070	505	2170	2,002	2270
construction, and maintenance	134	13%	1,108	8%	498	21%	937	10%
occupations	154	1570	1,100	070	470	2170	)51	1070
Production, transportation,								
and material moving	93	9%	1,886	14%	394	17%	1.130	12%
occupations	,,,	270	1,000	11/0	571	1770	1,150	1270
Jobs in a 5-Mile Radius of								
the Community by Sector	1,394		17,216		12,205		18,710	
Accommodation and Food		1.50.1	0.010	100/	(0.0	60.4		00/
Services	229	16%	2,012	12%	690	6%	1,644	9%
Administration and Support,								
Waste Management and	6	0%	778	5%	413	3%	1,143	6%
Remediation	-						· · ·	
Agriculture, Forestry, Fishing		201		00/	100	10.4		
and Hunting	37	3%	45	0%	488	4%	377	2%
Arts, Entertainment, and	4	00/	1.65	10/	0.6	10/	29.4	20/
Recreation	4	0%	165	1%	86	1%	284	2%
Construction	49	4%	390	2%	641	5%	669	4%
Educational Services	93	7%	848	5%	1,218	10%	2,172	12%
Finance and Insurance	25	2%	690	4%	149	1%	561	3%
Health Care and Social								
Assistance	154	11%	3,977	23%	912	7%	3,455	18%
Information	42	3%	292	2%	27	0%	195	1%
Management of Companies								
	0	0%	77	0%	44	0%	506	3%
and Enterprises								

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Champetonistic	Gold Be	each	Grants P	ass	Junction (	City	Klamath F	alls
Characteristic	#	%	#	%	#	%	#	%
Mining, Quarrying, and Oil and Gas Extraction	0	0%	0	0%	13	0%	1	0%
Other Services (excluding		201		10 (		10 (		10/
Public Administration)	38	3%	726	4%	448	4%	660	4%
Professional, Scientific, and Technical Services	60	4%	473	3%	251	2%	563	3%
Public Administration	295	21%	982	6%	202	2%	1,262	7%
Real Estate and Rental and Leasing	15	1%	243	1%	175	1%	201	1%
Retail Trade	188	13%	2,978	17%	2,055	17%	2,506	13%
Transportation and Warehousing	35	3%	228	1%	397	3%	355	2%
Utilities	17	1%	76	0%	42	0%	143	1%
Wholesale Trade	4	0%	878	5%	901	7%	516	3%
Jobs Distribution Variability			070		501		510	
Compared to Oregon (3)		183%		96%		123%		117%
Jobs by Earnings			<u> </u>				<u> </u>	
\$1,250 per month or less	467	34%	5,043	29%	2,911	24%	5,292	28%
\$1,251 to \$3,333 per month	565	41%	8,087	47%	5,538	45%	8,219	44%
More than \$3,333 per month	362	26%	4,086	24%	3,756	31%	5,199	28%
Income			.,	, .	-,,		-,,	
Median household income (dollars)	50,958		32,991		35,067		31,971	
Persons below poverty level	370	14%	7,132	21%	1,239	23%	5,131	24%
Health Insurance Coverage		, .	,,	, ,	- , ,		-,	
Civilian non-institutionalized		0.00/	22 (11)	0.00/	5.0.40	0.00/		000/
population	2,516	98%	33,614	98%	5,342	98%	20,538	98%
With health insurance coverage	1,865	73%	28,272	84%	4,320	79%	16,245	78%
No health insurance coverage	651	25%	5,342	16%	1,022	19%	4,338	21%
Education (highest level obtain	ned)						· · · · ·	
High School certificate	1,176	46%	30,251	88%	1,770	33%	5,634	27%
4 year degree	90	4%	4,617	13%	87	2%	1,173	6%
Assessed Value of Property								
Total assessed value for tax year 2013-14 (\$)	226,856,877		2,624,936,968		355,651,839		1,264,904,779	
Assessed Value Per Capita (\$)	88,512		76,187		65,317		60,397	
Recreation	,							
Outdoor recreation land in the county where the community is located (acres per thousand population)	31,208		8,612		5,098		34,321	

Characteristic	Lincoln	City	Molall		Rogue Ri		St. Helens	City
	#	%	#	%	#	%	#	%
Population		,				,		
Total Population, 2012	7,926		8,039		2,265		12,807	
Population, 2000	7,437		5,647		1,847		10,019	
Population Change 2000-2012	489	6%	2,392	42%	418	23%	2,788	22%
Age Distribution (2012)								
Population 19 years and under	1,729	21.8%	2,598	32%	500	22%	3,737	29%
Population 20 to 64 years	4,575	57.7%	4,654	58%	1,158	51%	8,043	63%
Population 65 years and older	1,622	20.5%	787	10%	607	27%	1,027	8%
Totals	7,926	100%	8,039	100%	2,265	100%	12,807	100%
Median age (years)	44.6		32		45.6		33.3	
Race								
White alone, 2012	6,931	87.4%	7,520	94%	2,103	93%	11,512	89.9
Minority	995	13%	519	6%	162	7%	1,295	10%
Housing		1 1					,	
Total housing units	5,720	5,720	3,010	37%	1,132	50%	5,123	40%
Occupied housing units	3,932	69%	2,966	99%	997	88%	4,725	92%
Vacant housing units	1,788	31%	44	1%	135	12%	398	8%
Owner-occupied	1,929	49%	2,077	70%	567	57%	3,007	59%
Renter-occupied	2,003	51%	889	30%	430	43%	1,718	34%
Median housing unit value (\$)	233,700	5170	204,600	5070	177,900	-J/U	186,000	J-7 /0
Median gross rent (\$)	717		889		420		1,701	
Employment	/1/		009		420	<u> </u>	1,701	
Workers 16 years and over	6,500	82%	5,813	72%	1,838	81%	9,842	77%
In labor force	3,963	61%		69%	1,838	81% 39%	,	53%
			4,006				6,742	
Unemployed	505	8%	444	8%	100	4%	1,202	9%
Occupation		<u>г г</u>				1 1		
Civilian employed population 16 years and over	3,458	44%	3,562	44%	777	34%	5,540	43%
Management, business, science and arts occupations	649	19%	683	19%	195	25%	1,371	25%
Service occupations	1,091	32%	696	20%	146	19%	852	15%
Sales and office occupations	1,268	37%	819	23%	236	30%	1,669	30%
Natural resources, construction, and maintenance occupations	253	7%	650	18%	102	13%	829	15%
Production, transportation, and material moving occupations	197	6%	714	20%	98	13%	819	15%
Jobs in a Five Mile Radius of the Community by Sector	5,709		3,804		1,304		3,729	
Accommodation and Food	1 701	200/	200	70/	104	00/	259	1.00/
Services	1,721	30%	266	7%	104	8%	358	10%
Administration and Support, Waste Management and Remediation	240	4%	54	1%	58	4%	151	4%
Agriculture, Forestry, Fishing and Hunting	12	0%	710	19%	62	5%	52	1%
Arts, Entertainment, and Recreation	661	12%	66	2%	19	1%	47	1%
Construction	226	4%	260	7%	117	9%	85	2%
Educational Services	159	3%	427	11%	202	15%	479	13%
Finance and Insurance	48	1%	36	1%	19	1%	126	3%
Health Care and Social Assistance	674	12%	253	7%	141	11%	705	19%
Information	53	1%	47	1%	32	2%	28	1%
Management of Companies	1	0%	5	0%	0	0%	23	1%
and Enterprises								

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	Lincoln	City	Molalla	a	Rogue Ri	iver	St. Helens	City
Characteristic	#	%	#	%	#	%	#	%
Mining, Quarrying, and Oil	0	0%	16	0%	19	1%	0	0%
and Gas Extraction	0	070	10	070	19	1 70	0	070
Other Services (excluding	168	3%	203	5%	52	4%	176	5%
Public Administration)	100	570	205	570	52	170	170	570
Professional, Scientific, and	66	1%	51	1%	49	4%	93	2%
Technical Services								
Public Administration	244	4%	102	3%	40	3%	417	11%
Real Estate and Rental and	233	4%	24	1%	20	2%	58	2%
Leasing			205		100			
Retail Trade	1,030	18%	385	10%	132	10%	345	9%
Transportation and	46	1%	121	3%	25	2%	45	1%
Warehousing	22	00/		00/		00/		00/
Utilities	23	0%	0 98	0%	0	0% 1%	0	0%
Wholesale Trade	57	1%	98	3%	15	1%	29	1%
Jobs Distribution Variability		217%		157%		49%		81%
Compared to Oregon (3)								
Jobs by Earnings \$1,250 per month or less	2,147	38%	1,170	31%	465	36%	799	21%
\$1,250 per month of less \$1,251 to \$3,333 per month	2,147	45%	1,170	43%	523	40%	2,079	56%
More than \$3,333 per month	987	17%	981	26%	323	24%	851	23%
Income	907	1 / /0	901	2070	510	2470	0.01	2370
Median household income (\$)	29,686		52,926		32,426		53,151	
Persons below poverty level	1,616	20%	868	11%	398	18%	2,267	18%
Health Insurance Coverage	1,010	2070	000	11/0	570	1070	2,207	1070
Civilian non-institutionalized	[							
population	7,886	99%	7,992	99%	2,265	100%	12,621	99%
With health insurance coverage	6,299	80%	6,664	83%	1,884	83%	10,706	84%
No health insurance coverage	1,587	20%	1,328	17%	381	17%	1,915	15%
Education (highest level obtain	,		<u> </u>				7	
High School certificate	1,745	22%	6,930	86%	695	31%	2,420	19%
4 year degree	1,119	14%	780	10%	0	0%	1,288	10%
Assessed Value of Property								
Total assessed value for tax	1 521 200 400		400 004 007		125 000 (51		015 441 224	
year 2013-14 (\$)	1,521,308,480		490,884,897		135,999,651		815,441,324	
Assessed Value Per Capita (\$)	191,939		61,063		60,044		63,672	
Recreation								
Outdoor recreation land in the								
county where the community	4,906		1,682		4,416		565	
is located (acres per 1,000	4,900		1,082		4,410		505	
population)								

