



United States Department of Agriculture
US Forest Service
Natural Resource Manager (NRM)



FSVeg Common Stand Exam User Guide Region 6 Appendices

Version: 2.12.6
March 2015



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APPENDIX A: ADMINISTRATIVE AND PROCLAIMED FOREST CODES

Table 1: Region 6 codes

Admin Number	Administrative Forest Name	Proclaimed Number	Proclaimed Forest Name
01	Deschutes	01	Deschutes
02	Fremont – Winema	02	Fremont
02	Fremont – Winema	20	Winema
03	Gifford Pinchot	03	Gifford Pinchot
03	Gifford Pinchot	14	Snoqualmie (part)
04	Malheur	04	Malheur
05	Mt. Baker – Snoqualmie	05	Mt. Baker
05	Mt. Baker – Snoqualmie	13	Snoqualmie (part)
06	Mt. Hood	06	Mt. Hood
07	Ochoco	07	Ochoco
09	Olympic	09	Olympic
10	Rogue River – Siskiyou	10	Rogue River
10	Rogue River – Siskiyou	11	Siskiyou
12	Siuslaw	12	Siuslaw
14	Umatilla	14	Umatilla
15	Umpqua	15	Umpqua
16	Wallowa – Whitman	16	Wallowa
16	Wallowa – Whitman	19	Whitman
17	Okanogan – Wenatchee	08	Okanogan
17	Okanogan – Wenatchee	13	Snoqualmie (part)
17	Okanogan – Wenatchee	17	Wenatchee
18	Willamette	18	Willamette

Admin Number	Administrative Forest Name	Proclaimed Number	Proclaimed Forest Name
21	Colville	13	Kaniksu (part)
21	Colville	21	Colville
22	Columbia River Gorge National Scenic Area	22	Columbia River Gorge National Scenic Area

APPENDIX B: DISTRICT CODES

Table 2: Region 6 codes

Forest	Code	District
Colville	3	Newport
Colville	4	Republic
Colville	5	Sullivan Lake
Colville	12	Three Rivers
Deschutes	1	Bend-Fort Rock
Deschutes	2	Crescent
Deschutes	5	Sisters
Fremont-Winema	1	Bly
Fremont-Winema	2	Lakeview
Fremont-Winema	3	Paisley
Fremont-Winema	4	Silver Lake
Fremont-Winema	11	Chemult
Fremont-Winema	12	Chiloquin
Fremont-Winema	13	Klamath
Gifford Pinchot	1	Mount St. Helens NVM
Gifford Pinchot	3	Mt. Adams
Gifford Pinchot	5	Cowlitz Valley

Forest	Code	District
Malheur	1	Blue Mountain
Malheur	2	Emigrant Creek
Malheur	4	Prairie City
Mt. Baker – Snoqualmie	1	Mt. Baker
Mt. Baker – Snoqualmie	2	Darrington
Mt. Baker – Snoqualmie	5	Snoqualmie
Mt. Baker – Snoqualmie	6	Skykomish
Mt. Hood	1	Barlow
Mt. Hood	5	Clackamas
Mt. Hood	6	Hood River
Mt. Hood	9	Zig Zag
Nez Perce (R1, F17)	1	Slate Creek
Nez Perce (R1, F17)	3	Salmon River
Ochoco	1	Lookout Mountain
Ochoco	2	Paulina
Okanogan – Wenatchee	2	Chelan
Okanogan – Wenatchee	3	Cle Elum
Okanogan – Wenatchee	4	Methow Valley
Okanogan – Wenatchee	5	Entiat
Okanogan – Wenatchee	7	Wenatchee River
Okanogan – Wenatchee	8	Naches
Okanogan – Wenatchee	9	Tonasket
Olympic	1	Hood Canal
Olympic	5	Pacific
Payette (R4, F12)	1	Council

Forest	Code	District
Payette (R4, F12)	2	Weiser
Payette (R4, F12)	3	New Meadows
Rogue River	20	Siskiyou Mountains
Siskiyou	22	Wild Rivers
Siskiyou	24	High Cascades
Siskiyou	26	Gold Beach
Siskiyou	28	Powers
Siuslaw	1	Hebo
Siuslaw	2	C. Coast/ODNRA
Umatilla	2	Heppner
Umatilla	4	Pomeroy
Umatilla	5	N. Fork John Day
Umatilla	6	Walla Walla
Umpqua	1	Cottage Grove
Umpqua	2	Tiller
Umpqua	3	Diamond Lake
Umpqua	5	Dorena
Umpqua	6	North Umpqua
Wallowa-Whitman	1	Baker
Wallowa-Whitman	2	Wallowa Valley
Wallowa-Whitman	4	Hells Canyon NRA
Wallowa-Whitman	5	Eagle Gap
Wallowa-Whitman	6	La Grande
Wallowa-Whitman	7	Pine
Wallowa-Whitman	9	Unity

Forest	Code	District
Willamette	1	McKenzie River
Willamette	3	Sweet Home
Willamette	4	Detroit
Willamette	10	Middle Fork

APPENDIX C: STATE CODES

Table 3: Region 6 codes

Code	State
CA	California
ID	Idaho
OR	Oregon
WA	Washington

APPENDIX D: COUNTY CODES

Table 4: California County codes

Code	County
15	Del Norte
93	Siskiyou

Table 5: Idaho County codes

Code	County
3	Adams
49	Idaho
69	Nez Perce
85	Valley

Table 6: Oregon county codes

Code	County
1	Baker
3	Benton
5	Clackamas
7	Clatsop
9	Columbia
11	Coos
13	Crook
15	Curry
17	Deschutes
19	Douglas
21	Gilliam
23	Grant
25	Harney
27	Hood River
29	Jackson
31	Jefferson
33	Josephine

Code	County
35	Klamath
37	Lakee
39	Lane
41	Lincoln
43	Linn
45	Malheur
47	Marion
49	Morrow
51	Multnomah
53	Polk
55	Sherman
57	Tillamook
59	Umatilla
61	Union
63	Wallowa
65	Wasco
67	Washington
69	Wheeler
71	Yamhill

Table 7: Washington county codes

Code	County
1	Adams
3	Asotin
5	Benton
7	Chelan

Code	County
9	Clallam
11	Clark
13	Columbia
15	Cowlitz
17	Douglas
19	Ferry
21	Franklin
23	Garfield
25	Grant
27	Grays Harbor
29	Island
31	Jefferson
33	King
35	Kitsap
37	Kittitas
39	Klickitat
41	Lewis
43	Lincoln
45	Mason
47	Okanogan
49	Pacific
51	Pend Oreille
53	Pierce
55	San Juan
57	Skagit

Code	County
59	Skamania
61	Snohomish
63	Spokane
65	Stevens
67	Thurston
69	Wahkiakum
71	Walla Walla
73	Whatcom
75	Whitman
77	Yakima

APPENDIX E: EXISTING VEGETATION REFERENCES & CODES

Table 8: Existing Vegetation References

Code	Name	Author
PNW	PNW-GTR-418. Pacific Northwest Ecoclass Codes for Seral and Potential Natural Communities. April 1998. A subset of PVRef 639, High-level codes to classify existing vegetation.	USDA Forest Service
R6F02	Region 6 Forest 2 (Fremont-Winema) Existing Vegetation Codes	USDA Forest Service, Reg. 6

Table 9: Existing PNW Vegetation codes

Code	Description
AB	Buildings, structures, roads, campgrounds
AC	Cultivated lands
AG	Grasslands: permanent pasture that is maintained in forest, shrub, or desert climates

Code	Description
AO	Orchards: maintained exotic forest stands
AR	Recreation areas; parks, golf courses, or play areas
AX	Administrative or agricultural (no descriptor specified)
CA	Alpine open, forest park
CC	Western red cedar
CD	Douglas-fir
CE	Subalpine fir, Englemann spruce
CF	Silver or noble fir
CH	Hemlock, western
CJ	Juniper, western
CL	Lodgepole pine
CM	Mountain hemlock
CP	Ponderosa, Jeffery pine
CR	Red fir
CS	Sitka spruce
CW	Grand or white fir
CX	Coniferous forest (no descriptor specified)
FM	Moist (mesic) forbland
FS	Subalpine or alpine forbland
FW	Wet forbland
FX	Forbland (no descriptor specified)
GA	Annual grasslands
GB	Bunchgrasses
GM	Mesic (forest zone) grasslands

Code	Description
GR	Rhizomatous grass-sedge
GS	Subalpine or alpine grass or sedge lands
GX	PNC grassland (no descriptor specified)
HA	Alder
HB	Bigleaf maple
HC	Cottonwood – ash bottoms
HL	Canyon live oak tree size
HO	Oak, Oregon or black
HQ	Quaking aspen
HT	Tanoak tree size
HX	Hardwood woodlands or forest (no descriptor specified)
MD	Dry meadow
MM	Moist meadow
MS	Subalpine or alpine wet meadow
MT	Tule, standing water
MW	Wet meadow
MX	Meadow; grass/sedge (no descriptor specified)
NC	Cinders, lava flow, mud flow, glacial wash; continuous disturbance or low site potential precludes vegetation reaching over 10 percent crown cover
NF	Flood plain periodically denuded of vegetation with no foreseeable means of establishing plants
NI	Ice fields, glaciers, perennial snow
NL	Landform failure, natural slumps, avalanches, avalanche trails with little practical means of establishing vegetative cover

Code	Description
NM	Mining tailings, dredging; human-caused disturbances, which has little current vegetation potential
NR	Rocky lands with too little soil (or no soil) for good vegetative cover
NS	Sand with minimal vegetative cover; shoreline or interior dune
NT	Talus with minimal vegetative potential
NX	Non-vegetated land; less than 10 percent crown cover potential (no descriptor specified)
SC	Chaparral
SD	Dry shrubland (sagebrush)
SM	Mesic (forest zone) shrublands
SS	Subalpine to alpine shrublands
SW	Wet shrublands
SX	PNC shrubland (no descriptor specified)
WL	Lakes, ponds, impoundments; perennial or intermittent
WR	Running water bodies, streams, rivers, creeks, ditches; perennial or intermittent
WX	Water-covered areas (no descriptor specified)

Table 10: Existing Region 6 Forest 2 (Fremont-Winema) Vegetation Codes

EV Code	Common Name
1	Silver fir
2	White fir
3	Grand fir
4	Subalpine fir
5	Noble fir

EV Code	Common Name
6	Red fir
7	Bigleaf maple
8	Red alder
9	Pacific madrone
10	Incense cedar
11	True mountain mahogany
12	Chinquapin
13	Ash
14	Western juniper
15	Western larch
16	Whitebark pine
17	Lodgepole pine
18	Englemann spruce
19	Western white pine
20	Ponderosa pine
21	Quaking aspen
22	Interior Douglas-fir (east of CA)
23	Oregon white bark
24	Black oak
25	Early seral
26	Willow
27	Western red cedar
28	Western hemlock
29	Mountain hemlock
30	Ponderosa pine mix

EV Code	Common Name
31	Ponderosa – lodgepole pine mix
32	Ponderosa pine – Douglas-fir
33	Ponderosa pine – western juniper – Douglas-fir
34	Western juniper – ponderosa pine
35	Douglas-fir/Pacific yew
36	Mixed conifer dry
37	Mixed conifer mesic
38	Mixed conifer moist
39	Upper montane mixed conifer
40	Upper montane moist mixed conifer
41	Whitebark pine mix
42	Lodgepole pine mix
43	Lodgepole pine – Englemann spruce
44	Mountain hemlock mix
45	Englemann spruce – subalpine fir
46	Mixed conifer – deciduous forest dry
47	Mixed conifer – deciduous forest moist
48	Western juniper – deciduous mix
49	Mixed deciduous forest dry
50	Mixed deciduous forest moist
51	Port Orchard cedar
52	Tanoak
53	Knobcone pine
54	Jeffrey pine
55	Sugar pine

EV Code	Common Name
56	Sitka spruce
57	Bitter cherry
58	Canyon live oak
59	Redwood
60	Knobcone pine mix
61	Jeffrey pine mix
255	Non-forested

APPENDIX F: POTENTIAL VEGETATION REFERENCES

Table 11: Region 6 references

Code	Name	
406	Riparian Community Type Classification of Eastern Idaho-Western Wyoming. USDA/FS Report R4-ECOL-85-01.	A.P. Youngblood, W.G. Padgett, and A.H. Winward (1985)
407	Riparian Community Type Classification of Utah and Southeastern Idaho. USDA/FS Report R4-ECOL-89-01	W.G. Padgett, A.P. Youngblood, and A.H. Winward (1989)
408	Sagebrush-Grass Habitat Types of Southern Idaho; Forest, Wildlife, and Range Experiment Station Bulletin No. 35, Univ. of Idaho, Moscow, Idaho.	M. Hironaka, M.A. Fosberg, and A.H. Winward (1983)
409	Steppe Vegetation of Washington; Washington Agriculture Experiment Station Tech. Bulletin No. 62.	R.F. Daubenmire (1970)
110	Forest Habitat Types of Northern Idaho: A Second Approximation. USDA/FS Gen. Tech. Ref. INT-236	Stephen V. Cooper, Kenneth E. Neiman, Robert Steele, and David W. Roberts (1987)
602	Vegetation-Soil Units in the Central Oregon Juniper Zone. Res. Pap. PNW-19. Portland, OR: USDA Forest Service, Pac. N.W. For. & Range Exp. Stat. 60 pp.	Richard S. Driscoll, 1964