Characteristic	Sublimi	ty	Winstor	1
Characteristic	#	%	#	%
Population				
Total Population, 2012	2,683		5,352	
Population, 2000	2,148		4,613	
Population Change 2000-2012	535	25%	739	16%
Age Distribution (2012)				
Population 19 years and under	495	18%	1,674	31%
Population 20 to 64 years	1,346	50%	3,012	56%
Population 65 years and older	842	31%	666	12%
Totals	2,683	100%	5,352	100%
Median age (years)	51		31.9	
Race	-	<u> </u>		
White alone, 2012	2,623	98%	4,980	93%
Minority	60	2%	372	7%
Housing				.,.
Total housing units	1,134	42%	1,927	36%
Occupied housing units	1,085	96%	1,809	94%
Vacant housing units	49	4%	118	6%
Owner-occupied	731	67%	1,074	59%
Renter-occupied	354	33%		41%
		33%0	735	41%
Median housing unit value (\$)	247,300		154,400	
Median gross rent (\$)	347		723	
Employment		0.000		
Workers 16 years and over	2,292	85%	3,961	74%
In labor force	1,089	48%	2,208	41%
Unemployed	61	3%	388	7%
Occupation				
Civilian employed population 16 years and	1,016	38%	1,820	34%
over	1,010	3070	1,020	J+70
Management, business, science and arts	370	36%	335	18%
occupations	570			
Service occupations	156	15%	337	19%
Sales and office occupations	276	27%	680	37%
Natural resources, construction, and	115	11%	183	10%
maintenance occupations	115	1170	165	1070
Production, transportation, and material	99	1.00/	295	1.60/
moving occupations	99	10%	285	16%
Jobs in a Five Mile Radius of the	17 216		4.022	
Community by Sector	17,216		4,032	
Accommodation and Food Services	2,012	12%	264	7%
Administration & Support, Waste	770	50/	70	20/
Management and Remediation	778	5%	72	2%
Agriculture, Forestry, Fishing and Hunting	45	0%	136	3%
Arts, Entertainment, and Recreation	165	1%	45	1%
Construction	390	2%	252	6%
Educational Services	848	5%	293	7%
Finance and Insurance	690	4%	35	1%
Health Care and Social Assistance	3,977	23%	196	5%
Information	292	2376	6	0%
Management of Companies and Enterprises		0%	319	8%
	1 258			
Manufacturing	1,358	8%	1,325	33%
Mining, Quarrying, and Oil and Gas	0	0%	17	0%
Extraction	-			-
Other Services (excluding Public	726	4%	106	3%
Administration)	-		-	
Professional, Scientific, and Technical	473	3%	42	1%
Services				
Public Administration	982	6%	48	1%
Real Estate and Rental and Leasing	243	1%	30	1%

	Sublimi	ty	Winston		
Characteristic	#	%	#	%	
Retail Trade	2,978	17%	316	8%	
Transportation and Warehousing	228	1%	301	7%	
Utilities	76	0%	89	2%	
Wholesale Trade	878	5%	140	3%	
Jobs Distribution Variability Compared		96%		174%	
to Oregon (3)					
Jobs by Earnings	5.0.42	200/	0.16	210/	
\$1,250 per month or less	5,043	29%	846	21%	
\$1,251 to \$3,333 per month	8,087	47%	1,542	38%	
More than \$3,333 per month	4,086	24%	1,644	41%	
Income	r				
Median household income (\$)	58,708		31,627		
Persons below poverty level	150	6%	1,584	30%	
Health Insurance Coverage					
Civilian non-institutionalized population	2,432	91%	5,345	100%	
With health insurance coverage	2,229	92%	4,589	86%	
No health insurance coverage	203	8%	756	14%	
Education (highest level obtained)					
High School certificate	2,519	94%	1,295	24%	
4 year degree	816	30%	417	8%	
Assessed Value of Property					
Total assessed value for tax year 2013-14 (\$)	187,046,485		223,555,844		
Assessed Value Per Capita (\$)	69,715		41,771		
Recreation					
Outdoor recreation land in the county where					
the community is located (acres per 1,000 population)	828		16,069		

Sources:

U.S. Census Bureau; American Community Survey, 2012 American Community Survey 5-Year Estimates, Tables DP03, DP04, DP05, S1901 and S1701; generated by Joan Huston; using American FactFinder; <u>http://factfinder2.census.gov</u>; (May 2014). U.S. Census Bureau; American Community Survey, 2009 American Community Survey 5-Year Estimates, Tables DP03, DP04,

DP05, S1901 and S1701; generated by Joan Huston; using American FactFinder; <u>http://factfinder2.census.gov</u>; (May 2014).

U.S. Census Bureau; Census 2000, Summary File 1, Table DP05; generated by Joan Huston; using American FactFinder; http://factfinder2.census.gov; (May 2014).

U.S. Census Bureau. 2013. OnTheMap Application. Longitudinal-Employer Household Dynamics Program. http://onthemap.ces.census.gov/; generated by Clive Graham July 3, 2014.

Assessed Property Value derived from individual County Assessors Offices Summary of Assessment and Tax Rolls.

Oregon Parks and Recreation Department. 2011. Oregon Statewide Outdoor Recreation Resource/Facility Bulletin Final Report. A Component of the 2013-2017 Oregon Statewide Comprehensive Outdoor Recreation Plan.

#### Notes:

(1) All data are for 2012 with the exception of the Coquille Indian Tribe and Cow Creek Band of Umpqua Tribe of Indians. For these two tribes the most recent available data in all categories are the from 2009 five-year estimates.

(2) The population that is 16 years or older and available to work.

(3) A measure of difference in the distribution of jobs by sector in the 5-mile radius compared to the distribution of jobs for the State. A higher number means a larger difference in distribution.

The American Community Survey data is derived from a sample of American households that contains a greater level of detailed socioeconomic data than the decennial census. Where available, we used American Community Survey data from 2012, which is informed by data collected over the prior 5 years and extrapolated for each community (for two tribes, data was only available from 2009). Since the American Community Survey uses data derived from a sample of the population, and is not a true count of the population like the decennial census, margins of error are associated with the extrapolated data. These margins of error vary across the geography sampled; however, smaller populations generally experience larger margins of error when compared to more populated geographies.

**Table O-308.** Selected socioeconomic characteristics: Federally-recognized Tribes with land in the planning area, 2009 and 2012 (1).

Characteristic	Orego	n	Confeder Tribes of Lower Un and Siur India	Coos, npqua, slaw	Confeder Tribes o Grand R	f the	Confede Tribes o Siletz In	of the	
	#	%	#	%	#	%	#	%	
Population									
Population, 2012, 2009 (1)	3,836,628		24		473		476		
Population, 2000	3,421,399		25		55		308		
Population Change	415,229	12%	-1	-4%	418	760%	168	55%	
Age Distribution	•								
Population 19 years and under	967,636	25%	4	17%	164	35%	193	41%	
Population 20 to 64 years	2,328,465	61%	13	54%	278	59%	243	51%	
Population 65 years and older	540,527	14%	7	29%	31	7%	40	8%	
Median age (years)	38		62		28		29		
Race						LI			
White alone	3,272,707	85%	12	50%	92	19%	56	12%	
Minority (Non-white) population	563,921	15%	12	50%	381	81%	420	88%	
Housing	505,721	1570	12	5070	501	0170	120	0070	
Total housing units	1,673,593		15		193		173		
Occupied housing units	1,512,718	90%	15	100%	195	96%	160	93%	
Owner-occupied	945,824	57%	3	20%	13	7%	88	55%	
Renter-occupied	566,894	34%	12	80%	13	93%	72	45%	
Vacant housing units	160,875		0	0%	8	<u>93%</u> 4%	13	43% 8%	
	,	10%	0	0%	-	4%	-	8%0	
Median value owner-occupied units (\$)	246,100		450		91,700		79,100		
Median gross rent (\$)	854		450		833		458		
Employment (2)	1.052.002	(70/		100/	174	5 (0)	224	710/	
Population in the labor force (2)	1,953,903	67%	2	10%	176	56%	224	71%	
Unemployed	210,379	7%	18	90%	139	44%	40	13%	
Occupation				1					
Civilian employed population 16 years	1,743,524	57%	0	0%	37	12%	184	58%	
and over	3 3-								
Management, business, science and	627,719	36%	0	0%	47	35%	55	30%	
arts occupations			-		-				
Service occupations	315,529	18%	0	0%	58	43%	44	24%	
Sales and office occupations	426,554	25%	0	0%	25	19%	45	25%	
Natural resources, construction, and maintenance occupations	164,625	9%	0	0%	2	2%	29	16%	
Production, transportation, and material moving occupations	209,097	12%	0	0%	2	2%	11	6%	
Jobs in a 5-Mile Radius of the			18,273	100%	2 168	100%	6,642	100%	
Community by Sector									
Accommodation and Food Services	145,131	9%	2,727	15%	1,331	61%	1,489	22%	
Administration & Support, Waste Management and Remediation	84,402	5%	1,347	7%	21	1%	245	4%	
Agriculture, Forestry, Fishing and Hunting	40,859	3%	509	3%	107	5%	163	2%	
Arts, Entertainment, and Recreation	26,407	2%	214	1%	-	0%	679	10%	
Construction	71,050	4%	609	3%	10	0%	266	4%	
Educational Services	158,758	10%	1,195	7%	50	2%	280	4%	
Finance and Insurance	57,164	4%	415	2%	8	0%	58	1%	
Health Care and Social Assistance	230,433	14%	4,169	23%	26	1%	715	11%	
Information	33,677	2%	4,109	23%	20	0%	46	11%	
Management of Companies and	33,077	270	331	270	2	070	40	170	
Enterprises	32,692	2%	184	1%	-	0%	1	0%	
Manufacturing	167,695	10%	612	3%	77	4%	419	6%	
Mining, Quarrying, and Oil and Gas	1,596	0%	27	0%	-	0%	4	0%	

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Characteristic	Orego	on	Confeder Tribes of Lower Un and Sius India	Coos, npqua, slaw	Confeder Tribes o Grand R	f the	Confeder Tribes o Siletz Inc	of the	
	#	%	#	%	#	%	#	%	
Extraction									
Other Services (excluding Public Administration)	60,136	4%	598	3%	17	1%	190	3%	
Professional, Scientific, and Technical Services	77,910	5%	427	2%	7	0%	81	1%	
Public Administration	91,242	6%	1,062	6%	370	17%	536	8%	
Real Estate and Rental and Leasing	25,259	2%	291	2%	3	0%	160	2%	
Retail Trade	181,165	11%	2,439	13%	86	4%	1,035	16%	
Transportation and Warehousing	52,036	3%	686	4%	35	2%	200	3%	
Utilities	8,692	1%	137	1%	13	1%	13	0%	
Wholesale Trade	74,290	5%	294	2%	5	0%	62	1%	
Jobs Distribution Concentration				510/		5540/		000/	
Compared to Oregon (3)				51%		554%		99%	
Jobs by Earnings							·		
\$1,250 per month or less	395,867	24%	5,611	31%	245	11%	2,272	34%	
\$1,251 to \$3,333 per month	621,915	38%	8,030	44%	1,121	52%	2,728	41%	
More than \$3,333 per month	602,812	37%	4,632	25%	802	37%	1,642	25%	
Income									
Median household income (\$)	50,036		15,938		24,861		39,000		
Persons below poverty level	584,059	15%	6	25%	130	28%	81	18%	
Health Insurance Coverage							· · ·		
With health insurance coverage	3,191,034	84%	22	92%	379	80%	335	70%	
No health insurance coverage	605,847	16%	2	8%	94	20%	141	30%	
Education (highest level obtained)									
High School certificate	635,670	17%	7	29%	157	33%	97	20%	
4 year degree	760,816	20%	0	0%	18	4%	25	5%	
Recreation									
Outdoor recreation land in the county where the community is located (acres per 1,000 population)	8,605		5,012		18,487		4,906		