Code	Name	
603	A Preliminary Classification of Forest Communities in the Central Portion of the Western Cascades in Oregon. Bull. 4, Coniferous Forest Biome, Ecosystem Analysis Studies, US/Int. Biological Program.	Dyrness, C.T., Jerry F. Franklin, and W.H. Moir. 1974
604	Plant Communities of the Blue Mountains in Eastern Oregon and Southeastern Washington. R6 Area Guide 3-1. Portland, OR: USDA, Forest Service, Pacific Northwest Region, 62 pp. illus. R6 AG 3-1.	Hall, F.C. 1973
605	Plant Associations of the Fremont National Forest. R6 Ecol 79-004. Portland, OR: USDA, Forest Service, Pacific Northwest Region, 106 pp.	W.E. Hopkins, 1979
606	Plant Associations of South Chiloquin and Klamath Ranger Districts, Winema National Forest. R6 Ecol 79-005. USDA, Forest Service, Pacific Northwest Region, 96 pp.	W.E. Hopkins, 1979
607	Plant Association and Management Guide for the Pacific Silver Fir Zone, Mt. Hood and Willamette National Forests. R6 Ecol 100-1982.	Hemstrom, M.A., W.H. Emmingham, N.M. Halverson, S.E. Logan, C. Topik, 1982
608	Plant Association and Management Guide for the Pacific Silver Fir Zone, Gifford Pinchot National Forest. R6 Ecol 130-83. Portland, OR: USDA Forest Service, Pacific Northwest Region, 76 pp.	Brockway, D.G., C. Topik, M.A. Hemstrom, W.H. Emmingham, 1983
609	Forested Plant Associations of the Okanogan National Forest. R6 Ecol 132-1983. Portland, OR: USDA, Forest Service, Pacific Northwest Region. 116 pp.	Williams, C.K. and T.R. Lillybridge. 1983
610	Plant Associations of the Crooked River National Grassland, Ochoco National Forest. R6 Ecol 133-1983. Portland, OR: USDA Forest Service, Pacific Northwest Region. 98 pp.	Hopkins, W.E., and B.L. Kovalchik. 1983
611	Plant Associations of the Central Oregon Pumice Zone. R6 Ecol 104-1985. Portland, OR: USDA, Forest Service, Pacific Northwest Region, 138 pp.	Volland, L.A. 1985
612	Plant Associations and Management Guide, Siuslaw National Forest. R6 Ecol 220-1986. Portland, OR: USDA, Forest Service, Pacific Northwest Region, 121 pp.	Hemstrom, M.A. and S.E. Logan, 1986

Code	Name	
613	Plant Association and Management Guide for the Western Hemlock Zone, Gifford Pinchot National Forest. R6 Ecol 230-1986. Portland, OR: USDA, Forest Service, Pacific Northwest Region, 133 pp.	Topik, C., N.M. Halverson, and D.G. Brockway, 1986
614	Plant Association and Management Guide for the Western Hemlock Zone, Mt. Hood National Forest. R6 Ecol 230-1986. Portland, OR: USDA, Forest Service, Pacific Northwest Region, 111 pp.	Halverson, N.M., C. Topik, and R. VanVickle. 1986
615	Plant Associations of the Wallowa-Snake Province, Wallowa-Whitman National Forest. R6 Ecol 255-1986. Portland, OR: USDA, Forest Service, Pacific Northwest Region, 514 pp.	Johnson, C.G. and S.A. Simon. 1987
616	Plant Association and Management Guide, Willamette National Forest. R6 Ecol 257-1986. Portland, OR: USDA, Forest Service, Pacific Northwest Region, 312 pp.	Hemstrom, M.A., S.E. Logan, and W. Paviat. 1986
617	Riparian Zone Associations, Deschutes, Ochoco, Fremont, and Winema National Forests. R6 Ecol. Tech. Paper 279-1987. Portland, OR: USDA, Forest Service, Pacific Northwest Region. 171 pp.	Kovalchik, B.L. 1987
618	Forested Plant Associations of the Olympic National Forest. R6 Ecol. Tech. Paper 001-88. Portland, OR: USDA, Forest Service, Pacific Northwest Region. 502 pp.	Henderson, J.A., D.H. Peter, R.D. Leshner. 1988
619	Plant Association and Management Guide for the Ponderosa Pine, Douglas Fir, and Grand Fir Zones, Mt. Hood National Forest. R6 Ecol. Tech. Paper 004-88. Portland, OR: USDA, Forest Service, Pacific Northwest Region. 132 pp.	Topik, C., N.M. Halverson, T. High (1988)
620	Plant Association and Management Guide for the Grand Fir Zone – Gifford Pinchot National Forest. R6 Ecol. Tech. Paper 006-88. Portland, OR: USDA, Forest Service, Pacific Northwest Region. 110 pp.	Topik, C., and N. Halverson. 1988
621	Field Guide to the Forested Plant Associations of the Mt. Baker-Snoqualmie National Forest. R6 Ecol. TP 028-91. Portland, OR: USDA, Forest Service, Pacific Northwest Region. 196 pp.	Henderson, J.A., R.D. Leshner, D.H. Peter, and D.C. Shaw. 1992

Code	Name	
622	Plant Associations of the Blue and Ochoco Mountains. R6 ERW TP 036-92. Portland, OR: USDA Forest Service, Pacific Northwest Region. 207 pp.	Johnson, Jr., C.G., and R.R. Clausnitzer. 1992
623	Plant Association and Management Guide for the Mountain Hemlock Zone, Gifford Pinchot and Mt. Hood National Forests. R6 MTH-GP TP-08-95. Portland, OR: USDA, Forest Service, Pacific Northwest Region. 101 pp.	Topic, C., D. Smith, N. Diaz, and T. High. 1995.
624	Mid-Montane Wetland Plant Associations of the Malheur, Umatilla, and Wallowa-Whitman National Forests. R6 NR Ecol TP-22-97.	Crowe, Elisabeth A., Clausnitzer, Roderick R. 1997
625	Riparian Ecological Types, Gifford Pinchot and Mt. Hood National Forests, Columbia River Gorge National Scenic Area. R6 NR-TP-10-96. Portland, OR: USDA, Forest Service, Pacific Northwest Region. 203 pp.	Diaz, Nancy M.; Mellen, T. Kim. 1996
626	Field Guide for Forested Plant associations of the Wenatchee National Forest. Gen. Tech. Rep. PNW-GTR-359. 335 pp.	Lillybridge, T.R.; Kovalchik, B.L.; Williams, C.K.; Smith, B.G. 1995
627	Forested Plant Associations for the Colville National Forest. Gen. Tech. Rep. PNW-GTR-306.	Williams, Clinton K.; Kelley, Brian F.; Williams C.K.; Smith, Bradley G.; Lillybridge, Terry R. 1995
628	Vegetation of Two Drainages in Eagle Cal Wilderness, Wallowa Mountains, Oregon. INT-288. Ogden, UT: USDA, Forest Service, Intermountain Forest and Range Experiment Station. 42 pp.	Cole, David N. 1982
631	Forest Habitat Types of the Colville Indian Reservation. Publication No. MISC0110. Pullman, WA: Washington State University, Agriculture Research Center. 110 pp.	Clausnitzer, RR. And B.A. Zamora. 1987
632	Forest Vegetation of Eastern Washington and Northern Idaho. Tech. Bull. 60. Pullman, WA: Washington State University, Agriculture Research Center. 104 pp. illus.	Daubenmire, R. and Jean B. Daubenmire
634	The Oregon Dunes NRA Resource Inventory, Siuslaw National Forest.	Carlos Pinto, USDA Forest Service. 1972

Code	Name	
635	Plant Associations of the Commercial Forest of the Warm Springs Indian Reservation. Warm Springs, OR: Warm Springs Indian Reservation. 142 pp. illust.	Marsh, R.R., Helliwell and J. Rodgers. 1987
636	The Forest Communities of Mount Rainier National Park. Scientific Monograph Series No. 19. Washington, DC: US Department of the Interior, National Park Service. 194 pp. illust.	Franklin, J.F., W.H. Moir, M.A. Hemstrom, S.E. Greene, B.A. Smith. 1988
638	Forest Habitat Types of the Spokane Indian Reservation. Res. Bull. XB-0936. Pullman, WA: Washington State University, Agriculture Research Center, 65 pp. illust.	Zamora, B.A. 1983
639	Pacific Northwest Ecoclass Codes for Seral and Potential Natural Communities. PNW-GTR-418 (contains a combination of the codes in references 602-638)	Hall, Frederick C. 1998
640	Some combination of references 604, 615, 622, 624	USDA Forest Service
641	Field Guide to the Forested Plant Associations of Southwestern Oregon. R6-NR-ECOL-TO_17-96. Portland, OR: USDA, Forest Service, Pacific Northwest Region.	Atzet, Thomas; White, D.E.; McCrimmon, L.A.; Martinez, P.A.; Fong, P.R.; and V.D. Randall. 1996
642	Plant Associations of the Oregon Dunes National Recreation Area. USDA, Forest Service, Pacific Northwest Region. R6-NR-ECOL-TP-09-98.	Christy, John A., James S. Kaga, and Alfred M. Wiedemann. 1986
643	Major Indicator Shrubs and Herbs on National Forests of Western Oregon and Southwestern Washington. USDA Forest Service, Pacific Northwest Region. R6-TM-229-1986.	Halverson, Nancy M. 1986
644	Key Species for Plant Associations on the Rogue River, Siskiyou, and Umpqua National Forests. USDA Forest Service, Pacific Northwest Region. R6-NR-ECOL-TP-026-97.	Seda, Anitihomas Atzet, and David Wheeler. 1989, updated 1997.
645	Major Indicator Shrubs and Herbs in Riparian Zones on National Forests of Eastern Oregon. USDA, Forest Service, Pacific Northwest Region. R6-TM-190-1985.	Hopkins, William, and Robert Rawlins. 1988

Code	Name	
646	Major Indicator Shrubs and Herbs in Riparian Zones on National Forests of Central Oregon. USDA Forest Service, Pacific Northwest Region. R6-ECOL-TP-005-88.	Kovalchik, Bernard L., William E. Hopkins, and Steven J. Brunsfeld. 1988
647	Field Guide for the Forested Plant Associations of the Westside Cascades of Northwest Oregon. USDA Forest Service, Pacific Northwest Region. R6-NR-ECOL-TP-02. 2002	McCain, Cindy; Diaz, Nancy
648	Field Guide to the Forested Plant Associations of the Northern Oregon Coast Range. USDA Forest Service, Pacific Northwest Region. R6-NR-ECOL-TP-03-02	McCain, Cindy; Diaz, Nancy
649	Some combination of references 614, 619, and 647	USDA Forest Service
650	Some combination of references 642 and 648	USDA Forest Service
651	Some combination of references 608, 613, 620, and 623	USDA Forest Service
653	Forested Plant Associations of the Oregon East Cascades. USDA Forest Service, Pacific Northwest Region. July 2007. R6-NR-ECOL-TP-03-2007.	Simpson, Michael

APPENDIX G: POTENTIAL VEGETATION CODES

Table 12: Reference Code 602

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CJG1	Western juniper/bluebunch wheatgrass	JUCO/PSSP6
CJG111	Western juniper/Idaho fescue-bluebunch wheatgrass	JUOC/FEID-PSSPS
CJG112	Western juniper/bluebunch-wheatgrass-Sandberg bluegrass	JUOC/PSSP6-POSE
CJG2	Western juniper/Idaho fescue	JUOC/FEID
CJS221	Western juniper/big sagebrush/bluebunch wheatgrass	JUOC/ARTR2/PSSPS

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CJS222	Western juniper/big sagebrush/bluebunch wheatgrass-Douglas' dustymaiden	JUOC/ARTR2/PSSPS-CHDO
CJS223	Western juniper/big sagebrush/bluebunch wheatgrass-woollypod milkvetch	JUCO/ARTR2/PSSPS-ASPUL2
CJS224	Western juniper/big sagebrush/Idaho fescue	JUCO/ARTR2/FEID
CJS225	Western juniper/big sagebrush/Idaho fescue-lupine	JUCO/ARTR2/FEID-LUPIN
CJS236	Western juniper/big sagebrush-antelope bitterbrush	JUCO/ARTR2-PUTR2
CJS3	Western juniper/antelope bitterbrush	JUCO/PUTR2