Characteristic	Confeder Tribes of Sprin Reservati Orege	Warm gs ion of	Coquille I Trib		Cow Cree of Umpqu of Indi	a Tribe	ribe Klamath Tr	
	#	%	#	%	#	%	$\begin{array}{c c} & \textbf{Klamath} \\ & \# \\ \hline \\ & 17 \\ & 9 \\ 6 \\ 6 \\ 6 \\ 0 \\ 6 \\ 0 \\ 7 \\ 6 \\ 6 \\ 0 \\ 7 \\ 6 \\ 0 \\ 7 \\ 6 \\ 0 \\ 7 \\ 6 \\ 0 \\ 7 \\ 6 \\ 0 \\ 7 \\ 6 \\ 0 \\ 7 \\ 6 \\ 0 \\ 7 \\ 6 \\ 0 \\ 7 \\ 6 \\ 0 \\ 7 \\ 7 \\ 0 \\ 0 \\ 7 \\ 7 \\ 0 \\ 0 \\ 0$	%
Population								
Population, 2012, 2009 (1)	3,960		297		21		17	
Population, 2000	3,314		258		22		9	
Population Change	646	19%	39	15%	-1	-5%	8	89%
Age Distribution							-	
Population 19 years and under	1,473	37%	103	35%	3	14%	0	0%
Population 20 to 64 years	2,235	56%	156	53%	12	57%	7	41%
Population 65 years and older	252	6%	38	13%	6	29%	10	59%
Median age (years)	27		30		62		70	
Race	-							
White alone	303	8%	131	44%	21	100%	6	35%
Minority (Non-white) population	3,657	92%	166	56%	0	0%	-	65%
Housing	0,007	/_/0	100	20/0	· · · · ·	070		0070
Total housing units	1,157		112		9		14	
Occupied housing units	1,137	90%	102	91%	9	100%		100%
Owner-occupied	650	63%	52	16%	7	78%		29%
Renter-occupied	387	37%	50	49%	2	22%	-	71%
Vacant housing units	120	10%	10	<u>4970</u> 9%	0	0%	-	0%
		10%	152,800	9%	÷	0%	*	0%
Median value owner-occupied units (\$)	103,200				387,500			
Median gross rent (\$)	673		483		N/A		3/1	
Employment	1 = 10	6.407	100	<b>51</b> 0/		220/	-	<b>2</b> 00/
Population in the labor force (2)	1,748	64%	108	51%	7	33%		29%
Unemployed	474	17%	14	7%	0	0%	1	6%
Occupation				[			1	
Civilian employed population 16 years and over	1,274	47%	94	44%	7	33%	4	24%
Management, business, science and arts occupations	267	21%	24	23%	0	0%	2	50%
Service occupations	433	34%	30	28%	5	71%	0	0%
Sales and office occupations	287	23%	22	24%	2	29%	0	0%
Natural resources, construction, and	97	70/	1	200/	0	00/	0	00/
maintenance occupations	86	7%	1	20%	0	0%	0	0%
Production, transportation, and material moving occupations	201	16%	14	15%	0	0%	2	50%
Jobs in a 5- Mile Radius of the								
Community by Sector	2,250	100%	17,768	100%	27,040	100%	17,418	100%
Accommodation and Food Services	331	15%	2,661	15%	2,682	10%	1,516	9%
Administration & Support, Waste					· · · · ·			
Management and Remediation	29	1%	1,240	7%	1,377	5%	1,076	6%
Agriculture, Forestry, Fishing and Hunting	189	8%	601	3%	899	3%	222	1%
Arts, Entertainment, and Recreation	6	0%	136	1%	222	1%	383	2%
Construction	51	2%	627	4%	954	4%	550	3%
Information								
	4	0%	221	1%	299	1%	193	1%
Educational Services	102	5%	1,205	7%	1,930	7%	1,447	8%
Finance and Insurance	22	1%	375	2%	760	3%	557	3%
Health Care and Social Assistance	43	2%	3,891	22%	5,051	19%	3,414	20%
Information	4	0%	221	1%	299	1%	193	1%
Management of Companies and Enterprises	-	0%	164	1%	532	2%	499	3%
Manufacturing	273	12%	940	5%	3,106	11%	1,419	8%
Mining, Quarrying, and Oil and Gas Extraction	1	0%	44	0%	91	0%	1	0%

Characteristic	Confederated Tribes of Warm Springs Reservation of Oregon		Coquille I Trib		Cow Creek Band of Umpqua Tribe of Indians			Tribes
	#	%	#	%	#	%	#	%
Other Services (excluding Public Administration)	11	0%	538	3%	874	3%	620	4%
Professional, Scientific, and Technical Services	31	1%	414	2%	658	2%	552	3%
Public Administration	890	40%	1,067	6%	2,558	9%	1,404	8%
Real Estate and Rental and Leasing	-	0%	218	1%	339	1%	189	1%
Retail Trade	39	2%	2,343	13%	3,120	12%	2,523	14%
Transportation and Warehousing	13	1%	696	4%	887	3%	313	2%
Utilities	101	4%	83	0%	198	1%	112	1%
Wholesale Trade	114	5%	304	2%	503	2%	428	2%
Jobs Distribution Concentration Compared to Oregon (3)		267%		55%		39%		117%
Jobs by Earnings								
\$1,250 per month or less	407	18%	5,351	30%	7,077	26%	4,903	28%
\$1,251 to \$3,333 per month	1,199	53%	7,779	44%	11,693	43%	7,835	45%
More than \$3,333 per month	644	29%	4,638	26%	8,270	31%	4,680	27%
Income					-			
Median household income (\$)	47,526		39,346		22,250		6,944	
Persons below poverty level	1,069	28%	67	23%	0	0%	9	53%
Health Insurance Coverage					-			
With health insurance coverage	2,535	65%	N/A	N/A	N/A	N/A	14	82%
No health insurance coverage	1,369	35%	N/A	N/A	N/A	N/A	3	18%
Education (highest level obtained)								
High School certificate	664	17%	69	23%	7	33%	0	0%
4 year degree	193	5%	15	5%	2	10%	9	53%
Recreation								
Outdoor recreation land in the county where the community is located (acres per 1,000 population)	1,682		5,012		16,069		34,321	

Sources:

U.S. Census Bureau; American Community Survey, 2012 American Community Survey 5-Year Estimates, Tables DP03, DP04, DP05, S1901 and S1701; generated by Joan Huston; using American FactFinder; <u>http://factfinder2.census.gov</u>; (May 2014).

U.S. Census Bureau; American Community Survey, 2009 American Community Survey 5-Year Estimates, Tables DP03, DP04, DP05, S1901 and S1701; generated by Joan Huston; using American FactFinder; <u>http://factfinder2.census.gov</u>; (May 2014).

U.S. Census Bureau; Census 2000, Summary File 1, Table DP05; generated by Joan Huston; using American FactFinder; <u>http://factfinder2.census.gov</u>; (May 2014).

U.S. Census Bureau. 2013. OnTheMap Application. Longitudinal-Employer Household Dynamics Program. http://onthemap.ces.census.gov/; generated by Clive Graham July 3, 2014.

Oregon Parks and Recreation Department. 2011. Oregon Statewide Outdoor Recreation Resource/Facility Bulletin Final Report. A Component of the 2013-2017 Oregon Statewide Comprehensive Outdoor Recreation Plan.

Notes:

(1) All data are for 2012 with the exception of the Coquille Indian Tribe and Cow Creek Band of Umpqua Tribe of Indians. For these two tribes the most recent available data in all categories are the from 2009 five-year estimates.

(2) The population that is 16 years or older and available to work.

(3) A measure of difference in the distribution of jobs by sector in the 5-mile radius compared to the distribution of jobs for the State. A higher number means a larger difference in distribution.

The American Community Survey data is derived from a sample of American households that contains a greater level of detailed socioeconomic data than the decennial census. Where available, we used American Community Survey data from 2012, which is informed by data collected over the prior 5 years and extrapolated for each community (for two tribes, data was only available from 2009). Since the American Community Survey uses data derived from a sample of the population, and is not a true count

of the population like the decennial census, margins of error are associated with the extrapolated data. These margins of error vary across the geography sampled; however, smaller populations generally experience larger margins of error when compared to more populated geographies.

# **Community Profiles**

The BLM developed brief, introductory geographic and economic profiles of the selected communities to have some familiarity with the communities prior to the interviews. For the tribes, the section contains profiles only for those that opted to participate in the interviews.

# Coquille

Coquille is the county seat of Coos County, and is located on Oregon Route 42 along the Coquille River approximately 20 miles downstream from the Pacific Ocean. Deriving its name from the Coquille Indian Tribe, the city's primary economic driver is the timber industry. Other economic activities include healthcare and tourism.

Area: 2.80 square miles. 2012 population: 3,874. http://cityofcoquille.org/

## Drain

Drain is in Douglas County, approximately 20 miles south of Eugene on Oregon Routes 99 and 38 at a pass in the coast range created by Pass Creek, a tributary of the Umpqua River. Drain is named after town founder and politician Charles J. Drain. The North Douglas School District is one of the major employers in the city, which is home to both the combined elementary/middle school and the high school. Area: 0.61 square miles. 2012 population: 1,142. <u>http://www.drainoregon.org/</u>

### Florence

Florence is located in Lane County on the Oregon coast at the mouth of the Siuslaw River roughly due east of Eugene, is located along U.S. Highway 101. The Siuslaw Tribe of Native Americans formerly inhabited the Florence area. The city's traditional economy was based on timber and fishing, but both have declined, and the city now focuses on tourism. The Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians own the Three Rivers Casino located just east of the city. Area: 5.87 square miles. 2012 population: 8,412. <u>http://www.ci.florence.or.us/</u>

## Gold Beach

Gold Beach is the county seat of Curry County and is located on the Oregon coast approximately 50 miles north of the California border. The community was originally named Ellensburg in the 1850s, but later took the name Gold Beach after a beach near the mouth of the Rogue River where placer mines extracted gold. Gold Beach is a center for fishing, ocean charters, and outdoor recreation. The primary industries in the city are tourism and government.

Area: 2.76 square miles. Population 2012: 2,563. http://www.goldbeachoregon.gov/

## **Grants Pass**

Grants Pass is the county seat of Josephine County and is located on Interstate 5, northwest of Medford. Incorporated in 1887, the city was named in honor of General Ulysses S. Grant. Attractions include the Rogue River and the nearby Oregon Caves National Monument. Once a timber-based community, the economy is currently a mix of light manufacturing, secondary wood products, retail trade, tourism, recreation, and service-based industries.

Area: 11.03 square miles. Population 2012: 34,454. https://www.grantspassoregon.gov/

# Klamath Falls

Klamath Falls is the county seat of Klamath County, and is located on the southeast shore of the Upper Klamath Lake, about 25 miles north of California. Founded in 1867 under the name Linkville, the city

was renamed Klamath Falls in 1893. Logging was Klamath Falls' first major industry, while tourism and recreation have become current economic mainstays. The nearby Lava Beds National Monument and Crater Lake National Park are common tourist destinations.

Area: 20.66 square miles. Population 2012: 20,943. http://ci.klamath-falls.or.us/

### **Junction City**

Junction City is located in Lane County on U.S. Route 99 west of the Willamette River, approximately 15 miles northwest of Eugene. Agricultural land surrounds the city, which has a strong manufacturing base including historic ties with the recreational vehicle industry. Incorporated in 1872, Junction City is also a gateway to Oregon wine country.

Area: 2.36 square miles. 2012 population: 5,445. http://www.junctioncityoregon.gov/

## Lincoln City

Lincoln City is located in Lane County on the Oregon coast approximately 60 miles from Salem and 90 miles from Portland. Lincoln City incorporated in 1965, uniting the cities of Delake, Oceanlake and Taft, and the unincorporated communities of Cutler City and Nelscott. It is a beach and resort community; tourism is the city's primary industry. Lincoln City is also home to the Chinook Winds Casino operated by the Confederated Tribes of the Siletz.