Table 13: Reference Code 603

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS151	Douglas-fir/oceanspray	PSME/HODI
CDS252	Douglas-fir/vine maple/salal	PSME/ACCI/GASH
CDS253	Douglas-fir/vine maple/Cascade barberry	PSME/ACCI/MANE2
CDS254	Douglas-fir/vine maple/common whipplea	PSME/ACCI/WHMO
CDS311	Douglas-fir-western hemlock/California hazelnut (steep, shallow soil)	PSME-TSHE/COCOC
CFC151	Pacific silver fir-mountain hemlock/common beargrass	ABAM-TSME/XETE
CFC152	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF251	Noble fir/sweet after death	ABPR/ACTR
CFF252	Pacific silver fir/sweet after death	ABAM/ACTR
CFS251	Pacific silver fir/thinleaf huckleberry/common beargrass	ABAM/VAME/XETE
CFS253	Pacific silver fir/oval-leaf blueberry/bunchberry dogwood	ABAM/VAOV/COCA13
CFS654	Pacific silver fir/Pacific rhododendron-oval-leaf blueberry/bunchberry dogwood	ABAM/RHMA3-VAOV/COCA13

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHC551	Western hemlock-Pacific silver fir/Pacific rhododendron-Cascade barberry	TSHE-ABAM/RHMA3-MANE2
CHC552	Western hemlock-Pacific silver fir/Pacific rhododendron/twinflower	TSHE-ABAM/RHMA2/LIBO3
CHC553	Western hemlock-Pacific silver fir/twinflower	TSHE-ABAM/LIBO3
CHF122	Western hemlock/western swordfern	TSHE/POMU
CHF124	Western hemlock/western swordfern-redwood-sorrel	TSHE/POMU-OXOR
CHH351	Western hemlock/giant chinquapin	TSHE/CHCHC4
CHS222	Western hemlock/vine maple/western swordfern	TSHE/ACCI/POMU
CHS321	Western hemlock/Pacific rhododendron-Cascade barberry	TSHE/RHMA3-MANE2
CHS322	Western hemlock/Pacific rhododendron-salal	TSHE/RHMA3-GASH
CMC151	Alaska cedar/devilsclub	CHNO/OPHO

Table 14: Reference Code 604

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAG111	Subalpine fir-whitebark pine/Geyer's sedge	ABLA-PIAL/CAGE2
CDG111	Ponderosa pine-Douglas-fir/Geyer's sedge (Blue Mountains)	PIPO-PSME/CAGE2
CDS611	Ponderosa pine-Douglas-fir/common snowberry-oceanspray	PIPO-PSME/SYAL-HODI
CDS711	Douglas-fir/mallow ninebark (Blue Mtns)	PSME/PHMA5
CES311	Subalpine fir/thinleaf huckleberry (Blue Mtns)	ABLA/VAME
CES411	Subalpine fir/grouse whortleberry (Blue Mtns)	ABLA/VASC
CJG111	Western juniper/Idaho fescue-bluebunch wheatgrass	JUOC/FEID-PSSPS
CJS111	Western juniper/little sagebrush/bluebunch wheatgrass-Idaho fescue	JUOC/ARAR8/PSSPS6-FEID

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CJS211	Western juniper/big sagebrush/bluebunch-Idaho fescue	JUOC/ARTR2/PSSP6-FEID
CJS811	Western juniper/scabland sagebrush (scabland)	JUOC/ARRI2
CLG211	Lodgepole pine/pinegrass-grouse whortleberry	PICO/CARU-VASC
CLS411	Lodgepole pine/grouse whortleberry (Blue Mountains)	PICO/VASC
CLS511	Lodgepole pine/thinleaf huckleberry (Blue Mountains)	PICO/VAME
CPG111	Ponderosa pine/bluebunch wheatgrass (Blue Mountains)	PIPO/PSSPS
CPG112	Ponderosa pine/Idaho fescue (Blue Mountains)	PIPO/FEID
CPM111	Ponderosa pine/blue wildrye	PIPO/ELGL
CPS221	Ponderosa pine/antelope bitterbrush/Ross' sedge	PIPO/PUTR2/CARO5
CWF311	Grand fir/twinflower-forb	ABGR/LIBO3-2FORB
CWG111	Douglas-fir/pinegrass (residual soil)	PSME-ABIES/CARU
CWG112	Douglas-fir/piengrass (ash soil)	PSME-ABIES/CARU
CWS211	Grand fir/thinleaf huckleberry	ABGR/VAME
CWS811	Grand fir/grouse whortleberry	ABGR/VASC
FS5911	Poke knotweed	POPH
GB4911	Bluebunch wheatgrass-Sandberg bluegrass-onespike danthonia (shallow soil, scabland)	PSSPS-POSE-DAUN
GB4912	Bluebunch wheatgrass-Idaho fescue (deep soil, gentle slopes)	PSSPS-FEID
GB4913	Bluebunch wheatgrass-Sandberg bluegrass (shallow soil, steep slopes)	PSSPS-POSE
GB4914	Bluebunch wheatgrass-Idaho fescue (deep soil, steep slopes)	PSSPS-FEID
GB9111	Sandberg bluegrass-onespike danthonia	POSE-DAUN
GBB911	Biscuit-scabland complex	N/A

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
GS1211	Idaho fescue (subalpine)	FEID
GS3911	Geyer's sedge (subalpine)	CAGE2
HQMI	Quaking aspen/grass (meadow, wetland)	POTR5/2GRAM
MD	Meadow, dry (water table available part of the growing season)	N/A
MM	Meadow, moist (water table available all growing season)	N/A
MW	Meadow, wet (surface moist or wet all growing season)	N/A
SD1911	Little sagebrush/Idaho fescue-bluebunch wheatgrass	ARAR8/FEID-PSSPS
SD2911	Mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	ARTRV/FEID-PSSPS
SD39	Antelope bitterbrush-bluebunch wheatgrass-Idaho fescue	PUTR2-PSSPS-FEID
SD49	Curl-leaf mountain mahogany	CELE3
SD9111	Scabland sagebrush/Sandberg bluegrass (scabland)	ARRI2/POSE
SD89	Biscuit-scabland (complex)	N/A
SM19	Mallow ninebark	PHMA5
SM29	Thinleaf alder (snowslide)	ALINT
SM31	Common snowberry (shrubland)	SYAL
SS4911	Mountain big sagebrush/Geyer's sedge	ARTRV/CAGE2

Table 15: Reference Code 605

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CJS112	Western juniper/little sagebrush/Idaho fescue	JUOC/ARAR8/FEID
CLC111	Lodgepole pine-whitebark pine/mountain blue penstemon	PICO-PIAL/PELA7
CLC112	Lodgepole pine-whitebark pine/King's sandwort	PICO-PIAL/ARKI

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLG315	Lodgepole pine/Virginia strawberry-Idaho fescue	PICO/FRVIP2-FEID
CLG415	Lodgepole pine/squirreltail-long-stolon sedge	PICO/ELELE-CAIN9
CLH111	Lodgepole pine-quaking aspens/Virginia strawberry	PICO-POTR5/FRVIP2
CPC211	Ponderosa pine-western juniper/curl-leaf mountain mahogany-antelope bitterbrush-basin big sagebrush/Idaho fescue	PICO-JUOC/CELE3-PUTR2-ARTRT/FEID
CPF111	Ponderosa pine/woolly mule-ears	PIPO/WYMO
CPH311	Ponderosa pine-quaking aspen/Wheeler bluegrass	PIPO-POTR5/PONE2
CPS121	Ponderosa pine/mountain big sagebrush/Wheeler bluegrass	PIPO/ARTRV/PONE2
CPS211	Ponderosa pine/antelope bitterbrush/Idaho fescue (pumice)	PIPO/PUTR2/FEID
CPS217	Ponderosa pine/antelope bitterbrush-greenleaf manzanita/Idaho fescue (pumice)	PIPO/PUTR2-ARPA6/FEID
CWC111	White fir-ponderosa pine-incense cedar/Saskatoon serviceberry	ABCO-PIPO-CADE27/AMAL2
CWC311	White fir-lodgepole pine/long-stolon sedge-western needlegrass	ABCO-PIPO/CAIN9-ACOCO
CWC411	White fir-lodgepole pine-sugar pine/sticky currant	ABCO-PIPO-PILA/RIVI3
CWC412	White fir-ponderosa pine-sugar pine/greenleaf manzanita	ABCO-PIPO-PILA/ARPA6
CWH211	White fir-ponderosa pine-quaking aspen/long-stolon sedge	ABCO-PIPO-POTR5/CAIN9
CWS117	White fir-ponderosa pine/greenleaf manzanita-hollyleaved barberry	ABCO-PIPO/ARPA6-MAAQ2
CWS313	White fir-ponderosa pine/common snowberry/tuber starwort	ABCO-PIPO/SYAL/PSJA2
MD3111	Kentucky bluegrass (dry meadow)	POPR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
MM1911	Tufted hairgrass-Nebraska sedge (moist meadow)	DECA18-CANE2
MW1911	Nebraska sedge-Baltic rush (wet meadow)	CANE2-JUBA
SD1913	Little sagebrush/Idaho fescue-squirreltail	ARAR8/FEID-ELELE
SD2912	Basin big sagebrush/bluebunch wheatgrass	ARTRT/PSSPS
SD9211	Little sagebrush-narrowleaf mock goldenweed/Sandberg bluegrass	ARAR8-STST5/POSE
SD9212	Little sagebrush/Sandberg bluegrass-onespike danthonia	ARAR8/POSE-DAUN
SS4912	Little sagebrush/red fescue (alpine)	ARAR8/FERU2

Table 16: Reference Code 606

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLF111	Lodgepole pine/forb	PICO/2FORB
CLS413	Lodgepole pine/grouse whortleberry/forb	PICO/VASC/2FORB
CLS414	Lodgepole pine/grouse whortleberry/long-stolon sedge	PICO/CASC/CAIN9
CMS111	Mountain hemlock/grouse whortleberry	TSME/VASC
CPS111	Ponderosa pine/antelope bitterbrush-big sagebrush/Idaho fescue	PIPO/PUTR2-ARTR2/FEID
CPS211	Ponderosa pine/antelope bitterbrush/Idaho fescue	PIPO/PUTR2/FEID
CPS212	Ponderosa pine/antelope bitterbrush/western needlegrass	PIPO/PUTR2/ACOCO
CRG111	Shasta red fir/long-stolon sedge	ABSH/CAIN9
CRS112	Shasta red fir-mountain hemlock/pinemat manzanita/long-stolon sedge	ABSH-TSME/ARNE/CAIN9
CRS311	Shasta red fir/giant chinquapin/pipsissewa-long-stolon sedge	ABSH/CHCHC4/CHUM-CAIN9
CWC215	White fir-Douglas-fir/snowbrush ceanothus/kinnikinnick	ABCO-PSME/CEVE/ARUV

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWH112	White fir/giant chinquapin-Oregon boxleaf/pipsissewa	ABCO/CHCHC4-PAMY/CHUM
CWM111	White fir/thinleaf alder (meadow)	ABCO/ALINT
CWS116	White fir/snowbrush ceanothus-squawcarpet/Virginia strawberry	ABCO/CEVE-CEPR/FRVI
CWS312	White fir/common snowberry/Virginia strawberry	ABCO/SYAL/FRVI
SD1913	Little sagebrush/Idaho fescue-squirreltail	ARAR8/FEID-ELELE

Table 17: Reference Code 607

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFC251	Pacific silver fir-western hemlock/Pacific rhododendron-salal	ABAM-TSHE/RHMA3-GASH
CFF152	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF153	Pacific silver fir/redwood-sorrel	ABAM/OXOR
CFS151	Pacific silver fir/Cascade barberry	ABAM/MANE2
CFS251	Pacific silver fir/thinleaf huckleberry/common beargrass	ABAM/VAME/XETE
CFS253	Pacific silver fir/oval-leaf blueberry/bunchberry dogwood	ABAM/VAOV/COCA13
CFS254	Pacific silver fir/rusty menziesia	ABAM/MEFE
CFS255	Pacific silver fir/oval-leaf blueberry-salal	ABAM/VAOV-GASH
CFS256	Pacific silver fir/thinleaf huckleberry/bride's bonnet	ABAM/VAME/CLUN2
CFS351	Pacific silver fir/devilsclub	ABAM/OPHO
CFS551	Pacific silver fir/Cascade azalea/common beargrass	ABAM/RHAL2/XETE
CFS552	Pacific silver fir/Cascade azalea/bride's bonnet	ABAM/RHAL2/CLUN2
CFS651	Pacific silver fir/vine maple/oneleaf foamflower	ABAM/ACCI/TITRU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS652	Pacific silver fir/Pacific rhododendron-Cascade barberry	ABAM/RHMA3-MANE2
CFS653	Pacific silver fir/Pacific rhododendron/common beargrass	ABAM/RHMA3/XETE
CFS654	Pacific silver fir/Pacific rhododendron-oval-leaf blueberry/bunchberry dogwood	ABAM/RHMA3-VAOV/COCA13
CMS114	Mountain hemlock/grouse whortleberry	TSME/VASC
CMS216	Mountain hemlock/thinleaf huckleberry/common beargrass	TSME/VAME/XETE