Area: 5.68 square miles. Population 2012: 7,926. http://www.lincolncity.org/

### Molalla

Molalla is located in Clackamas County, 30 miles southeast of Portland. The city was named after the Molalla River, which in turn was named for the Molalla, a Native American tribe that inhabited the area. Descendants of the Molalla tribe are members of the Confederated Tribes of Grand Ronde. Historically, lumber production was the community's biggest industry. In recent years, the city has diversified its economic base with manufacturing, commercial, tourism, and recreation, with Molalla as the gateway to the Molalla River Recreation Corridor.

Area: 2.26 square miles. Population 2012: 8,039. http://www.cityofmolalla.com/

### Rogue River

Rogue River is located in the western edge of Jackson County along U.S. Route 5. Formerly known as Woodville the settlement changed to Rogue River. During the 1830s and 1840s, the area had become a stopover for trappers and traders traveling from Fort Vancouver on the Columbia River south to California along the Siskiyou Trail. Today's Interstate 5 traces the route of that trail. Rogue River was closely tied to the timber industry but is now seeing a shift to service and retail jobs. Area: 0.97 square miles. Population 2012: 2,265. <u>http://cityofrogueriver.org/</u>

### St. Helens

St. Helens is the county seat of Columbia County and is located about 30 miles north of Portland along the Oregon-Washington border. Bounded by the Columbia River to the east, St. Helens is named for its view of Mount St. Helens in Washington, approximately 40 miles away. The city has a strong focus on business development, especially in its Downtown Historic District and through its Main Street Program. St. Helens also offers a variety of tourism and recreation activities along the Columbia River. Area: 5.51 square miles. Population 2012: 12,807. <u>http://www.ci.st-helens.or.us/</u>

### Sublimity

Sublimity is located in Marion County, about 15 miles east of Salem on a plateau on the western foothills of the Oregon Cascades. The town incorporated in 1903. Sublimity was a center for the timber industry through the 1980s but is now a bedroom community for Salem.

Area: 0.93 square miles. Population 2012: 2,683. http://www.cityofsublimity.org/

### Winston

Winston is located in Douglas County less than 10 miles south of Roseburg along the South Umpqua River. Although separated by the river, Winston is often regarded as part of a single entity with nearby Dillard and Willis Creek. Winston experienced significant growth when lumber mills began to open towards the middle of the twentieth century, and it remains timber-dependent today. Area: 2.65 square miles. Population 2012: 5,352. <u>http://www.winstoncity.org/</u>

### Confederated Tribes of the Grand Ronde Community of Oregon

The Confederated Tribes of the Grand Ronde's reservation and other owned lands cover approximately 10,700 acres in Yamhill and Polk Counties. The population on these lands is approximately 470 (2012 Census), but tribal membership across Western Oregon is 5,000 to 6,000.

The Tribes' vision is to be a tribal community providing responsible stewardship of human and natural resources <u>http://www.grandronde.org/ikanum/index.html</u> (6-27-14). The Tribes' sources of income include the Spirit Mountain Casino, timber sales from tribal lands, and tourism. The Grand Ronde is involved in community building functions such as housing, education, and health care. <u>http://www.grandronde.org/</u>

## Coquille Indian Tribe of Coos County, Oregon

The Coquille Indian Tribe's reservation and its tribal service area covers approximately 15,600 square miles of Coos, Curry, Douglas, and Lane counties, with its main tribal campus in Southeastern Coos County.

The Tribe is the second largest employer in Coos County, Oregon, with successful business ventures in forestry, arts and exhibits, gaming and hospitality, assisted living and memory care, high-speed telecommunications, and renewable energy. The Tribe also operates the Mill Resort & Casino in Coos Bay and manages the Coquille Forest, comprised of 14 separate parcels of formerly BLM-administered timberlands in eastern Coos County, totaling 5,410 acres. <u>http://www.coquilletribe.org/</u>

# Appendix O – Socioeconomics

Environmental Resources Management

200 Harry S Truman Parkway Annapolis, MD 21401 410 266 0006 410 266 8912 (fax)



June 18, 2014

To: City Officials, Selected Cities in Western Oregon

Re: Bureau of Land Management Resource Management Plans Environmental Impact Statement for Western Oregon

This letter is a follow up to a recent telephone call between Environmental Resources Management (ERM) and an official from your City. As discussed during that call, Environmental Resources Management, an environmental consulting firm, is assisting the Bureau of Land Management (BLM) with the socio-economic component of its Resource Management Plans (RMPs) for Western Oregon planning process. This process will revise the six RMPs that currently guide the management of BLM-administered lands in western Oregon, and will address the many resources on BLM-owned lands such as forests, timber, wildlife habitat, minerals, recreation and roads.

As part of that process the BLM would like to improve its understanding of how its Resource Management Plans affect communities in Western Oregon. For purposes of this analysis, a community means a city or a federally recognized tribe. We are unable to analyze all 161 cities in Western Oregon, so we developed a sample of 13 cities to represent the broader set of communities. Your city is one of the 13 selected.

In reaching out to you, the specific question the BLM is seeking to explore is, "How will the RMP alternatives affect the capacity and resiliency of different types of communities in the planning area?" What the BLM learns will be used in helping select the final Resource Management Plan for each district<sup>1</sup>.

ERM has begun to explore the question by gathering publicly available data and information about each community. However, to add depth, perspective and personal experience to our understanding, ERM, on behalf of the BLM would like to conduct an informal interview with representatives of each city (one interview per

<sup>&</sup>lt;sup>i</sup> For more information about the question and the methodology we are using to explore it, please see pages 140 -148 of the RMP Planning Criteria <u>http://www.blm.gov/or/plans/rmpswesternoregon/files/rmp-criteria.pdf</u>

city). There is no set time length for the interview. We anticipate it could last anywhere from 1 to 2 hours, or longer if necessary. The interview would be conducted by phone. If desired, ERM can set up a toll free conference call line so that participants could call in from different locations.

There will be no set agenda for the interview, but the types of questions we would like to explore during the interview include:

- How do you view your community's "capacity", that is your community's ability to face changes, respond to external and internal stresses, create and take advantage of opportunities, and meet its needs?
- How do you view your community's "resiliency", that is your community's ability to adapt to change over time?
- How do the ways the BLM manages its resources affect your community (its capacity and resiliency)?
- Have changes in the BLM's resource management over time affected your community? In what ways?
- Are there changes in the ways that the BLM manages its resources that would increase your community's capacity and resiliency?

Each city would decide who it would like to invite to participate. There is no set number of participants, but we anticipate a small group of perhaps up to four or five. We would like to complete the interviews by mid- to late-July.

The BLM believes that your community's input will help ensure that the RMPs express management direction that is responsive to all affected communities, and ERM looks forward to your participation.

Please let us know who we may speak with to set up a convenient time for the interview. Please contact Jill Bellenger, who will be making the arrangements, at 410 266 0006 or via email at <u>jill.bellenger@erm.com</u>. If you have any questions please do not hesitate to call me at 410 266 0006 or at <u>clive.graham@erm.com</u>.

Thank you for your time and attention. We look forward to hearing from you.

aire Graham

Clive Graham, Principal

## Appendix O – Socioeconomics

Environmental Resources Management

200 Harry S Truman Parkway Annapolis, MD 21401 410 266 0006 410 266 8912 (fax)



June 16, 2014

To: Tribal Working Group of the Cooperating Agencies Advisory Group Through: Heather Ulrich, Bureau of Land Management Tribal Liaison

Re: Bureau of Land Management Resource Management Plan Environmental Impact Statement for Western Oregon

Environmental Resources Management, an environmental consulting firm, is assisting the Bureau of Land Management (BLM) with the socio-economic component of its Resource Management Plans (RMPs) for Western Oregon planning process. This process will revise the six RMPs that currently guide the management of BLMadministered lands in western Oregon, and will address the many resources on BLMowned lands such as forests, timber, wildlife habitat, minerals, recreation and rare plants.

As part of that process the BLM would like to improve its understanding of how its Resource Management Plans affect communities in Western Oregon. The BLM would like to include the seven federally recognized tribes with interest and land in the planning area as affected communities.

In reaching out to you in this letter, the specific question the BLM is seeking to explore is, *"How will the RMP alternatives affect the capacity and resiliency of different types of communities in the planning area?"* What the BLM learns will be used in helping select the final Resource Management Plan for each district.

ERM has begun to explore the question by gathering publicly available data and information about each community, speaking with Heather Ulrich (BLM Tribal Liaison) and by reviewing background information such as the BLM's Report on Tribal Listening Sessions (November 2013). However, to add depth, perspective and personal experience to our understanding, ERM, on behalf of the BLM would like to conduct an informal interview with members of each community (one interview per tribe). There is no set time length for the interview. We anticipate it could last anywhere from 1 to 2 hours, or longer if necessary. The interview would be conducted by phone. If desired, ERM can set up a toll free conference call line so that participants could call in from different locations.

There will be no set agenda for the interview, but the types of questions we would like to explore during the interview include:

- How do you view your community's "capacity", that is your community's ability to face changes, respond to external and internal stresses, create and take advantage of opportunities, and meet its needs?
- How do you view your community's "resiliency", that is your community's ability to adapt to change over time?
- How do the ways the BLM manages its resources affect your community (its capacity and resiliency)?
- Have changes in the BLM's resource management over time affected your community? In what ways?
- Are there changes in the ways that the BLM manages its resources that would increase your community's capacity and resiliency?

Each tribe would decide who it would like to invite to participate. There is no set number of participants, but we anticipated a small group of perhaps up to four or five per tribe. The analysis will not be limited to residents of tribal lands but can also include other tribal members. We would like to complete the interviews by mid-July.

ERM recognizes that, unless explicitly told otherwise, participants would not be speaking for the tribal leadership or for the tribe as a whole. In reporting the interview results we would be clear that participants were speaking as individuals and not as representatives of or on behalf of a larger group.

The BLM believes that your community's input will help ensure that the RMPs express management direction that is responsive to all affected communities, and ERM looks forward to your participation.

Please let us know who we may speak with to set up a convenient time for the interview. Please contact Jill Bellenger, who will be making the arrangements, at 410 266 0006 or via email at <u>jill.bellenger@erm.com</u>. If you have any questions please do not hesitate to call me at 410 266 0006 or at <u>clive.graham@erm.com</u>.

Thank you for your time and attention. We look forward to hearing from you.

aire Graham

Clive Graham, Principal

# **Interview Summaries**

This appendix contains summaries of the interviews that the BLM conducted with communities in the planning area.

Please note that, while the interviewees participated as representatives of their city or Tribe, they spoke as individuals and not formally on behalf of the city elected officials or of the Tribal leaderships.