Table 18: Reference Code 608

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFF152	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF253	Pacific silver fir/sweet after death-bride's bonnet	ABAM/ACTR-CLUN2
CFS151	Pacific silver fir/Cascade barberry	ABAM/MANE2
CFS152	Pacific silver fir/salal (Gifford Pinchot)	ABAM/GASH
CFS251	Pacific silver fir/thinleaf huckleberry/common beargrass	ABAM/VAME/XETE
CFS254	Pacific silver fir/rusty menziesia	ABAM/MEFE
CFS255	Pacific silver fir/oval-leaf blueberry-salal	ABAM/VAOV-GASH
CFS256	Pacific silver fir/thinleaf huckleberry/bride's bonnet	ABAM/VAME/CLUN2
CFS257	Pacific silver fir/oval-leaf blueberry	ABAM/VAOV
CFS351	Pacific silver fir/devilsclub	ABAM/OPHO
CFS550	Pacific silver fir/Cascade azalea (Gifford Pinchot)	ABAM/RHAL2
CMS210	Mountain hemlock/thinleaf huckleberry (Gifford Pinchot)	TSME/VAME
CMS221	Mountain hemlock/rusty menziesia	TSME/MEFE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMS223	Mountain hemlock/Cascade azalea	TSME/RHAL2

Table 19: Reference Code 609

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAC1	Subalpine larch	LALY
CAG112	Whitebark pine/pinegrass	PIAL/CARU
CDG123	Douglas-fir/kinnikinnick (Okanogan)	PSME/ARUV
CDG131	Douglas-fir/pinegrass (Okanogan and Colville)	PSME/CARU
CDG311	Ponderosa pine-Douglas-fir/bluebunch wheatgrass	PIPO-PSME/PSSPS
CDS411	Douglas-fir/Oregon boxleaf (Okanogan)	PSME/PAMY
CDS631	Douglas-fir/kinnikinnick-antelope bitterbrush	PSME/ARUV-PUTR4
CDS632	Douglas-fir/mountain snowberry (Okanogan and Colville)	PSME/SYOR2
CDS633	Douglas-fir/common snowberry	PSME/SYAL
CDS715	Douglas-fir/mallow ninebark (Okanogan and Colville)	PSME/PHMA5
CDS811	Douglas-fir/blueberry	PSME/VACCI
CEF211	Subalpine fir/longitude twinflower (Okanogan and Colville)	ABLA/LIBOL2
CEG311	Subalpine fir/pinegrass (Okanogan and Colville)	ABLA/CARU
CEM211	Engelmann spruce/field horsetail	PIEN/EQAR
CES111	Subalpine fir/Oregon boxleaf (Okanogan)	ABLA/PAMY
CES211	Subalpine fir/Cascade azalea	ABLA/RHAL2
CES312	Subalpine fir/blueberry	ABLA/VACCI
CES412	Subalpine fir/grouse whortleberry (Okanogan and Colville)	ABLA/VASC
CES413	subalpine fir/grouse whortleberry/pinegrass (Okanogan)	ABLA/VASC/CARU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CES611	Subalpine fir/pink mountainheath	ABLA/PHEM
CFS258	Pacific silver fir/oval-leaf blueberry	ABAM/VAOV
CFS553	Pacific silver fir/Cascade azalea (Okanogan)	ABAM/RHAL2
HQG111	Quaking aspen/pinegrass	POTR5/CARU
HQG211	Quaking aspen/common snowberry	POTR5/SYAL

Table 20: Reference Code 610

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CJS212	Western juniper/basin big sagebrush/Idaho fescue-bluebunch wheatgrass (N slope)	JUOC/ARTRT/FEID-PSSPS
CJS213	Western juniper/basin big sagebrush/bluebunch wheatgrass-Sandberg bluegrass (S slope)	JUOC/ARTRT/PSSPS-POSE
CJS226	Western juniper/basin big sagebrush/bluebunch wheatgrass-Idaho fescue (flat)	JUOC/ARTRT/PSSPS-FIED
CJS231	Western juniper/basin big sagebrush-rockspirea/bluebunch wheatgrass-arrowleaf balsamroot (steep canyon)	JUOC/ARTRT-HODU/PSSPS-BASA3
CJS232	Western juniper/basin big sagebrush-yellow rabbitbrush/Idaho fescue-arrowleaf balsamroot (steep N canyon)	JUOC/ARTRT-CHVI8/FEID-BASA3
CJS291	Western juniper/rubber rabbitbrush-basin big sagebrush/crested wheatgrass	JUOC/ERNAN5-ARTRT/AGCR
CJS292	Western juniper/rubber rabbitbrush-basin big sagebrush/beardless wheatgrass	JUOC/ERNAN5-ARTRT/PSSPI
CJSB11	Western juniper/basin big sagebrush/bluebunch wheatgrass-Idaho fescue (mound)	JUOC/ARTRT/PSSPS-FEID
SD9131	Scabland sagebrush/Sandberg bluegrass-bigseed biscuitroot (scabland)	ARRI2/POSE-LOMA3

Table 21: Reference Code 611

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS612	Mixed conifer/common snowberry/twinflower (flatlands)	2TE/SYAL/LIBO3
CDS613	Mixed conifer/common snowberry/forb	2TE/SYAL/2FORB
CDS614	Missed conifer/common snowberry/pinegrass	2TE/SYAL/CARU
CJS311	Western juniper/antelope bitterbrush/bluebunch wheatgrass-Idaho fescue	JUOC/PUTR2/PSSPS-FEID
CLG311	Lodgepole pine/western needlegrass (basins, pumice)	PICO/ACOCO
CLG313	Lodgepole pine/western needlegrass-tailcup lupine-Nuttall's linanthus	PICO/ACOCO-LUCA-LINU3
CLG314	Lodgepole pine/western needlegrass-tailcup lupine (pumice)	PICO/ACOCO-LUCA
CLG411	Lodgepole pine/long-stolon sedge-tailcup lupine (pumice)	PICO/CAIN9-LUCA
CLG412	Lodgepole pine/long-stolon sedge-tailcup lupine-beardtongue	PICO/CAIN9-LUCA-PENST
CL413	Lodgepole pine/long-stolon sedge-western needlegrass (basins, pumice)	PICO/CAIN9-ACOCO
CLM111	Lodgepole pine/Nebraska sedge-blue wildrye (wetland)	PICO/CANE2-ELGL
CLM211	Lodgepole pine/kinnikinnick (pumice)	PICO/ARUV
CLM311	Lodgepole pine/bog blueberry-forb (pumice)	PICO/VAUL-2FORB
CLM411	Lodgepole pine/common beargrass (pumice)	PICO/XETE
CLS111	Lodgepole pine/big sagebrush/Idaho fescue (pumice)	PICO/ARTR2/FEID
CLS112	Lodgepole pine/big sagebrush (rhyolite, pumice)	PICO/ARTR2
CLS211	Lodgepole pine/antelope bitterbrush/western needlegrass (pumice)	PICO/PUTR2/ACOCO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLS212	Lodgepole pine/antelope bitterbrush/long-stolon sedge (pumice)	PICO/PUTR2/CAIN9
CLS213	Lodgepole pine/antelope bitterbrush/forb (pumice)	PICO/PUTR2/2FORB
CLS214	Lodgepole pine/antelope bitterbrush/Idaho fescue (pumice)	PICO/PUTR2/FEID
CLS215	Lodgepole pine/wax currant-antelope bitterbrush/western needlegrass (pumice)	PICO/RICE-PUTR2/ACOCO
CLS216	Lodgepole pine/antelope bitterbrush (rhyolite)	PICO/PUTR2
CLS311	Lodgepole pine/pinemat manzanita	PICO/ARNE
CLS412	Lodgepole pine/grouse whortleberry (pumice)	PICO/VASC
CLS911	Lodgepole pine/snowbrush ceanothus-greenleaf manzanita (pumice)	PICO/CEVE-ARPA6
CMS111	Mountain hemlock/grouse whortleberry	TSME/VASC
CPF111	Ponderosa pine/woolly mule-ears	PIPO/WYMO
CPG212	Ponderosa pine/long-stolon sedge-Idaho fescue-Nevada pea	PIPO/CAIN9-FEID-LALA3
CPS111	Ponderosa pine/antelope bitterbrush-big sagebrush/Idaho fescue	PIPO/PUTR2-ARTR2/FEID
CPS112	Ponderosa pine/antelope bitterbrush-big sagebrush/squirreltail (rhyolite)	PIPO/PUTR2-ARTR2/ELELE
CPS211	Ponderosa pine/antelope bitterbrush/Idaho fescue (pumice)	PIPO/PUTR2/FEID
CPS212	Ponderosa pine/antelope bitterbrush/western needlegrass (pumice)	PIPO/PUTR2/ACOCO
CPS213	Ponderosa pine/antelope bitterbrush-greenleaf manzanita/western needlegrass (pumice)	PIPO/PUTR2-ARPA6/ACOCO
CPS214	Ponderosa pine/antelope bitterbrush-greenleaf manzanita/long-stolon sedge (pumice)	PIPO/PUTR2-ARPA6/CAIN9
CPS215	Ponderosa pine/antelope bitterbrush/long-stolon sedge (pumice)	PIPO/PUTR2/CAIN9

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CPS216	Ponderosa pine/antelope bitterbrush/Idaho fescue-bluebunch wheatgrass (pumice)	PIPO/PUTR2/FEID-PSSPS
CPS217	Ponderosa pine/antelope bitterbrush-greenleaf manzanita/Idaho fescue (pumice)	PIPO/PUTR2-ARPA6/FEID
CPS218	Ponderosa pine/antelope bitterbrush/squirreltail (rhyolite)	PIPO/PUTR2/ELELE
CPS311	Ponderosa pine/antelope bitterbrush-snowbrush ceanothus/western needlegrass	PIPO/PUTR2-CEVE/ACOCO
CPS312	Ponderosa pine/antelope bitterbrush-snowbrush ceanothus/long-stolon sedge	PIPO/PUTR2-CEVE/CAIN9
CPS314	Ponderosa pine/antelope bitterbrush-snowbrush ceanothus/Idaho fescue	PIPO/PUTR2-CEVE/FEID
CRS111	Mixed conifer/pinemat manzanita	2TE/ARNE
CWC211	Mixed conifer/snowbrush ceanothus-giant chinquapin/western brackenfern	2TE/CEVE-CHCHC4/PTAQ
CWC212	Mixed conifer/snowbrush ceanothus-giant chinquapin/pinegrass	2TE/CEVE-CHCHC4/CARU
CWC213	Mixed conifer/snowbrush ceanothus/long-stolon sedge-hairy brackenfern	2TE/CEVE/CAIN9-PTAQP2
CWH111	Mixed conifer/snowbrush ceanothus-giant chinquapin	2TE/CEVE-CHCHC4
CWS112	Mixed conifer/snowbrush ceanothus-greenleaf manzanita (pumice)	2TE/CEVE-ARPA6
CWS113	Mixed conifer/snowbrush ceanothus-greenleaf manzanita/long-stolon sedge-glaucus beardtongue	2TE/CEVE-ARPA6/CAIN9-PEEU
CWS114	Mixed conifer/snowbrush ceanothus (pumice)	2TE/CEVE
CWS115	Mixed conifer/snowbrush ceanothus/long-stolon sedge	2TE/CEVE/CAIN9
CWS911	Englemann spruce (bottomlands)	PIEN
GB99	Sandberg bluegrass-onespike danthonia (scabland)	POSE-DAUN
MD1911	Meadow, dry	N/A

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
MM19	Meadow, moist (tufted hairgrass)	DECA18
MM90	Meadow, moist (bluegrass)	POA
MW	Meadow, wet (surface moist or wet all growing season)	N/A
SD1912	Little sagebrush/Idaho fescue	ARAR8/FEID
SD2912	Basin big sagebrush/bluebunch wheatgrass	ARTRT/PSSPS
SD2913	Big sagebrush-antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	ARTR2-PUTR2/FEID-PSSPS
SD2914	Big sagebrush/western needlegrass (rhyolite pumice)	ARTR2/ACOCO
SD3311	Antelope bitterbrush/western needlegrass-long-stolon sedge	PUTR2/ACOCO-CAIN9
SD9323	Sulphur-flower buckwheat/stipa (flats, rhyolite pumice)	ERUM/STIPA

Table 22: Reference Code 612

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHF121	Western hemlock/redwood-sorrel (coastal)	TSHE/OXOR
CHF122	Western hemlock/western swordfern (coastal)	TSHE/POMU
CHS121	Western hemlock/Cascade barberry (coastal)	TSHE/MANE2
CHS122	Western hemlock/Cascade barberry-salal (coastal)	TSHE/MANE2-GASH
CHS123	Western hemlock/salal (coastal)	TSHE/GASH
CHS221	Western hemlock/vine maple-salal (coastal)	TSHE/ACCI-GASH
CHS222	Western hemlock/vine maple/western swordfern barberry (coastal)	TSHE/ACCI/POMU
CHS321	Western hemlock/Pacific rhododendron-Cascade barberry (coast)	TSHE/RHMA3-MANE2
CHS322	Western hemlock/Pacific rhododendron-salal (coast_	TSHE/RHMA3-GASH

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS323	Western hemlock/Pacific rhododendron-western swordfern (coast)	TSHE/RHMA3-POMU
CHS324	Western hemlock/Pacific rhododendron-California huckleberry (coast)	TSHE/RHMA3-VAOV2
CHS421	Western hemlock/salmonberry (coastal)	TSHE/RUSP
CHS422	Western hemlock/salmonberry-vine maple (coast)	TSHE/RUSP-ACCI
CHS423	Western hemlock/salmonberry-salal (coast)	TSHE/RUSP-GASH
CHS521	Western hemlock/devilsclub (coastal)	TSHE/OPHO
CHS610	Western hemlock/California huckleberry (coastal)	TSHE/VAOV2
CSF121	Sitka spruce/western swordfern	PISI/POMU
CSF321	Sitka spruce/redwood-sorrel	PISI/OXOR
CSS221	Sitka spruce/rusty menziesia-red huckleberry	PISI/MEFE-VAPA
CSS321	Sitka spruce/salal	PISI/GASH
CSS521	Sitka spruce/salmonberry	PISI/RUSP
CSS522	Sitka spruce/salmonberry-salal	PISI/RUSP-GASH
CSS621	Sitka spruce/devilsclub	PISI/OPHO

Table 23: Reference Code 613

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHC212	Western hemlock-Douglas-fir/oceanspray	TSHE-PSME/HODI
CHC213	Western hemlock-Douglas-fir-Pacific madrone	TSHE-PSME-ARME
CHF124	Western hemlock/western swordfern-redwood-sorrel	TSHE/POMU-OXOR
CHF125	Western hemlock/western swordfern	TSHE/POMU
CHF221	Western hemlock/sweet after death	TSHE/ACTR
CHF222	Western hemlock/threeleaf foamflower	TSHE/TITR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHF421	Western hemlock/common juniper	TSHE/ATFI
CHM121	Western hemlock/American skunkcabbage	TSHE/LYAM3
CHS125	Western hemlock/Cascade barberry	TSHE/MANE2
CHS126	Western hemlock/Cascade barberry/western swordfern	TSHE/MANE2/POMU
CHS127	Western hemlock/Cascade barberry-salal	TSHE/MANE2-GASH
CHS128	Western hemlock/salal	TSHE/GASH
CHS224	Western hemlock/Pacific dogwood/sweet after death	TSHE/CONU4/ACTR
CHS524	Western hemlock/devilsclub/western swordfernt	TSHE/OPHO/POMU
CHS613	Western hemlock/oval-leaf blueberry/redwood-sorrel	TSHE/VAOV/OXOR
CHS614	Western hemlock/oval-leaf blueberry-salal	TSHE/VAOV-GASH
CHS615	Western hemlock/oval-leaf blueberry/bunchberry dogwood	TSHE/VAOV/COCA13

Table 24: Reference Code 614

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHC212	Western hemlock-Douglas-fir/oceanspray	TSME-PSME/HODI
CHF123	Western hemlock/western swordfern	TSHE/POMU
CHF124	Western hemlock/western swordfern-redwood-sorrel	TSHE/POMU-OXOR
CHF221	Western hemlock/sweet after death	TSHE/ACTR
CHM121	Western hemlock/American skunkcabbage	TSHE/LYAM3
CHS124	Western hemlock/Cascade barberry-salal	TSHE/MANE2-GASH
CHS125	Western hemlock/Cascade barberry	TSHE/MANE2
CHS126	Western hemlock/Cascade barberry/western swordfern	TSHE/MANE2/POMU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS223	Western hemlock/vine maple/sweet after death	TSHE/ACCI/ACTR
CHS325	Western hemlock/Pacific rhododendron/common beargrass	TSHE/RHMA3/XETE
CHS326	Western hemlock/Pacific rhododendron-oval-leaf blueberry/bunchberry dogwood	TSHE/RHMA3-VAOV/COCA13
CHS327	Western hemlock/Pacific rhododendron-salal	TSHE/RHMA3-GASH
CHS328	Western hemlock/Pacific rhododendron-Cascade barberry	TSHE/THMA3-MANE2
CHS522	Western hemlock/devilsclub/redwood-sorrel	TSHE/OPHO/OXOR
CHS523	Western hemlock/devilsclub/starry false lily of the valley	TSHE/OPHO/MAST4
CHS611	Western hemlock/oval-leaf blueberry-devilsclub	TSHE/VAOV-OPHO
CHS612	Western hemlock/thinleaf huckleberry/common beargrass	TSHE/VAME/XETE
CHS613	Western hemlock/oval-leaf blueberry/redwood-sorrel	THSE/VAOV/OXOR
CHS614	Western hemlock/oval-leaf blueberry-salal	TSHE/VAOV-GASH
CHS615	Western hemlock/oval-leaf blueberry/bunchberry dogwood	TSHE/VAOV/COCA13

Table 25: Reference Code 615

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDG121	Douglas-fir/pinegrass	PSME/CARU
CDS622	Douglas-fir/common snowberry	PSME/SYAL
CDS623	Douglas-fir/mountain snowberry	PSME/SYOR2
CDS634	Douglas-fir/white spirea	PSME/PHMA5
CDS711	Douglas-fir/mallow ninebark	PSME/PHMA5
CDS722	Douglas-fir/Rocky Mountain maple-mallow ninebark	PSME/ACGL-PHMA5
CDS812	Douglas-fir/thinleaf huckleberry	PSME/VAME

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEF221	Subalpine fir/twinflower	ABLA/LIBO3
CEF311	Subalpine fir/claspleaf twisted stalk	ABLA/STAM2
CEF411	Subalpine fir/Jacob's ladder	ABLA/POPU3
CEG312	Subalpine fir/pinegrass	ABLA/CARU
CES131	Subalpine fir/bride's bonnet	ABLA/CLUN2
CES221	Subalpine fir/rusty menziesia	ABLA/MEFE
CES315	Subalpine fir/thinleaf huckleberry	ABLA/VAME
CES415	Subalpine fir/grouse whortleberry/Jacob's-ladder	ABLA/VASC/POPU3
CJG111	Western juniper/Idaho fescue-bluebunch wheatgrass	JUOC/FEID-PSSPS
CLF211	Lodgepole pine/twinflower	PICO/LIBO3
CLS415	Lodgepole pine/grouse whortleberry/Jacob's-ladder	PICO/VASC/POPU3
CLS515	Lodgepole pine/thinleaf huckleberry	PICO/VAME
CMS131	Mountain hemlock/grouse whortleberry	TSME/VASC
CMS231	Mountain hemlock/thinleaf huckleberry	TSME/VAME
CPS522	Ponderosa pine/common snowberry	PIPO/SYAL
CPS523	Ponderosa pine/white spirea	PIPO/SPBE2
CWF311	Grand fir/twinflower	ABGR/LIBO3
CWF421	Grand fir/bride's bonnet	ABGR/CLUN2
CWF422	Grand fir/Pacific yew/bride's bonnet	ABGR/TABR2/CLUN2
CWF511	Grand fir/Idaho goldthread	ABGR/COOC
CWG112	Grand fir/pinegrass	ABGR/CARU
CWS211	Grand fir/thinleaf huckleberry	ABGR/VAME
CWS321	Grand fir/white spirea	ABGR/SPBE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWS412	Grand fir/Rocky Mountain maple-mallow ninebark	ABGR/ACGL-PHMA5
CWS912	Grand fir/Rocky Mountain maple	ABGR/ACGL
FM9111	Douglas' buckwheat/Sandberg bluegrass	ERDO/POSE
FM9112	Blue Mountain buckwheat/Sandberg bluegrass	ERST4/POSE
FM9113	Sulphur-flower buckwheat	ERUME
FW	Meadow, ridgetops	N/A
FW3911	Cusick's camas	CACU2
FX4111	Wallowa lewisia	LECOW
GB1211	Sand dropseed (river terrace)	SPCR
GB1911	Bluebunch wheatgrass-sand dropseed-Fendler threeawn	PSSPS-SPCR-ARPUL
GB4111	Bluebunch wheatgrass-parsnipflower buckwheat	PSSPS-ERHE2
GB4112	Bluebunch wheatgrass-Sandberg bluegrass-narrowleaf skullcap	PSSPS-POSE-SCAN3
GB4113	Bluebunch wheatgrass-Sandberg bluegrass	PSSPS-POSE
GB4114	Bluebunch wheatgrass-Sandberg bluegrass-Cusick's milkvetch	PSSPS-POSE-ASCU5
GB4115	Bluebunch wheatgrass-Sandberg bluegrass-shaggy fleabane	PSSPS-POSE-ERPU2
GB4116	Bluebunch wheatgrass-Sandberg bluegrass (granite)	PSSPS-POSE
GB4117	Bluebunch wheatgrass-Sandberg bluegrass-Snake River phlox	PSSPS-POSE-PHCO10
GB4118	Bluebunch wheatgrass-Sandberg bluegrass-plains pricklypear	PSSPS-POSE-OPPO
GB4911	Bluebunch wheatgrass-Sandberg bluegrass (scabland)	PSSPS-POSE
GB5121	Common snowberry/Idaho fescue-bluebunch wheatgrass/silky lupine	SYAL/FEID-PSSPS/LUSE4

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
GB5911	Idaho fescue-prairie junegrass (ridgetops)	FEID-KOMA
GB5912	Idaho fescue-prairie junegrass (mounds)	FEID-KOMA
GB5913	Idaho fescue-prairie junegrass (high elevation)	FEID-KOMA
GB5914	Idaho fescue-prairie junegrass (low elevation)	FEID-KOMA
GB5915	Idaho fescue-bluebunch wheatgrass (ridgetops)	FEID-PSSPS
GB5916	Idaho fescue-bluebunch wheatgrass-silky lupine	FEID-PSSPS-LUSE4
GB5917	Idaho fescue-bluebunch wheatgrass-arrowleaf balsamroot	FEID-PSSPS-BASA
GB5918	Idaho fescue-bluebunch wheatgrass-Snake River phlox	FEID-PSSPS-PHCO10
GB5919	Common snowberry/Idaho fescue-prairie junegrass	SYAL/FEID-KOMA
GB5920	Idaho fescue-timber oatgrass-sedge	FEID-DAIN-CAREX
GB5921	Idaho fescue-Hood's sedge	FEID-CAHO5
GB5922	Idaho fescue-Geyer's sedge	FEID-CAGE2
GB7111	Basin wildrye	LECI4
GB9111	Sandberg bluegrass-one spike danthonia	POSE-DAUN
GS1111	Greenleaf fescue-Hood's sedge	FEVI-CAHO5
GS1112	Greenleaf fescue-silvery lupine	FEVI-LUARL5
HQG1	Quaking aspen	POTR5
MD3112	Snake River Degenerated Bench	N/A
MM1921	Tufted hairgrass-sedge (moist meadow)	DECA18-CAREX
MM1922	Tufted hairgrass-sedge (wet meadow)	DECA18-CAREX
MW19	Sedge (tall, wet meadow)	CAREX
NTS111	Lewis' mock orange (talus strips)	PHLE4
SD2911	Mountain big sagebrush/Idaho fescue	ARTRV/FEID

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SD2915	Mountain big sagebrush/Geyer's sedge	ARTRV/CAGE2
SD2916	Mountain big sagebrush-antelope bitterbrush/Idaho fescue	ARTRV/SYOR2-BRCA5
SD2917	Mountain big sagebrush-mountain snowberry-California brome	ARTRV-SYOR2-BRCA5
SD30	Squaw apple-mountain snowberry	PERA4-SYOR2
SD3111	Antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	PUTR2/FEID-PSSPS
SD3112	Antelope bitterbrush/bluebunch wheatgrass	PUTR2/PSSPS
SD49	Curl-leaf mountain mahogany	CELE3
SD5611	Netleaf hackberry/bluebunch wheatgrass	CELAR/PSSPS
SD6121	Smooth sumac/bluebunch wheatgrass	GLSPA/PSSPS
SD65	Spiny greasebush/bluebunch wheatgrass	ARR12/PSSPS
SD9111	Scabland sagebrush/Sandberg bluegrass	ARR12/POSE
SD9322	Buckwheat/Oregon twinpod	ERIOG/PHOR2
SM19	Mountain ninebark/common snowberry	PHMA5/SYAL
SM3111	Common snowberry-rose	SYAL/ROSA5
SM32	Mountain snowberry	SYOR2