# City of Coquille

Date: July 16, 2014

### **Participants:**

Ben Marchant, City Manager; Coquille Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

## Table O-309. City of Coquille interview.

quille is challenged because its capacity is bound up with the economy of southwestern Oregon, which is been in malaise since the mid-1980s. Ben has been City Manager for two years and was hired in part to rease the city's capacity by, for example, diversifying the economy and attracting families with children move to the city. His sense of the history is that the city's economic heyday was in the early1980s; there re three mills, car dealers, large retail stores. Now there is only one mill and many of the stores are gone in that sense the city is depressed. For a while, the city was under development moratorium, but has since banded its sewer treatment plant.
e capacity data are somewhat inconsistent. The city lost population (approximately 8%) between 2000 d 2012. The population is older and there has been a decline in the 18 and under age cohort. Coquille d the third lowest assessed value per capita among the 13 cities surveyed. On the other hand, Ben said tax base was healthy and household incomes are relatively high such that the city does not meet the teria for State Community Development Block Grant funding because the city is above the 50% low- to derate-income threshold for eligibility.
d 20 d th tax teria der

Question	Discussion/ Despanse
Question	Discussion/ Response         The city's remaining mill is a major employer (between 1/3 to ½ of all jobs in the city). The other major employment sectors are government (Coquille is the county seat) and institutional - employment at the area's hospital.         Although Coquille is 10 miles off U.S. 101 (the coast highway), it does attract visitors. The city offers a
	variety of options including summer festivals, theatre, and antiquing. Ben feels that Coquille has a great sense of community with very strong volunteer programs and ability to raise funds for charity. This undercurrent of community is a testament to the city's capacity to weather economic challenges and work together to find solutions to problems.
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	As timber production has declined, the community is somewhat divided between those who see the potential for a timber-based economy to come back, and others who think that timber is not coming back and that the city needs to adapt to the "new normal." The latter group sees some hope in the proposed Jordan Cove Energy Project in Coos Bay to export liquefied natural gas.
	Ben feels that Oregon's citizen-driven tax cap initiatives (Measure 5 and Measure 50) limit government revenues and, as a result cities' capacity to provide services. For example, Ben said that important services like the ambulance program were operating in the red. Coquille needs to become less dependent on property tax revenues. Ben said that Curry County was in the worst financial condition, with Coos, Josephine, and Douglas close behind.
	The city's one timber mill is sustained by logging on private land. The City of Coquille owns approximately 800 acres of forestland on two parcels in separate locations east and west of the city. The city plans a timber sale on part of this land.
	All cities in Coos County are members of watershed associations to sustain and improve water quality. The associations focus on habitat restoration, preventing silt and runoff, and best practices around the watershed.
	Ben sees a sociopolitical divide between rural and urban areas in Western Oregon; the urban areas progressing economically and the rural areas much less. This could impact the resiliency of cities like Coquille in the future.
How do the ways the BLM manages its resources affect your community (its capacity and resiliency)?	Ben said that the BLM's management has a great effect on the community. Coquille, like many cities in Western Oregon, sees restoring the O&C lands to local management or to be managed for the benefit of local communities as a major issue, because they see the effects of millions of dollars of potential income that are lost every year. Local management would benefit communities by helping to offset the property

Question	Discussion/ Response
	tax revenue caps.
Have changes in the BLM's resource	Ben said he had seen harvest studies from the 1930s that would have allowed for 10% of the forest to be
management over time affected your	harvested at a sustainable rate. In his view, the steep decline in harvest since the 1990s has resulted in
community? In what ways?	forests that are overgrown, begging questions about how to manage this enormous resource.
Are there changes in the ways that	Ben feels that there has been a transition within the BLM from a pragmatic management approach to a
the BLM manages its resources that	more "idealistic" (let the forest be) mindset. He sees this as flawed and somewhat inconsistent, for
would increase your community's	example, managed hunts for some species and protections for others.
capacity and resiliency?	
	Ben said that if the BLM opened up more timberland for harvest it would have positive direct and spillover
	effects on the local economy.
	BLM has very few trails and campgrounds near Coquille – Ben felt there are more in the eastern part of
	the planning area. Ben feels that Coquille residents would benefit from the availability of more access into
	the forest. It could also be another attractor for tourists. The Coquille River provides opportunities for
	recreational fishing.

# City of Gold Beach

Date: July 10, 2014

## **Participants:**

Jodi Fritts-Matthey, City Administrator; City of Gold Beach Will Newdall, Public Works Superintendent; City of Gold Beach Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

## Table O-310. City of Gold Beach interview.

	Question	Discussion/Response
	How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create, and take advantage of opportunities, and meet its needs?	Gold Beach is a small city with limited capacity. Its population is approximately 2,500 and it is located in Curry County, which has the smallest population among Western Oregon counties – 22,300. Gold Beach is the County seat, which provides some stability but, overall, there are only approximately 1,400 jobs in a 5-mile radius of the city. According to the Census, the city added approximately 660 people between 2000 and 2012.
1		Jodi Fritts (Jodi) stated that Gold Beach used to be totally timber dependent. In the mid-1980s, the city

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Question	Discussion/Response
	experienced a major economic setback when its only timber mill burned down and was not rebuilt. The mill had provided jobs for many residents, and its loss left a significant "economic hole that has not been filled." There are no longer means to process timber in Gold Beach, and the closest mill is in Brookings, OR, roughly 30 miles away.
	Jodi said that during the recession of the mid to late 2000s, the public sector took a huge employment hit in the city and in the County, especially considering their relatively low populations. She said that Gold Beach "lost hundreds of federal, state, local and school district jobs." These job losses have resulted in a severely stressed level of economic capacity. The Census data state an unemployment rate of 5% for the city, but Jodi believes this is low. Data from the Bureau of Labor Statistics (June 2013- May 2014) indicate Curry County's unemployment rate is between 10.0 and 11.9%, putting the County's rate above the State's (7%).
	Currently, the city's major economic drivers are tourism and government. Tourism is based on the beaches, hiking, horseback riding, and boating and rafting.
How do you view your community's "resiliency," that is your	Gold Beach has struggled to adapt from its former timber-reliant economy. Jodi says that the city's basket essentially had only one egg (the timber egg) and that tourism jobs have not been equivalent replacements. She added that the city has not recovered from the job losses during the recession; to her, it was, and remains a "depression." (Jodi cited the Grapes of Wrath in describing the recession's impacts).
community's ability to adapt to change over time?	Jodi states that the city is trying to grow its tourism economy. But, it is not easy for a small, relatively isolated place with limited options and opportunities. Growing tourism has been a "tough sell" among some residents who hold on to the possibility of a return to a better economy through logging.
	In short, the city's resiliency is extremely low.
How do the ways the BLM manages	The BLM only owns a small portion of land in the upper portion of Gold Beach at the Rogue River National Recreation Trail. As such, the BLM's management has no effects on the city. The U.S. Forest Service has much larger land holdings, approximately 70% of the land; but, to Jodi's knowledge, there have been no timber sales in recent years from Forest Service land.
its resources affect your community (its capacity and resiliency)?	Some city residents look back fondly at the older timber-dependent economy. But, in Jodi's view, any effort by the BLM to contribute to the city's capacity is 30 years late.
	The BLM has some land near Cape Blanco State Park (Cape Blanco lighthouse), which is managed by the Oregon Parks and Recreation Department, but this is some 30 miles north of Gold Beach.
Have changes in the BLM's resource	Any small role the BLM had when the city's mill was operating has now gone.

Question	Discussion/Response
management over time affected your	
community? In what ways?	The city is responsible for providing nearly all services within the city. The city does not benefit directly
	from timber payments to counties. The only services the county provides in the city are the jail and
	maintaining county roads in the city (approximately 15% of the roads). The jail is important because if it
	exceeds capacity inmates are released into Gold Beach.
Are there changes in the ways that	
the BLM manages its resources that	If BLM's management could result in increased payments to Curry County then pressure on the County's
would increase your community's	budget would decrease and make it more likely that county services in the city are maintained.
capacity and resiliency?	

# City of Drain

Date: July 25, 2014

## **Participants:**

Suzanne Anderson, Mayor; City of Drain Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

Mayor Anderson provided written responses to the questions. These are provided verbatim, followed by input from the personal interview.

Table O-311. City of Drain interview.
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Question	Discussion/Response
	Written response
How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create,	In times of sustainable economic growth, our community has the ability to take advantage of opportunities to create new jobs, businesses and focus on increasing the overall health and prosperity of our community. Also, we can focus on infrastructure improvements, including streets and utilities (electric, water, sewer & communications).
and take advantage of opportunities,	Interview
and meet its needs?	Mayor Anderson (Suzanne) said she had lived in Douglas County all her life. She said that unemployment in Drain was around 40% versus the 10% figure cited in the data from the Census. She said the logging population had fallen drastically, due to lack of demand and mechanization of the logging industry.

# Appendix O – Socioeconomics

Question	Discussion/Response
	Drain is down to only one working mill, Emerald Forest Products, which trucks veneer in to be dried, and then ships the dried veneer back to other plants to make plywood. Drain's population is not growing and enrollment at the city's combined elementary/middle school and high school has declined from about 500 to 345. Nevertheless, the school district remains one of the largest employers. Written response
	DIFFICULT! Significant changes (governmental policies, recession, etc.) resulting in job loss and less income flows significantly affects our ability to maintain community stability. When these changes occur the overall socio-economic health of our community declines and it is very difficult to adapt to changes without corresponding changes in governmental policies that create opportunities for socio-economic growth.
	Interview
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	It is difficult for a small city to actively "adapt." The city did however have a recent success – as much by chance as by effort. Malcolm Drilling, a specialty-drilling contractor in the deep foundation industry, purchased Drain's former North Douglas Wood Products facility in 2013, and is now one of the city's major employers.
	Local colleges are gearing more programs to help former loggers find the assistance they need to start new careers, though the older generation loggers are finding it difficult to transfer their skills into new trades or professions.
	Mayor Anderson has seen the city of Drain struggle as mills closed and Douglas County lost funding from timber receipts. The city is unable to fund a police force and therefore contracts with the County's deputies to fill this need. The countywide library system has also suffered, and lacks funding to upgrade computers and other services. Other services the county provides that affect the city are the jail, health and social services, and juvenile services.
	Written response
How do the ways the BLM manages its resources affect your community (its capacity and resiliency)?	It has a direct effect on our community. BLM's statutory authority for managing resources on O&C and Coos Bay Wagon Road (CBWR) lands is the O&C Act of 1937. This law dedicates the O&C and CBWR lands to permanent timber production through long-term sustained forestry to help support local communities and O&C county governments with revenues from the sale of timber and by supplying timber to local industries for the purpose of creating jobs and income. BLM's management direction must,

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[	Question	Discussion/Response
		therefore, give the highest priority to achieving those results. Planning decisions for the management of these lands must be designed to: (1) create jobs and income flow within the O&C Counties; (2) create opportunities for growth in the timber and related industries; (3) provide a sustainable source of revenues to O&C Counties based on the principles of sustained yield timber production; (4) increased tax revenue to the State of Oregon; and (5) contribute to the stability of communities in Western Oregon.
		Fifty percent of the receipts from the sale of timber from the O&C lands are distributed to the 18 O&C Counties in which the lands are located. That 50% is distributed to the Counties according to their proportion of the total assessed value of the lands and timber that existed in each of the Counties in 1915. These percentages range from 0.36% to 25.05% for the 18 Counties. It does not matter in which Counties the timber is harvested. All Counties get their assigned percentages of whatever receipts are available each year. In Douglas County we receive about 25%.
		The receipts are available to O&C Counties without restriction to be used for essential services, including especially public safety programs such as sheriff's patrols and corrections, as well as health and social services, libraries and programs for juveniles and seniors. These services have both a direct and indirect effect on residents of my community.
		Interview
		Suzanne said that historically Douglas County has been one of the highest recipients of payments to counties, making it more dependent and more vulnerable.
		Suzanne said the city did not benefit from the BLM's recreational resources.
	Have changes in the BLM's resource management over time affected your community? In what ways?	Major changes in forest policies occurred in 1995 and continue today that significantly reduced BLM's ability to manage the O&C and CBWR lands for permanent timber production through sustained yield forestry. Significant negative socio-economic impacts have occurred in the form of job loss and increased unemployment; reduced income flow; business closure and/or reduction in operations; and reduced County and community services. In addition, significant increases have occurred in crime activities, mental health and drug addiction issues, and other social impacts that have affected the quality of life for
	Are there changes in the ways that the BLM manages its resources that would increase your community's capacity and resiliency?	residents living within communities. The healthy functioning of O&C County governments and communities they serve depends in substantial part on the BLM's compliance with the O&C Act. Changes in the way BLM manages O&C forests to comply with its mandatory O&C statutory authority must be addressed in a land use planning revision for O&C and CBWR lands. Simply stated, BLM plan revisions must significantly identify the availability of