Table 26: Reference Code 616

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDC711	Douglas-fir-western hemlock/Cascade barberry	PSME-TSHE/MANE2
CDC712	Douglas-fir-western hemlock/Pacific rhododendron	PSME-TSHE/RHMA3
CDC713	Douglas-fir-western hemlock/salal	PSME-TSHE/GASH
CDS211	Douglas-fir/oceanspray-Cascade barberry	PSME/HODI-MANE2
CDS212	Douglas-fir/oceanspray/grass	PSME/HODI/2GRAM
CDS213	Douglas-fir/oceanspray-common whipplea	PSME/HODI-WHMO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS641	Douglas-fir/creeping snowberry	PSME/SYMO
CFC251	Pacific silver fir-western hemlock/Pacific rhododendron-salal	ABAM-TSHE/THMA3-GASH
CFC311	Pacific silver fir-grand fir/starry false lily-of-the-valley	ABAM-ABGR/MAST4
CFF152	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF153	Pacific silver fir/redwood-sorrel	ABAM/OXOR
CFS151	Pacific silver fir/Cascade barberry	ABAM/MANE2
CFS251	Pacific silver fir/thinleaf huckleberry/common beargrass	ABAM/VAME/XETE
CFS253	Pacific silver fir/oval-leaf blueberry/bunchberry dogwood	ABAM/VAOV/COCA13
CFS254	Pacific silver fir/rusty menziesia	ABAM/MEFE
CFS255	Pacific silver fir/oval-leaf blueberry-salal	ABAM/VOAV-GASH
CFS256	Pacific silver fir/thinleaf huckleberry/bride's bonnet	ABAM/VAME/CLUN2
CFS351	Pacific silver fir/devilsclub	ABAM/OPHO
CFS551	Pacific silver fir/Cascade azalea/common beargrass	ABAM/RHAL2/XETE
CFS552	Pacific silver fir/Cascade azalea/bride's bonnet	ABAM/RHAL2/CLUN2
CFS651	Pacific silver fir/vine maple/oneleaf foamflower	ABAM/ACCI/TITRU
CFS652	Pacific silver fir/Pacific rhododendron-Cascade barberry	ABAM/RHMA3-MANE2
CFS653	Pacific silver fir/Pacific rhododendron/common beargrass	ABAM/RHMA3/XETE
CFS654	Pacific silver fir/Pacific rhododendron-oval-leaf blueberry/bunchberry dogwood	ABAM/RHMA3-VAOV/COCA13
CHF111	Western hemlock/redwood-sorrel (Willamette)	TSHE/OXOR
CHF151	Western hemlock/western swordfern (Willamette)	TSHE/POMU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHF221	Western hemlock/sweet after death	TSHE/ACTR
CHF321	Western hemlock/twinflower	TSHE/LIBO3
CHS111	Western hemlock/salal (Willamette)	TSHE/GASH
CHS113	Western hemlock/Cascade barberry/redwood-sorrel	TSHE/MANE2/OXOR
CHS114	Western hemlock/Cascade barberry/sweet after death	TSHE/MANE2/ACTR
CHS124	Western hemlock/Cascade barberry-salal	TSHE/MANE2-GASH
CHS125	Western hemlock/Cascade barberry	TSHE/MANE2
CHS326	Western hemlock/Pacific rhododendron-oval-leaf blueberry/bunchberry dogwood	TSHE/RHMA3-VAOV/COCA13
CHS351	Western hemlock/Pacific rhododendron-salal (Willamette)	TSHE/RHMA3-GASH
CHS352	Western hemlock/Pacific rhododendron-Cascade barberry (Willamette)	TSHE/RHMA3-MANE2
CHS353	Western hemlock/Pacific rhododendron/common beargrass (Willamette)	TSHE/RHMA3/XETE
CHS354	Western hemlock/Pacific rhododendron/redwood-sorrel	TSHE/RHMA3/OXOR
CHS355	Western hemlock/Pacific rhododendron/twinflower	TSHE/RHMA3/LIBO3
CHS511	Western hemlock/devilsclub (Willamette)	TSHE/OPHO
CHS615	Western hemlock/oval-leaf blueberry/bunchberry dogwood	TSHE/VAOV/COCA13
CMG211	Mountain hemlock/woodrush	TSME/LUZUL
CMS114	Mountain hemlock/grouse whortleberry	TSME/VASC
CMS216	Mountain hemlock/thinleaf huckleberry/common beargrass	TSME/VAME/XETE
CMS612	Mountain hemlock/Pacific rhododendron	TSME/RHMA3
CWF211	Grand fir/pipsissewa	ABGR/CHUM

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWF521	Grand fir/kinnikinnick	ABGR/ARUV
CWF522	Grand fir/Cascade barberry	ABGR/MANE2
FM2911	Common beargrass-red fescue	XETE-FERU2
FM3011	Garden vetch-subalpine fleabane-blue wildrye	VISA-ERPE3-ELGL
FM9911	Common woolly sunflower-varileaf phacelia	ERLA6-PHHE2
FW5111	False hellebore-common cowparsnip	VERAT-HEMA80
GM4121	Blue wildrye-bromegrass	ELGL-BROMU
MM3911	Sedge-Howell's marsh marigold	CAREX-CALEH2
MT1911	Sedge-panicled bulrush (hydric)	CAREX-SCMI2
NCS111	Shrub (lava flows)	2SHRUB
NRL911	Rock garden (steep, xeric)	N/A
NRL912	Rock garden (steel, moist)	N/A
NRR911	Rock garden (flat, xeric)	N/A
NTS211	Vine maple (talus)	ACCI
NTS911	Talus	N/A
SM5911	Thimbleberry/poke knotweed	RUPA/POPH
SM8111	Sitka alder (rocky soil)	ALVIS
SM8112	Vine maple (rocky soil)	ACCI
SW4121	Blueberry-rose meadowsweet/grass	VACCI-SPSPS/2GRAM
SW4122	Rose spirea-bog blueberry/sedge	SPDO-VAUL/CAREX
SW4123	Spirea-willow/sedge	SPIRA-SALIX/CAREX

Table 27: Reference Code 617

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEM111	Engelmann spruce/widefruit sedge	PIEN/CAAN15
CEM221	Engelmann spruce/field horsetail-twistedstalk	PIEN/EQAR-STREP3

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEM222	Engelmann spruce/bride's bonnet	PIEN/CLUN2
CEM311	Engelmann spruce/bog blueberry/forb	PIEN/VAUL/2FORB
CEM312	Engelmann spruce/bog blueberry/widefruit sedge	PIEN/VAUL/CAAN15
CLM112	Lodgepole pine/Kentucky bluegrass	PICO/POPR
CLM113	Lodgepole pine/widefruit sedge	PICO/CAAN15
CLM114	Lodgepole pine/water sedge	PICO/CAAQ
CLM211	Lodgepole pine/kinnikinnick	PICO/ARUV
CLM311	Lodgepole pine/bog blueberry-forb	PICO/VAUL-2FORB
CLM312	Lodgepole pine/bog blueberry/widefruit sedge	PICO/VAUL/CAAN15
CLM313	Lodgepole pine/rose spirea/forb	PICO/SPDO/2FORB
CLM314	Lodgepole pine/rose spirea/widefruit sedge	PICO/SPDO/CAAN15
CLM911	Lodgepole pine-Englemann spruce/fewflower spikerush	PICO-PIEN/ELQUZ
CPS511	Ponderosa pine/common snowberry (floodplain)	PIPO/SYAL
CWF431	White fir/bride's bonnet	ABCO/CLUN2
FW4111	Bride's bonnet-gray alder	CLUN2-ALIN2
FS4211	Arrowleaf ragwort	SETR
HQM121	Quaking aspen/blue wildrye	POTR5/ELGL
HQM411	Quaking aspen-lodgepole pine/rose spirea/widefruit sedge	POTR5-PICO/SPDO/CAAN15
HQS221	Quaking aspen/common snowberry/blue wildrye	POTR5/SYAL/ELGL
MD1911	Cusick's bluegrass	POCU3
MD3111	Kentucky bluegrass	POPR
MM1912	Tufted hairgrass	DECA18
MM2911	Woolly sedge	CAPE42

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
MM2912	Nebraska sedge	CANE2
MM2913	Widefruit sedge	CAAN15
MM2914	Water sedge	CAAQ
MM2915	Analogue sedge	CANI2
MS1111	Brewer's sedge	CABR12
MS2111	Black alpine sedge	CANI2
MS2112	Broom sedge-black alpine-tufted hairgrass	CASC11-CANI2-DECA18
MS3111	Mountain sedge	CASC12
MW1921	Panicled bulrush-bigleaf sedge	SCMI2-CAAM10
MW1922	Sitka sedge	CAAQD
MW1923	Blister sedge	CAVE6
MW1924	Beaked sedge	CARO6
MW2911	Woollyfruit sedge	CALA11
MW4911	Fewflower spikerush	ELQU2
MW4912	Common spikerush	ELPA3
SD2311	Big sagebrush-silver sagebrush/Cusick's bluegrass	ARTR2-ARCA13/POCU3
SS1911	Pink mountainheath	PHEM
SW1111	Willow/Kentucky bluegrass	SALIX/POPR
SW1112	Willow/woolly sedge	SALIX/CAPE42
SW1113	Willow/widefruit sedge	SALIX/CAAN15
SW1114	Willow/water sedge	SALIX/CAAQ
SW1115	Willow/Sitka sedge	SALIX/CAAQD
SW1116	Willow/beaked sedge	SALIX/CARO6
SW2211	Gray alder/common snowberry	ALIN2/SYAL
SW2212	Gray alder/rose spirea	ALIN2/SPDO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SW2213	Gray alder (spring)	ALIN2
SW2911	Gray alder	ALIN2
SW4111	Bog blueberry/Sitka sedge	VAUL/CAAQD
SW4112	Bog blueberry/fewflower spikerush	VAUL/ELQU2

Table 28: Reference Code 618

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS221	Douglas-fir/oceanspray-dwarf rose	PSME/HODI-ROGY
CDS255	Douglas-fir/salal	PSME/GASH
CDS651	Douglas-fir/kinnikinnick	PSME/ARUV
CEF321	Subalpine fir/broadleaf lupine	ABLA/LULA4
CES212	Subalpine fir/Cascade azalea (Olympic)	ABLA/RHAL2
CES321	Subalpine fir/thinleaf huckleberry (Olympic)	ABLA/VAME
CES621	Subalpine fir/common juniper	ABLA/JUCO6
CFF111	Pacific silver fir/redwood-sorrel (Olympic)	ABAM/OXOR
CFF211	Pacific silver fir/sweet after death-oneleaf foamflower	ABAM/ACTR-TITRU
CFF311	Pacific silver fir/common beargrass	ABAM/XETE
CFF611	Pacific silver fir/western swordfern	ABAM/POMU
CFF612	Pacific silver fir/western swordfern-redwood-sorrel	ABAM/POMU-OXOR
CFF911	Pacific silver fir (depauperate)	ABAM
CFM111	Pacific silver fir/American skunkcabbage	ABAM/LYAM3
CFS154	Pacific silver fir/salal (Olympic)	ABAM/GASH
CFS155	Pacific silver fir/salal/deer fern	ABAM/GASH/BLSP
CFS156	Pacific silver fir/salal/redwood-sorrel	ABAM/GASH/OXOR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS211	Pacific silver fir/thinleaf huckleberry/common beargrass (Olympic)	ABAM/VAME/XETE
CFS212	Pacific silver fir/oval-leaf blueberry (Olympic)	ABAM/VAOV
CFS213	Pacific silver fir/oval-leaf blueberry/white avalanche-lily	ABAM/VAOV/ERMO8
CFS214	Pacific silver fir/oval-leaf blueberry/common beargrass (Olympic)	ABAM/VAOV/XETE
CFS215	Pacific silver fir/oval-leaf blueberry/oneleaf foamflower	ABAM/VAOV/TITRU
CFS216	Pacific silver fir/oval-leaf blueberry-Cascade barberry	ABAM/VAOV-MANE2
CFS217	Pacific silver fir/oval-leaf blueberry/redwood-sorrel	ABAM/VAOV/OXOR
CFS218	Pacific silver fir/oval-leaf blueberry/bride's bonnet	ABAM/VAOV/CLUN2
CFS219	Pacific silver fir/oval-leaf blueberry/twinflower	ABAM/VAOV/LIBO3
CFS220	Pacific silver fir/oval-leaf blueberry-Cascade azalea	ABAM/VAOV-TITRU
CFS311	Pacific silver fir/devilsclub (Olympic)	ABAM/OPHO
CFS611	Pacific silver fir/Pacific rhododendron (Olympic)	ABAM/RHMA3
CFS612	Pacific silver fir/Pacific rhododendron-oval-leaf blueberry	ABAM/RHMA3-VAOV
CHF112	Western hemlock/redwood-sorrel (Olympic)	TSHE/OXOR
CHF131	Western hemlock/western swordfern-redwood-sorrel	TSHE/POMU-OXOR
CHF132	Western hemlock/western swordfern-threeleaf foamflower	TSHE/POMU-TITR
CHF211	Western hemlock/sweet after death (Olympic)	TSHE/ACTR
CHF511	Western hemlock/common beargrass (Olympic)	TSHE/XETE
CHF911	Western hemlock/depauperate	TSHE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHM111	Western hemlock/American skunkcabbage (Olympic)	TSHE/LYAM3
CHS131	Western hemlock/salal (Olympic)	TSHE/GASH
CHS132	Western hemlock/salal/common beargrass	TSHE/GASH/XETE
CHS133	Western hemlock/salal-California huckleberry	TSHE/GASH-VAOV2
CHS134	Western hemlock/salal-oceanspray	TSHE/GASH-HODI
CHS135	Western hemlock/salal-Cascade barberry	TSHE/GASH-MANE2
CHS136	Western hemlock/salal/redwood-sorrel	TSHE/GASH/OXOR
CHS137	Western hemlock/salal/western swordfern	TSHE/GASH/POMU
CHS138	Western hemlock/Cascade barberry (Olympic)	TSHE/MANE2
CHS139	Western hemlock/Cascade barberry/western swordfern (Olympic)	TSHE/MANE2/POMU
CHS331	Western hemlock/Pacific rhododendron (Olympic)	TSHE/RHMA3
CHS332	Western hemlock/Pacific rhododendron/common beargrass	TSHE/RHMA3/XETE
CHS333	Western hemlock/Pacific rhododendron-Cascade barberry (Olympic)	TSHE/RHMA3-MANE2
CHS334	Western hemlock/Pacific rhododendron-salal (Olympic)	TSHE/RHMA3-GASH
CHS335	Western hemlock/Pacific rhododendron/western swordfern (Olympic)	TSHE/RHMA3/POMU
CHS512	Western hemlock/devilsclub (Olympic)	TSHE/OPHO
CHS621	Western hemlock/oval-leaf blueberry	TSHE/VAOV
CHS622	Western hemlock/oval-leaf blueberry/common beargrass	TSHE/VAOV/XETE
CHS623	Western hemlock/oval-leaf blueberry/redwood-sorrel	TSHE/VAOV/OXOR
CHS624	Western hemlock/oval-leaf blueberry-salal (Olympic)	TSHE/VAOV-GASH