Orrection	Discussion/Decompage
Question	Discussion/Response
	more forestlands for timber production that can be sold, cut and removed on a sustained yield basis. This
	in turn will create sustainable economic growth in communities by taking advantage of opportunities to
	create more jobs and increase income flows; develop new businesses and revive old ones, and increase the
	overall health and prosperity of communities. If, on the other hand, BLM chooses to maintain the status
	quo or further reduce the availability of timber that can be sold and harvested on a sustained yield basis,
	communities will continue to decline from a socio-economic perspective. Without major changes in the
	way BLM manages these lands, some O&C Counties will become incapable of providing essential County
	services and, therefore, cause communities residing within the O&C Counties to continue to suffer and
	decline, which we have already recently experienced.
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	Interview
	Drain currently only has logging rights on private lands, and the Mayor feels that the area could
	significantly benefit from gaining access to logging on federal lands. There have been clashes between
	cities and environmentalists, making it difficult for the cities to move forward in a way that could be
	mutually beneficial. Cities are required to agree to numerous environmental regulations, which the Mayor
	feels that Drain goes above and beyond these regulations and is still experiencing push back from
	environmentalist groups.
	The Mayor points out that the BLM should have a leadership role in these timber disputes and considers
	all possibilities and outcomes.

Appendix O-

Socioeconomics

# **City of Florence**

Date: July 31, 2014

**Participants:** Larry Patterson, City Manager Pro Tem; City of Florence Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

## Table O-312. City of Florence interview.

Question	Discussion/Response
How do you view your	Larry Patterson (Larry) moved to the state of Oregon in 1986 and served in city administration in
community's "capacity," that is	Bend and Oregon City, retiring in 2010. Larry recently joined the City of Florence as an interim City

Question	Discussion/Response
your community's ability to face	Manager.
changes, respond to external and internal stresses, create, and take advantage of opportunities, and meet its needs?	Florence is a coastal resort town with a large elderly population. Recreational tourism is important to the city, with the coast, golf, fishing, and a casino as major draws.
	Larry sees Florence's capacity being challenged, as the city experiences a weak overall economy and more and more costs forced upon it because of declining intergovernmental fund transfers. The city had about a 16% population increase between 2000 and 2012. The city's 65 years and older population (37%) is more than triple the share for the state of Oregon. Larry sees this high retiree population as posing some limits to contributing to the city's capacity– indeed the city's median household income is \$35,000, at the lower end of the cities that were interviewed. Larry pointed out retirees with higher incomes (like in Bend, OR) have a greater positive fiscal impact for a city.
	The city's hospital and ambulance services are important to the large elderly population, and in tandem with these services is the higher demand for public transportation. The city ambulance service is provided by a private company, and supplemented with first responder service from the fire department.
	The Three Rivers Casino, owned and operated by the Siuslaw tribe of Native Americans, is located just east of the city. Larry feels that spillover spending in the city by casino guests is small though he thinks there are opportunities for stronger, mutually beneficial connections between the city and the casino. For example, he thinks both could benefit from more hotel rooms.
	The city's traditional economy was based on timber and fishing. Both have declined. Florence had an icehouse but it was moved down the coast to Coos Bay (to a more direct location), and the city lost the jobs and associated business activity.
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	The city has sought to adapt to changing circumstances by focusing on tourism but tourism does not provide the stability of the traditional industries. Tourism in Florence is very seasonal and though tourism provides a continuum of jobs, many are lower paying jobs.
	Florence's main draw is its location on the Oregon Coast, but it has limited accessibility. It is on the Oregon Coast Hwy (US Highway 101) but is not close to I-5. Larry feels that the city needs a vision and plan to grow its tourism industry. The city needs more hotel capacity and development of the "shoulder" seasons (extending the visitor season later into the Fall and Winter when the weather from time to time can be very pleasant).

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Question	Discussion/Response
	Florence has far less resiliency compared to larger cities; larger cities can recover more quickly from adversity.
	There is a budget proposal for a local gas tax increase in Florence in an effort to increase revenue for street improvements. Larry feels that, like all money measures, passage of such a measure will always be a challenge. A five-year moratorium imposed by the State legislature was recently lifted, meaning local governments are now able to seek voter approval for such gas tax increases.
	Larry sees the direct day to day impact from the BLM as small. He did point out that the BLM administers property with sand dunes on the north side of town. The BLM's lack of maintenance has meant that the city has had to take responsibility for removing sand. Sand removal affects roads and also affects local business such as Fred Meyer and the Sandpines Golf Links.
How do the ways the BLM manages its resources affect your community (its capacity and resiliency)?	In the bigger picture he thinks that the BLM's management affects the counties, and, in turn, the cities. As timber receipts have declined, jobs have been lost and discretionary funds for cities, streets, social services watershed enhancements along with other services have been cut.
	Larry sees the cost of fighting forest fires are a significant issue for Western Oregon. The costs are huge (one fire he cited cost \$70 million) impacting state budgets and subsequently impacting Counties and cities as resources are directed away from other priorities. These cuts affect the entire state and therefore affect cities like Florence.
Have changes in the BLM's resource management over time affected your community? In what ways?	Larry does not have answers to how to manage the forest. However, he feels strongly that a healthy forest industry is needed. The healthier the forest is the greater its ability to bring about positive
Are there changes in the ways that the BLM manages its resources that would increase your community's capacity and resiliency?	economic effects on communities. An increase in the timber yield would benefit the local communities like Florence as well as the counties.

# City of Grants Pass

Date: July 30, 2014

**Participants:** 

Simon Hare, County Commissioner; Josephine County Aaron Cubic, City Administrator: City of Grants Pass Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

## Table O-313. City of Grants Pass interview.

Question	Discussion/Response
How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create, and take advantage of opportunities, and meet its needs?	Aaron Cubic (Aaron) has been with the city for two years having previously served in Roseburg. Commissioner Hare (Simon) is a south Oregon native. He lived elsewhere for around 10 years, including a stint with the federal government in Washington DC. He returned to Oregon and been a Josephine County Commissioner since 2011.
	Aaron said that Grants Pass overall is doing relatively well based on several measures of capacity (such as population growth, employment diversity, per capita assessed property value). The city ranks high for livability. The city had a 50% population increase between 2000 and 2012. However, the poverty rate in 2012 was 21%.
	Aaron said the city has been striving to retain existing businesses and maintain a viable workforce, as it has navigated a shift from a timber and natural resource-based economy to a more diversified economy. He said that tourism and healthcare were important sectors of the local economy. The government sector is also important since Grants Pass is the county seat. Aaron praised the community college for doing a great job of matching people with the skills they need to find work, especially former timber employees.
	Simon added that he feels the city is at a "tipping" point with respect to responding to the impacts and effects of the management of forest resources. As an example he recounted that the last sawmill in Josephine County (Rough and Ready) had to close in 2012 for lack of inventory. It had been in the county for 92 years and had provided 85 jobs, historically as high as 225. Fortunately, it is expected to reopen with approximately 70 jobs in the near future. State funds have helped the mill with retooling.
	Recreation is important to the city and the county. The Rogue River is a particularly important resource.

Question	Discussion/Response
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	Grants Pass benefits from its relative size and capacity, but the city is highly dependent on the county. Simon said the city and county were "tied at the hip."
	Aaron feels that as the rural area has struggled economically due to the decline in the timber industry, the city has felt these effects both directly in strain on city services (public safety and social services) and indirectly due to reduced county funding.
	As the county struggles to fund programs, the effects are felt by the city which lacks the resources to make up shortfalls. Ballot measures that would increase tax levies had majority support in the city, but failed overall due to insufficient support in the rural areas.
	Josephine County administers services that are important to the city including juvenile services, the jail, the court system and district attorneys, and public health. Aaron says the city has been hit harder than other areas with the reduction of Secure Rural Schools (SRS) funding because of the decline in county resources that are now passed down from the county.
How do the ways the BLM manages its resources affect your community (its capacity and resiliency)?	Aaron and Simon said that the ways the BLM manages its timber resources directly affect the city. The BLM administers approximately 300,000 acres land in Josephine County, close to 30% of the county land area. This includes one of the largest contiguous O&C land areas in Western Oregon along the Rogue River in the northwest part of the County.
	If more federal land were opened up for logging the timber industry would benefit and result in more timber- related jobs with direct beneficial impacts to the city, especially to former timber workers who are struggling to transition to new employment.
	Simon said that when there was more logging on federal lands Josephine county was receiving \$10 to \$12 million annually in shared timber receipts, whereas payments under the SRS are currently approximately \$5 million. Of these monies, a good deal is spent on roads. Simon said the county spent \$1.5 million helping to maintain roads needed to access federal lands.
	Fire is a huge concern for Grants Pass. Large fires in 2013 (such as the 54,000-acre Douglas Complex and Big Windy) effectively shut down the city causing economic losses, heat, human health effects, and negative reputational impacts. Reportedly, the Rogue River rafting companies lost \$100,000 per day when they were unable to operate. Simon estimated that 25% of the fires in Oregon are in the BLM's Medford District.
Have changes in the BLM's resource management over time affected your community? In	Simon acknowledges that there are no simple answers to the forestland management questions. He served on Governor Kitzhaber's O&C lands task force and has some familiarity with the issues. He thinks that the management is unbalanced; 300% of the Northwest Forest Plan's conservation goals were being achieved, but

Question	Discussion/Response
what ways?	only 8% of the timber industry's goals. He is looking to the new round of RMP's for more balance.
Are there changes in the ways that the BLM manages its resources that would increase your community's capacity and resiliency?	In Simon's view if plans are written solely from the perspective of ecology they will not be effective; ecological set-asides with no management will lead to more fires. He is interested in water quality, but not just for its own sake; the Rogue River, for example, supports a \$15 million economy based on fishing (salmon, steelhead) and other recreation (Josephine County Parks Dept. Study).
	Simon reiterated his feeling that Grants Pass/Josephine County are at a tipping point with respect to their resiliency. Absent change, the communities' inability to deliver services will create a failed situation that will affect their reputation and send them into an economic spiral they will have great difficulty recovering from. The county's tax rate (58 cents per \$1,000 of assessed value) is the lowest in the state of Oregon. O&C Payments as proportion of the county budget is 13% (only in Douglas County is the share higher). Simon acknowledged that the property tax rate is low but added that this low number should not be taken out of context because other taxes and fees make up the total tax burden.
	There is strong community support for putting more forestland back into production and for clearing the dead/dying timber. Simon serves on the Interagency Salvage Committee. What, he asks, are they going to do with the 75,000 acres that burnt in the fire? He finds it very frustrating that a new plan has to be prepared after each fire. There should be an overall plan that is mutually agreed upon under which actions can be taken without unnecessary "reinventing the wheel."
	Simon feels that in the past when there were more people (including loggers) in the forest and the roads were more actively managed, these people in a sense were the first responders and were able to provide faster response times to emergencies. Now he sees fires escalating more rapidly as first responders are faced with overgrowth and blocked access roads.

# City of Klamath Falls

Date: July 23, 2014

**Participants:** Nathan Cherpeski, City Manager; City of Klamath Falls Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

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# Table O-314. City of Klamath Falls interview.

Table O-314. City of Klamath Fa	
Question	Discussion/Response
How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create, and take advantage of opportunities, and meet its needs?	Nathan feels that Klamath Falls is challenged in terms of capacity. Traditionally the city was a natural resource-heavy, resource dependent community, with lots of lumber mills. Workers were able to get decent, well-paying jobs without having, necessarily, a high level of education. With the decline in the timber industry much of the supporting timber infrastructure has disappeared and the city has struggled.
	Today the census data indicate the challenges: poverty rate of 24% (compared to 15% for Oregon); high number of lower paying jobs, relatively low rate of homeownership (42%), only 8% of jobs in manufacturing, unemployment rate of 10 to 12% (Bureau of Labor Statistics Klamath county data for June 2013- May 2014). Nathan cites as factors the loss of resource-based jobs and an influx of lower income retirees. While the population of the city is approximately 21,000, the area population is around 40,000.
	The city is surrounded by forest and recreation land. The city is the closest community to Crater Lake National Park, making it a destination. Klamath County has the highest per capita amount of outdoor recreation land (34,300 acres) compared to the other counties in the capacity/resiliency assessment. Tourism is important to the economy, but jobs in the tourism sector do not pay as well as those in manufacturing.
	The city's interior location off the interstate highway grid makes it hard to attract new industries. The city's largest job sectors are Health Care and Social Assistance, Education, and Retail. Oregon Institute of Technology, the only public institute of technology in the Northwest U.S. is a strong city asset.
	Nathan says that the city is still a timber town at heart – the wild west. Opinions vary; some residents look back fondly at the older timber-dependent economy and yearn for a return. Others see the need to forge a new path.
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	Nathan points out that the city is seeking to adapt from its former timber-reliant economy to a more diversified economy, but the challenges make this difficult. In that sense the city has not turned around. He feels that some of the city's adaptation efforts have been stymied by an environmental interests/interest groups who are not from the area and do not have to live with the consequences of failed economic initiatives. Nathan gave as an example, a private developers interests/efforts to develop a ski resort (following the example of Bend) – which failed due to red tape and environmental concerns.
	Nathan questions whether the city is being given the tools (or conversely is being denied the tools) to be resilient and allow it to adapt.
	The types of jobs that are interested in coming to the city are lower paying jobs such as call centers. Nathan spoke about the significant loss that the community felt about the Jeld-Wen's decision to move its corporate, global headquarters from Klamath Falls to Charlotte, North Carolina. Jen-Weld, windows and doors

Question	Discussion/Response
	manufacturer, was Oregon's largest private company. As a result, manufacturing jobs remained while corporate executive jobs were lost.
	As another example, Nathan cited Collins, a wood products company, where employment at its Klamath plant was once as high as1,200 but has fallen to 300.
	Industry consolidations have left the city with old mill redevelopment sites. While Nathan did not single out the BLM, he felt that its decisions are part of a larger decision-making
	environment that has resulted in the city's loss of capacity. The rules and regulations, which are formulated in metropolitan areas, have hurt and continue to hurt small rural cities.
How do the ways the BLM manages its resources affect	The overall result is pressure on the city's resources and strain on the social safety network.
your community (its capacity and resiliency)?	The BLM and the U.S. Forest Service manage some of the access roads around Klamath Falls that connect residents and tourists with forestlands and natural areas. There is strong support among residents for more access to public lands (off-road vehicles) to allow the public to use the resources.
	BLM's management of other resources such as minerals have a minimal effect on Klamath Falls.
Have changes in the BLM's resource management over time affected your community? In what ways?	Nathan believes the supply should be increased – allowing a "reasonable" amount of logging. His view is that as the timber harvest continues to decline, trees tend to be smaller and grow closer together, dying in the forest as opposed to being harvested. This results in unhealthy forest land which is prime tinder for forest fires, which the area experiences on an annual basis. Nathan cited the Moccasin Hill Fire as a recent July 2014) example.
Are there changes in the ways	
that the BLM manages its resources that would increase your community's capacity and	Nathan sees the importance for the BLM to manage the city's public lands for more than only recreation and to provide more resource products.
resiliency?	These changes would positively impact Klamath Falls and increase its capacity and resiliency

# City of Junction City Date: August 14, 2014

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**Participants:** Jason Knope, Public Works Director; City of Junction City

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# Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

# Table O-315. Junction City interview.

Question	Discussion/Response
How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create, and take advantage of opportunities, and meet its needs?	Jason Knope (Jason) is a lifelong Oregonian. He thinks that Junction city's capacity is fairly high which he attributes in part to strong community engagement that has broadened the city's ability to meet its needs and face change.
	Junction City is located approximately 15 miles northwest of Eugene and is surrounded by agricultural land in the Willamette River valley. The city benefits from its proximity to both rural and urban environments and opportunities. The city had a 15% population increase between 2000 and 2012.
	The city has a strong manufacturing economic sector comprising approximately 3,000 jobs, 25% of the jobs in a five mile radius (the largest in number of any of the cities in the sample – and Jason thinks the number may be closer to 35%). Historically this was due in part to the city housing the Country Coach Recreational Vehicle manufacturing plant. At its height, the company had between 500 and 600 employees. It went bankrupt in November 2009, but has recently reopened under the same name, though now with approximately 100 employees focusing on refurbishing and modernizing RV interiors.
	Jason said that the economy in Junction City is fairly diverse, though it has little today in the way of timber- related industries. He estimates that about 5% of the city's workforce is directly related to the timber industry, or indirectly in a support capacity.
	Jason added that some of the city's labor force work in Eugene. There is a small tourism and visitation economic component, Junction City being in Oregon wine country – the city is gateway to the Long Tom agritourism trail.
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	The city's traditional economy was based on timber and farming, but as noted above is now quite diverse. Jason feels the city has done a good job in diversifying after the decline of the timber industry. He attributes this in part to geography and locational opportunities (the city is located on Oregon Route 99 truck route) but also, in his opinion, to unusually strong community engagement and involvement that has led to development of a strong community vision. For example, Jason points out that the city currently has three different committees dealing with community development, looking at the potential ripple effects of different community development options in different locations in relation to the vision for the city's future. These committees engage in "what ifs" – helping the city decide its investment and development policy.
	Agriculture in the area has also changed. Agriculture has always been an integral part of Junction City's

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Question	Discussion/Response
	economic landscape, but Jason explains that there has been a shift from the traditional grass, hay and seed crops to organic crops; wheat and barley, and to biofuels. He estimates this sector now makes up between 40% and 50% of agricultural production.
	Jason believes the city learnt lessons through its experience with Country Coach, primarily to push to broaden its horizons. It expanded its Urban Growth Boundary, examined its fees and rates schedules to ensure the city was attractive to development, invested in infrastructure, engaged the community, explored development scenarios, and looked for opportunities to diversify. This included a prison, which did not move forward, and a new psychiatric hospital, part of the Oregon State Hospital system, which is scheduled to open in 2015. Jason feels the direct day-to-day impact from the BLM on Junction City is relatively small. The city has moved on compared to 10 to15 years ago when it was more timber-dependent.
How do the ways the BLM manages its resources affect your community (its capacity	He thinks there are two or three lumber mills outside town, inside the Urban Growth Boundary - Seneca Sawmill, Lane Forest Products, and Weyerhaeuser - and perhaps one mill in town, a processing packing business that relocated from Eugene. However, as noted above, overall employment in timber industries is small.
and resiliency)?	In the bigger picture, he thinks that the BLM's management affects the counties, and, in turn, the cities. Specifically, as timber receipts have declined, discretionary funds have been cut. Jason explains that until 2008 Junction City was receiving between \$60,000 and \$65,000 a year in timber receipts funds from Lane County for the city's street fund. This was the second largest source of funding after gas tax receipts (approximately \$300,000). The city no longer receives these monies which is regrettable as the city was using them for pedestrian-related projects.
Have changes in the BLM's resource management over time affected your community? In what ways?	Jason believes that an increase in timber production would have a positive effect on Junction City. Over time, the timber-related industries have shrunk to some degree, though he notes that they have not gone away
Are there changes in the ways that the BLM manages its resources that would increase your community's capacity and resiliency?	entirely. More timber opportunities would certainly provide the community with more options and he sees a more reliable timber resource as a benefit to the area overall.

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# City of Lincoln City

Date: July 11, 2014

## **Participants:**

David Hawker, City Manager; Lincoln City Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

## Table O-316. Lincoln City interview.

Question	Discussion/Response
How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create, and take advantage of opportunities, and meet its needs?	Lincoln City has an interesting capacity mix. The assessed value of property in the city is high but residents' incomes are low. This is due to the nature of the city as a vacation and second home destination on the Oregon Coast. Roughly a third of the housing stock in the city is second homes, owned mostly by residents of Portland and Salem. It is the premiere beach town destination within driving distance of these larger municipalities. Lincoln City serves a variety of residential and visitor markets. The city has a large number of short-term rental units (hotel, motel vacation rental dwellings); about 4,000. This helps make it a fairly inexpensive place to visit. A variety of well-priced long-term rentals are also available. With its low cost of living, it also attracts retirees. This variety provides a high flux of visitors and seasonal residents over the course of the year, and the city accommodates and benefits from this variety. The city is home to a retail outlets mall and the Chinook Winds Casino, operated by the Confederated Tribes of the Siletz. Low resident incomes are due to the concentration of employment in retail, accommodation, and food service jobs. This includes seasonal employment. David feels that Lincoln City has high capacity because its economic diversity makes is less sensitive to economic ups and downs. Low resident income is a concern but is offset to some degree by the property tax base and visitor spending.
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	Resiliency was to some extent thrust on the city. During the 1960s, partially as a result of the Clean Water Act, three cities and three unincorporated areas became incorporated as the City of Lincoln City. This created rational, consolidated boundaries for efficient delivery of city services.
How do the ways the BLM manages its resources affect	The BLM has very little direct effect on the city. Approximately 60% of Lincoln City's watershed is in federal ownership, but the BLM owns very little compared to the USFS. Water quality could be a major concern, but

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Question	Discussion/Response
your community (its capacity and resiliency)?	the decline in logging since the 1990s on all federal lands has meant that potentially impactful logging practices have not occurred.
Have changes in the BLM's resource management over time affected your community? In what ways?	Recreation is a major component of federal land management in the area. What drives tourism in Lincoln City is the beach but, increasingly, opportunities to experience the spectacular landscape and natural areas by hiking, trails, and scenic viewing, hunting and fishing. For example, the U.S. Forest Service maintains the Cascade Head National Scenic Research Area in the Siuslaw National Forest, which has congressional legislative limits for activities. While logging on private lands occurs, David was not aware of federal timber sales.
Are there changes in the ways that the BLM manages its resources that would increase your community's capacity and resiliency?	<ul> <li>Whatever the BLM can do to maintain and increase access to this landscape for recreation would benefit</li> <li>Lincoln City. David speculated that if land swaps between the BLM and the USFS could be affected, this could provide opportunities for better management.</li> <li>The city does not benefit directly from timber payments to counties. David thought that payments to Lincoln</li> </ul>
	County were earmarked for social services, so increases in payments could have an indirect beneficial effect on city residents.