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMS241	Mountain hemlock/oval-leaf blueberry	TSME/VAOV
CMS242	Mountain hemlock/oval-leaf blueberry/white avalanche lily	TSME/VAOV/ERMO8
CMS243	Mountain hemlock/oval-leaf blueberry/common beargrass	TSME/VAOV/XETE
CMS244	Mountain hemlock/thinleaf huckleberry-oval-leaf blueberry	TSME/VAME-VAOV
CMS245	Mountain hemlock/thinleaf huckleberry/common beargrass (Olympic)	TSME/VAME/XETE
CMS311	Mountain hemlock/pink mountainheath-Cascade bilberry	TSME/PHEM-VADE
CMS312	Mountain hemlock/Cascade azalea thinleaf huckleberry	TSME/RHAL2-VAME
CSF111	Sitka spruce/western swordfern-redwood-sorrel	PISI/POMU-OXOR

Table 29: Reference Code 619

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CCF211	Western red cedar-grand fir/sweet after death	THPL-ABGR/ACTR
CDG141	Douglas-fir/Geyer's sedge	PSME/CAGE2
CDG321	Douglas-fir/western fescue	PSME/FEOC
CDS231	Douglas-fir/oceanspray/Geyer's sedge	PSME/HODI/CAGE2
CDS661	Douglas-fir/common snowberry	PSME/SYAL
CDS662	Douglas-fir/pinemat manzanita	PSME/ARNE
CHC311	Western hemlock-grand fir/bride's bonnet	TSHE-ABGR/CLUN2
CPH211	Ponderosa pine-Oregon white oak/arrowleaf balsamroot	PIPO-QUGA4/BASA3
CPH212	Ponderosa pine-Oregon white oak/antelope bitterbrush	PIPO-QUGA4/PUTR2
CWC511	Grand fir-Englemann spruce/starry false lily of the valley	ABGR-PIEN/MAST4

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWF321	Grand fir/twinflower	ABGR/LIBO3
CWF521	Grand fir/broadleaf starflower	ABGR/TRBOL
CWF522	Grand fir/sweet after death	ABGR/ACTR
CWF523	Grand fir/Jacob's-ladder	ABGR/POPU3
CWG121	Grand fir/Geyer's sedge	ABGR/CAGE2
CWS331	Grand fir/snowberry	ABGR/SYMPH
CWS531	Grand fir/oceanspray	ABGR/HODI
CWS532	Grand fir/vine maple/sweet after death	ABGR/ACCI/ACTR
CWS533	Grand fir/giant chinquapin	ABGR/CHCHC4

Table 30: Reference Code 620

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CCF212	Western red cedar/sweet after death	THPL/ACTR
CDS241	Douglas-fir/vine maple/western fescue	PSME/ACCI/FEOC
CWG122	Grand fir/Geyer's sedge (Gifford Pinchot)	ABGR/CAGE2
CWG123	Grand fir/pinegrass	ABGR/CARU
CWS221	Grand fir/thinleaf huckleberry/twinflower	ABGR/VAME/LIBO3
CWS222	Grand fir/thinleaf huckleberry/bride's bonnet	ABGR/VAME/CLUN2
CWS223	Grand fir/thimbleberry/drops of gold	ABGR/RUPA/DIHO3
CWS224	Grand fir/Cascade barberry/sweet after death	ABGR/MANE2/ACTR
CWS332	Grand fir/creeping snowberry/sweet after death	ABGR/SYMO/ACTR
CWS534	Grand fir/oceanspray (Gifford Pinchot)	ABGR/HODI
CWS535	Grand fir/vine maple-hollyleaved barberry/broadleaf starflower	ABGR/ACCI-MAAQ2/TRBOL
CWS536	Grand fir/beaked hazelnut/sweet after death	ABGR/COCO6/ACTR
CWS537	Grand fir/Pacific dogwood/sweet after death	ABGR/CONU4/ACTR

Table 31: Reference Code 621

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEF341	Subalpine fir/Sitka valerian	ABLA/VASI
CFF154	Pacific silver fir/oneleaf foamflower-twistedstalk	ABAM/TITRU-STLAR
CFF250	Pacific silver fir/sweet after death	ABAM/ACTR
CFF311	Pacific silver fir/common beargrass	ABAM/XETE
CFF450	Pacific silver fir/strawberry raspberry-deer fern	ABAM/RUPE-BLSP
CFM111	Pacific silver fir/American skunkcabbage	ABAM/LYAM3
CFS110	Pacific silver fir/Cascade barberry (Mt. Baker-Snoqualamie)	ABAM/MANE2
CFS154	Pacific silver fir/salal-Cascade barberry	ABAM/GASH-MANE2
CFS211	Pacific silver fir/thinleaf huckleberry/common beargrass	ABAM/VAME/XETE
CFS212	Pacific silver fir/oval-leaf blueberry (Mt. Baker-Snoqualmie)	ABAM/VAOV
CFS214	Pacific silver fir/oval-leaf blueberry/common beargrass	ABAM/VAOV/XETE
CFS216	Pacific silver fir/oval-leaf blueberry-Cascade barberry	ABAM/VAOV-MANE2
CFS218	Pacific silver fir/oval-leaf blueberry/bride's bonnet	ABAM/VAOV/CLUN2
CFS221	Pacific silver fir/thinleaf huckleberry/Sitka valerian	ABAM/VAME/VASI
CFS222	Pacific silver fir/thinleaf huckleberry/twistedstalk	ABAM/VAME-STLAR
CFS223	Pacific silver fir/thinleaf huckleberry-oval-leaf blueberry	ABAM/VAME/VAOV
CFS224	Pacific silver fir/thinleaf huckleberry	ABAM/VAME
CFS225	Pacific silver fir/oval-leaf blueberry/false lily of the valley	ABAM/VAOV/MADI
CFS226	Pacific silver fir/oval-leaf blueberry/oneleaf foamflower	ABAM/VAOV/TITRU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS228	Pacific silver fir/oval-leaf blueberry/sidebells wintergreen	ABAM/VAOV/ORSE
CFS229	Pacific silver fir/thinleaf huckleberry/sidebells wintergreen	ABAM/VAME/ORSE
CFS230	Pacific silver fir/oval-leaf blueberry-salal (Mt. Baker-Snoqualmie)	ABAM/VAOV-GASH
CFS231	Pacific silver fir/oval-leaf blueberry/western swordfern	ABAM/VAOV/POMU
CFS352	Pacific silver fir/devilsclub-oval-leaf blueberry	ABAM/OPHO-VAOV
CFS554	Pacific silver fir/Cascade azalea-thinleaf huckleberry	ABAM/RHAL2-VAME
CFS555	Pacific silver fir/Cascade azalea-oval-leaf blueberry	ABAM/RHAL2-VAOV
CHF132	Western hemlock/western swordfern-threeleaf foamflower (Olympic)	TSHE/POMU-TITR
CHF133	Western hemlock/western swordfern-salal	TSHE/POMU-GASH
CHF134	Western hemlock/western swordfern-Cascade barberry	TSHE/POMU-MANE2
CHF250	Western hemlock/threeleaf foamflower-western oakfern	TSHE/TITR/GYDR
CHM111	Western hemlock/American skunkcabbage (Mt. Baker-Snoqualmie)	TSHE/LYAM3
CHS131	Western hemlock/salal (Mt. Baker-Snoqualmie)	TSHE/GASH
CHS132	Western hemlock/salal/common beargrass	TSHE/GASH/XETE
CHS135	Western hemlock/salal-Cascade barberry	TSHE/GASH-MANE2
CHS138	Western hemlock/Cascade barberry (Mt. Baker-Snoqualmie)	TSHE/MANE2
CHS140	Western hemlock/salal-thinleaf huckleberry	TSHE/GASH-VAME
CHS141	Western hemlock/Cascade barberry/little prince's pine	TSHE/MANE2/CHME
CHS251	Western hemlock/vine maple-Cascade barberry	TSHE/ACCI-MANE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS513	Western hemlock/devilsclub-common ladyfern	TSHE/OPHO-ATFI
CHS621	Western hemlock/oval-leaf blueberry	TSHE/VAOV
CHS622	Western hemlock/oval-leaf blueberry/common beargrass	TSHE/VAOV/XETE
CHS625	Western hemlock/oval-leaf blueberry-western swordfern	TSHE/VAOV-POMU
CHS626	Western hemlock/oval-leaf blueberry-Cascade barberry	TSHE/VAOV-MANE2
CMF250	Mountain hemlock/oneleaf foamflower-twistedstalk	TSME/TITRU-STLAR
CMF251	Mountain hemlock/Howell's marsh marigold	TSME/CALEH2
CMS241	Mountain hemlock/oval-leaf blueberry	TSME/VAOV
CMS244	Mountain hemlock/thinleaf huckleberry-oval-leaf blueberry	TSME/VAME-VAOV
CMS245	Mountain hemlock/thinleaf huckleberry/common beargrass (Mt. Baker-Snoqualmie)	TSME/VAME/XETE
CMS246	Mountain hemlock/thinleaf huckleberry (Mt. Baker/Snoqualmie)	TSME/VAME
CMS250	Mountain hemlock/thinleaf huckleberry/twistedstalk	TSME/VAME-STLAR
CMS251	Mountain hemlock/thinleaf huckleberry/Sitka valerian	TSME/VAME/VASI
CMS252	Mountain hemlock/oval-leaf blueberry/twistedstalk	TSME/VAOV-STLAR
CMS253	Mountain hemlock/oval-leaf blueberry/bride's bonnet	TSME/VAOV/CLUN2
CMS254	Mountain hemlock/thinleaf huckleberry/roughfruit berry	TSME/VAME/RULA2
CMS255	Mountain hemlock/oval-leaf blueberry/false lily of the valley	TSME/VAOV/MADI
CMS350	Mountain hemlock/pink mountainheath-Cascade bilberry	TSME/PHEM-VADE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMS351	Mountain hemlock/Cascade azalea-oval-leaf blueberry	TSME/THAL2-VAOV
CMS352	Mountain hemlock/Cascade azalea-thinleaf huckleberry	TSME/THAL2-VAME
CMS353	Mountain hemlock/copperbush/strawberryleaf raspberry	TSME/ELPY/RUPE
CMS450	Mountain hemlock/devilclub-oval-leaf blueberry	TSME/OPHO-VAOV

Table 32: Reference Code 622

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAF0	Subalpine fir-whitebark pine/Jacob's ladder	ABLA-PIAL/POPU3
CAF2	Subalpine fir-whitebark pine/poke knotweed	ABLA-PIAL/POPH
CAG111	Subalpine fir/Geyer's sedge	ABLA/CAGE2
CAG3	Subalpine fir-whitebark pine/Drummond's rush	ABLA-PIAL/JUDR
CAG4	Subalpine fir/western needlegrass	ABLA/ACOCO
CDG111	Douglas-fir/Geyer's sedge	PSME/CAGE2
CDG112	Douglas-fir/pinegrass	PSME/CARU
CDS611	Douglas-fir/oceanspray	PSME/HODI
CDS624	Douglas-fir/common snowberry	PSME/SYAL
CDS625	Douglas-fir/mountain snowberry	PSME/SYOR2
CDS711	Douglas-fir/mallow ninebark	PSME/PHMA5
CDS821	Douglas-fir/thinleaf huckleberry	PSME/VAME
CDSD	Douglas-fir/curl-leaf mountain mahogany/Geyer's sedge	PSME/CELE3/CAGE2
CEF331	Subalpine fir/Carolina bugbane	ABLA/TRCA
CES221	Subalpine fir/rusty menziesia	ABLA/MEFE
CES311	Subalpine fir/thinleaf huckleberry	ABLA/VAME