# City of Molalla

The City of Molalla was unavailable for an interview. However, Molalla City Manager, Dan Huff, provided written responses to the questions. These are provided verbatim below, followed by some additional observations by ERM.

Table O-317. City of Molalla interview	τ.
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Question	Discussion/ Response
	Dan Huff written response
How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create, and take advantage of opportunities, and	Today, Molalla is in a fairly strong position to react to change and respond to opportunities. Molalla never really grew up when the mills closed in the 1980s due to a large influx of residents that were commuting to Portland and Salem area employment. Because of that change, the city did not have to face that changing economy until the late $2007 - 2012$ . Today our capacity and infrastructure is managed for growth and expansion, capitalizing on the recreation and agriculture in the region.
meet its needs?	Additional observations The city benefits from its proximity to both Portland and Salem, which are about 30 and 40 miles away,

Question	Discussion/ Response
	respectively.
	Molalla has experienced a significant population increase (42%) between 2000 and 2012. At just over 8,000 residents, the city has a relatively low percentage of its population below the poverty level (11%) compared to the State percentage (15%).
	Molalla is the gateway to the Molalla River Recreation Corridor, attracting visitors year-round for sightseeing, fishing, hunting, water sports, camping, mountain biking and horseback riding.
How do you view your	Written response
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	Molalla is a tough town and people choose to live here today. The economic and fiscal storms have not changed the longtime resident's belief in their community as a great place to live or come home to. Molalla has adapted and accepted that part of its role is as a commuter city but with a vibrant past that is connected to timber.
	Written response
How do the ways the BLM manages its resources affect your community (its capacity and resiliency)?	BLM's management of resources in the Molalla River corridor have not impacted the recreation component of this area recently. We do have some timber related jobs but there is not much timber-related activity in town today. Four intown mills have closed since the mid-eighties and periphery businesses like saw shops, and equipment dealers go with the mills. There are two mills north of town, and the former in-town mills are redevelopment sites today. The old sites are now being looked at for redevelopment - one redevelopment area at the south end of town is now a bark and chip mobile unit.
Have changes in the BLM's	
resource management over time affected your community? In	Written response
what ways?	Resource management has removed the historic job market from the area. However, Molalla continues to pursue other opportunities as a bedroom community to Salem and Portland. Because the farm or mill to market transportation corridors are not as high volume with trucks highway maintenance dollars have decreased in the
Are there changes in the ways	area over the years at the State level.
that the BLM manages its resources that would increase your community's capacity and resiliency?	At this point probably not. Other than promotion of recreation, I am not sure how resource management would greatly impact the community today.

# City of Rogue River

Date: July 22, 2014

Participants: Pam VanArsdale, Mayor; City of Rogue River Mark Reagles, City Administrator: City of Rogue River Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

## Table O-318. City of Rogue River interview.

Question	Discussion/Response
How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create, and take advantage of opportunities, and meet its needs?	Mark has been with city for 20 years. He is a 4 <sup>th</sup> generation Oregonian. Both he and his father worked in the timber industry and lost their jobs (Roseburg Lumber). He said that the City of Rogue River's capacity is closely tied to the timber industry. As the fortunes of the timber industry have ebbed and flowed, so have the city's fortunes – wreaking havoc with its economy and capacity.
	Before the 1970s, Rogue River had more than one mill. The city's one remaining mill (owned by Medford Corp) burned to the ground in 1990. It was rebuilt then sold, and resold, closing for long periods during transitions. The mill, located by I-5, is now owned by Murphy Plywood. It employs approximately 150 people – and is the largest employer, and taxpayer in the city. Murphy plans to add another shift, which could increase the number of jobs to about 250. Mark pointed out that timber-related employment is more widespread including truck drivers, loggers, construction workers, and machinists. The Rogue River School District is the second largest employer.
	The city lost over 400 residents (18%) between 2000 and 2012 and has an 18% poverty rate. Mark said that the city has seen an increase in retirement-aged residents and a decline in the school-aged population, to the point where one of the city's four schools had to close. In the late 1980s and 1990s retirees were coming from California; people interested in enjoying Oregon's great quality of life.
	Mayor VanArsdale (Pam) said that the city has seen a shift to service and retail jobs, but these jobs tend to be low wage compared to the higher, family-supporting wage jobs in the timber industry.
	Recreational tourism is a small portion of the city's economy. While the Rogue River is well known for rafting, that activity takes place upstream of the city. In 2009, the Savage Rapids (irrigation) Dam between Grants Pass and Rogue River was removed. While this benefitted fishes and fishing in the Rogue River, the city lost the lake behind the dam which was used for boating. The city considered it a loss –the city gets little economic

Question	Discussion/Response
	benefit from fishing.
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	Rogue River has struggled to adapt from a timber-reliant economy to a more diversified economy. The lack of diversity makes the city less resilient. Mark pointed out that because the city is small the ebbs and flows in timber-related employment have major direct and ripple impacts on the community. Rogue River cannot compete with the larger cities.
	For example, he noted that during the 2007 – 2009 recession, the mill's assessed value fell from \$13 million to \$3 million – with severe effects on city tax revenues.
	The city's loss of population is an indication of the city's resiliency challenges.
How do the ways the BLM manages its resources affect your community (its capacity and resiliency)?	<ul> <li>Mark feels that the way the BLM manages its timber resources directly affects the City. If more federal land were opened up for logging the timber industry would benefit and result in more timber-related jobs with direct beneficial impacts to the City. With a stronger timber industry, more stable jobs could be offered and more people would set up roots in the community. This would result in more school-aged children being added to the school system, creating the need for hiring more education jobs.</li> <li>In places where the BLM has cut roads into the forestlands and properly managed these roads, it is easier for emergency vehicles to access particularly in the case of a forest fire.</li> <li>The BLM management of recreation resources has limited effects on the City. However, Mark did note that the BLM is working with a local group to open up an area for mountain biking approximately two miles from the City on the Rogue River Greenway, a 30-mile partially complete greenway between the Cities of Grants Pass and Central Point.</li> </ul>
Have changes in the BLM's resource management over time affected your community? In what ways?	In Mark's and the Mayor's view, the BLM should actively "manage" its lands and "use" the resource. Enough land has been preserved and timber should be cut which would have multiple benefits: economic (as described above); help manage the risk of fire, and, as a side benefit open up areas for hunting – for food and for recreation. Mark said he is a hunter and hunts on private and public land – he finds the hunting is better on private lands that are managed.
Are there changes in the ways that the BLM manages its resources that would increase	Mayor VanArsdale felt that the forestland can be managed to meet both the environmental interests and economic interests, which will make for a more well-rounded economy.
your community's capacity and resiliency?	Mark feels that the BLM should allow more timber sales and boost the supply. He thinks the decline of timber is a supply issue – not an issue of jobs moving overseas.

# City of St. Helens

Date: August 26, 2014

## **Participants:**

John Walsh, City Administrator; City of St. Helens Susan Conn, City Councilor; City of St. Helens Clive Graham, Principal; ERM Jill Bellenger, Associate Consultant; ERM

## Table O-319. City of St. Helens interview.

Question	Discussion/ Response
How do you view your community's "capacity," that is your community's ability to face changes, respond to external and internal stresses, create, and take advantage of opportunities, and meet its needs?	John Walsh has served as City Administrator for St. Helens since 2012. Susan Conn has served as a City Councilor since 2012, and is a long-time resident. John had previously worked in Coos County and is familiar with timber issues.
	John noted that the city's capacity numbers look good with high population growth, a high working-age population cohort, and high median household income. However, he said that the numbers don't tell the whole story.
	John and Susan said that historically the city was a mill town and had several mills but the city has experienced a steady drop-off in timber-related employment in recent decades culminating in the closure of a Boise Paper plant in 2012; the plant had been winding down over time, but all told, the job losses totaled approximately 900. John said this was a devastating social blow for the city. The one remaining mill is the Cascade Tissue plant, which has approximately 60 jobs – a huge change for the city.
	John described St. Helens as a healthy, middle-class town – but essentially a bedroom community for Portland and Hillsboro, both approximately 30 miles away. Hillsboro is the location of one of Intel's product development and manufacturing campuses, and is the largest private employer in the state. John estimated that about three-quarters of St. Helens' residents commute out of the city to work. John and Susan said that while the city is fortunate to have this proximity to jobs, the jobs are not "in the city" and the result has been a loss of social cohesion. As examples, John cited the decline in participation in charitable organizations and social clubs such as the Kiwanis. Susan noted that three bookstores, including her own, had closed.
	St. Helens is the county seat of Columbia County and public administration is one of the larger job sectors (11%).

Appendix O – Socioeconomics

	St. Helens owns a 2,500-acre tree farm which it harvests for sale; no old growth.
How do you view your community's "resiliency," that is your community's ability to adapt to change over time?	John noted that change has been thrust on the city. The mills had provided commercial tax base and had supported the public utilities. With the mills' decline and the city's loss of income and inability to raise revenue due to tax caps, the city has had to enact double-digit rate utility increases over the past five years and has reduced its workforce by 30%. He noted that the tax rate, \$1.90 per \$1,000, is unchanged since1995. As a result, revenues only increase if the assessed value goes up, but this too is capped.
	John said that the State has been doing a good job of retraining the workforce as fewer Oregonians are employed in the timber industry. Susan said that older generations have been especially affected by changes in the economic landscape in St. Helens.
	John said that the city is fortunate in that residents have alternative job options in Portland and Hillsboro. He thought that total employment was back to pre-recession levels, but not the same jobs.
	The city is working to adapt to the new economic environment. John said that the large mills were located along the Columbia River waterfront, which limited public access to this area. The city is working with Boise in order to acquire those properties and transition to new uses. The planning effort includes design collaborations between the city, Portland State University, and the American Institute of Architects.
	However, both he and Susan acknowledged that lack of a bridge over the Columbia river to I-5 is a major impediment to the city's economic development.
	John felt that generally cities had more resiliency compared to counties because the counties were tasked with more services and the cities had more options to raise revenues.
How do the ways the BLM manages its resources affect your community (its capacity	There is relatively little BLM land near St. Helens, compared to many of the other cities in the sample, but the city is affected by the way the BLM manages its resources in that the county has cut services. Susan noted that the county got close to closing the jail in the city.
and resiliency)?	John said that the city had never received pass-through federal timber funds from Columbia County, and so had not relied on such funds.
Have changes in the BLM's	
resource management over time affected your community? In what ways?	John sees a sustainable timber harvest as the key to increasing community capacity and resiliency. He did not think the entire decline of the timber industry was attributable to the BLM; there were many other factors to consider. He noted that St. Helens had not been affected by the forest fires that had affected other parts of the State.
Are there changes in the ways	