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CES314	Subalpine fir/bride's bonnet	ABLA/CLUN2
CES411	Subalpine fir/grouse whortleberry	ABLA/VASC
CES414	Subalpine fir/twinflower	ABLA/LIBO3
CJG111	Western juniper/Idaho fescue-bluebunch wheatgrass	JUOC/FEID-PSSPS
CJS1	Western juniper/little sagebrush	JUOC/ARAR8
CJS2	Western juniper/mountain big sagebrush	JUOC/ARTRV
CJS321	Western juniper/antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	JUOC/PUTR2/FEID-PSSPS
CJS4	Western juniper/mountain mahogany	JUOC/CERCO
CJS8	Western juniper/scabland sagebrush	JUOC/ARRI2
CLG2	Lodgepole pine/pinegrass	PICO/CARU
CLS4	Lodgepole pine/grouse whortleberry	PICO/VASC
CLS416	Lodgepole pine/pinegrass	PICO/CARU
CLS5	Lodgepole pine/thinleaf huckleberry/pinegrass	PICO/VAME/CARU
CLS6	Lodgepole pine/Sitka alder	PICO/ALVIS
CPG111	Ponderosa pine/bluebunch wheatgrass	PIPO/PSSPS
CPG112	Ponderosa pine/Idaho fescue	PIPO/FEID
CPG221	Ponderosa pine/pinegrass	PIPO/CARU
CPG222	Ponderosa pine/Geyer's sedge	PIPO/CAGE2
CPS1	Ponderosa pine/mountain big sagebrush/Geyer's sedge	PIPO/ARTRV/CAGE2
CPS131	Ponderosa pine/mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	PIPO/ARTRV/FEID-PSSPS
CPS221	Ponderosa pine/antelope bitterbrush/Ross' sedge	PIPO/PUTR2/CAR05
CPS222	Ponderosa pine/antelope bitterbrush/Geyer's sedge	PIPO/PUTR2/CAGE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CPS226	Ponderosa pine/antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	PIPO/PUTR2/FEID-PSSPS
CPS232	Ponderosa pine/curl-leaf mountain mahogany/Geyer's sedge	PIPO/CELE3/CAGE2
CPS233	Ponderosa pine/curl-leaf mountain mahogany/Wheeler bluegrass	PIPO/CELE3/PONE2
CPS234	Ponderosa pine/curl-leaf mountain mahogany/Idaho fescue-bluebunch wheatgrass	PIPO/CELE3/FEID-PSSPS
CPS524	Ponderosa pine/common snowberry	PIPO/SYAL
CPS525	Ponderosa pine/mountain snowberry	PIPO/SYOR2
CWC811	Grand fir/Pacific yew/bride's bonnet	ABGR/TABR2/CLUN2
CWC812	Grand fir/Pacific yew/twinflower	ABGR/TABR2/LIBO3
CWF312	Grand fir/twinflower	ABGR/LIBO3
CWF421	Grand fir/bride's bonnet	ABGR/CLUN2
CWF512	Grand fir/Carolina bugbane	ABGR/TRCA
CWF611	Grand fir/western oakfern	ABGR/GYDR
CWF612	Grand fir/western swordfern-British Columbia wildginger	ABGR/POMU-ASCA2
CWG111	Grand fir/Geyer's sedge	ABGR/CAGE2
CWG113	Grand fir/pinegrass	ABGR/CARU
CWG211	Grand fir/Columbia brome	ABGR/BRVU
CWS212	Grand fir/thinleaf huckleberry	ABGR/VAME
CWS322	Grand fir/white spirea	ABGR/SPBE2
CWS541	Grand fir/Rocky Mountain maple	ABGR/ACGL
CWS811	Grand fir/grouse whortleberry	ABGR/VASC
CWS812	Grand fir/grouse whortleberry/twinflower	ABGR/VASC/LIBO3
GB41	Bluebunch wheatgrass-Sandberg bluegrass	PSSPS-POSE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
GB4911	Bluebunch wheatgrass-Sandberg bluegrass-onespike danthonia	PSSPS-POSE-DAUN
GB59	Idaho fescue-bluebunch wheatgrass	FEID-PSSPS
GB9111	Sandberg bluegrass-onespike danthonia	POSE-DAUN
GS10	Western needlegrass	ACOCO
GS11	Greenleaf fescue	PEVI
GS12	Idaho fescue	FEID
SD1911	Little sagebrush/Idaho fescue-bluebunch wheatgrass	ARAR8/FEID-PSSPS
SD2911	Mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	ARTRV/FEID-PSSPS
SD3111	Antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	PUTR2/FEID-PSSPS
SD40	Curl-leaf mountain mahogany/Geyer's sedge	CELE3/CAGE2
SD4111	Curl-leaf mountain mahogany/Idaho fescue-bluebunch wheatgrass	CELE3/FEID-PSSPS
SD9111	Scabland sagebrush/Sandberg bluegrass	ARRI2/POSE
SD9221	Little sagebrush/Sandberg bluegrass	ARAR8/POSE
SM1111	Mallow ninebark-common snowberry	PHMA5-SYAL
SM20	Sitka alder	ALVIS
SM31	Common snowberry	SYAL
SM32	Mountain snowberry	SYOR2
SS49	Geyer's sedge	CAGE2
SS4911	Mountain big sagebrush/Geyer's sedge	ARTRV/CAGE2

Table 33: Reference Code 623

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAF211	Mountain hemlock-subalpine fir/Davis' knotweed	TSME-ABLA/PODA

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAF311	Mountain hemlock-subalpine fir/Cascade aster	TSME-ABLA/EULEL2
CAG211	Mountain hemlock-subalpine fir/greenleaf fescue	TSME-ABLA/FEVI
CAG311	Mountain hemlock/Hitchcock's smooth woodrush	TSME/LUGLH
CAG312	Mountain hemlock-whitebark pine/Hitchcock's smooth woodrush	TSME-PIAL/LUGLH
CAS211	Mountain hemlock/pink mountainheath-Cascade bilberry	TSME/PHEM-VADE
CAS411	Mountain hemlock-subalpine fir/common juniper	TSME-ABLA/JUCO6
CMS114	Mountain hemlock/grouse whortleberry	TSME/VASC
CMS216	Mountain hemlock/thinleaf huckleberry/common beargrass	TSME/VAME/XETE
CMS218	Mountain hemlock/thinleaf huckleberry/bride's bonnet	TSME/VAME/CLUN2
CMS221	Mountain hemlock/rusty menziesia	TSME/MEFE
CMS223	Mountain hemlock/Cascade azalea	TSME/RHAL2
CMS612	Mountain hemlock/Pacific rhododendron	TSME/RHMA3

Table 34: Reference Code 624

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS628	Douglas-fir/common snowberry (floodplain)	PSME/SYAL
CDS724	Douglas-fir/Rocky Mountain maple-mallow ninebark (floodplain)	PSME/ACGL-PHMA5
CEF332	Subalpine fir/common ladyfern	ABLA/ATFI
CEF333	Subalpine fir/arrowleaf ragwort	ABLA/SETR
CEF334	Engelmann spruce/common ladyfern	PIEN/ATFI
CEF335	Engelmann spruce/arrowleaf ragwort	PIEN/SETR
CEM121	Engelmann spruce/softleaf sedge	PIEN/CADI6

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEM211	Engelmann spruce/field horsetail	PIEN/EQAR
CES511	Engelmann spruce/redosier dogwood	PIEN/COSES
CLM112	Lodgepole pine/Kentucky bluegrass	PICO/POPR
CLM114	Lodgepole pine/water sedge	PICO/CAAQ
CLM115	Lodgepole pine/tufted hairgrass	PICO/DECA18
CPM112	Ponderosa pine/Kentucky bluegrass	PIPO/POPR
CPS511	Ponderosa pine/common snowberry (floodplain)	PIPO/SYAL
CWF611	Grand fir/western oakfern	ABGR/GYDR
CWF613	Grand fir/common ladyfern	ABGR/ATFI
CWS314	Grand fir/common snowberry (floodplain)	ABGR/SYAL
CWS543	Grand fir/Rocky Mountain maple (floodplain)	ABGR/ACGL
FW4211	Arrowleaf ragwort	SETR
FW4212	Field horsetail	EQAR
FW4213	Northern maidenhair	ADPE
FW5121	False hellebore	VERAT
GM4111	Bluejoint	CACA4
HAF211	Red alder/arctic sweet coltsfoot	ALRU2/PEFRP
HAS211	Red alder/Pacific ninebark	ALRU2/PHCA11
HCS112	Black cottonwood/Pacific willow	POBAT/SALUL
HCS113	Black cottonwood/thinleaf alder-redosier dogwood	POBAT/ALINT-COSES
HCS114	Black cottonwood/Rocky Mountain maple	POBAT/ACGL
HCS311	Black cottonwood/common snowberry	POBAT/SYAL
HQM122	Quaking aspen/Kentucky bluegrass	POTR5/POPR
HQM123	Quaking aspen/bluejoint	POTR5/CACA4

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
HQM211	Quaking aspen/woolly sedge	POTR5/CAPE42
HQS221	Quaking aspen/common snowberry	POTR5/SYAL
MD3111	Kentucky bluegrass	POPR
MM1912	Tufted hairgrass	DECA18
MM2911	Woolly sedge	CAPE42
MM2912	Nebraska sedge	CANE2
MM2914	Water sedge	CAAQ
MM2915	Analogue sedge	CASI2
MM2916	Woodrush sedge	CALU7
MM2917	Northwest Territory sedge	CAUT
MM2918	Cusick's sedge	CACU5
MM2919	Lakeshore sedge	CALEL
MM2920	Woolly fruit sedge	CALA11
MM2921	Bigleaf sedge	CAAM10
MM2922	Naked sedge	CANU5
MM2924	Panicled bulrush	SCM12
MM2925	Fowl mannagrass	GLST
MS3111	Mountain sedge	CASC12
MW1923	Blister sedge	CAVEV2
MW3912	Baltic rush	JUBA
MW4911	Fewflower spikerush	ELQU2
MW4912	Common spikerush	ELPA3
SW1111	Willow/Kentucky bluegrass	SALIX/POPR
SW1112	Willow/woolly sedge	SALIX/CAPE42
SW1114	Willow/water sedge	SALIX/CAAQ

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SW1117	Narrowleaf willow	SAEX
SW1121	Undergreen willow/mountain sedge	SACO2/CASC12
SW1123	Willow/Northwest Territory sedge	SALIX/CAUT
SW2111	Sitka alder/common ladyfern	ALVIS/ATFI
SW2112	Sitka alder/drooping woodreed	ALVIS/CILA2
SW2114	Gray alder/bigleaf sedge	ALIN2/CAAM10
SW2115	Gray alder/Northwest Territory sedge	ALIN2/CAUT
SW2116	Gray alder/common ladyfern	ALIN2/ATFI
SW2117	Gray alder/field horsetail	ALIN2/EQAR
SW2118	Gray alder/Dewey sedge	ALIN1/CADE9
SW2120	Gray alder/Kentucky bluegrass	ALIN2/POPR
SW2121	Gray alder/bluejoint	ALIN2/CACA4
SW2122	Gray alder/panicled bulrush	ALIN2/SCMI2
SW2123	Gray alder/woolly sedge	ALIN2/CAPE42
SW2124	Thinleaf alder/common cowparsnip	ALINT/HEMA80
SW2211	Gray alder/common snowberry	ALIN2/SYAL
SW2215	Gray alder/fowl mannagrass	ALIN2/GLST
SW2216	Gray alder-redosier dogwood/mesic forb	ALIN2-COSES/2FORB
SW2217	Gray alder-currant/mesic forb	ALIN2-RIBES/2FORB
SW3111	Black hawthorn	CRDO2
SW5111	Currant/drooping woodreed	RIBES/CILA2
SW5112	Redosier dogwood	COSES
SW5113	Shrubby cinquefoil/tufted hairgrass	DAFL3/DECA18
SW5114	Shrubby cinquefoil/Kentucky bluegrass	DAFL3/POPR
SW6111	Silver sagebrush/tufted hairgrass	ARCA12/DECA18

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SW6112	Silver sagebrush/Kentucky bluegrass	ARCA12/POPR
SW6113	Mountain big sagebrush/Cusick's bluegrass	ARTRV/POCU3

Table 35: Reference Code 625

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CCF110	Western red cedar/common ladyfern-coastal hedgenettle	THPL/ATFI-STCHC3
CCS110	Western red cedar/salmonberry-redwood-sorrel	THPL/RUSP-OXOR
CWM210	Grand fir-western red cedar/American skunkcabbage	ABGR-THPL/LYAM3
FW4221	Northern maidenhair	ADPE
FW4222	Field horsetail	EQAR
FW4223	American skunkcabbage	LYAM3
FW4224	Seep monkeyflower	MIGU
FW4225	Woodsorrel	OXALI
FW4226	Arctic sweet coltsfoot	PEFR5
FW4227	Brook saxifrage-arrowleaf ragwort	SAOD2-SETR
FW4228	Arrowleaf ragwort-giant mountain aster	SETR-CAMO32
FW4229	Coastal hedgenettle-common ladyfern	STCHC3-ATFI
FW4230	Coastal hedgenettle-seep monkeyflower	STCHC3-MIGU
FW4231	Coldwater fumewort	COCAA
HAF221	Red alder/blue wildrye	ALRU2/ELGL
HAF222	Red alder/woodsorrel	ALRU2/OXALI
HAF223	Red alder/arctic sweet coltsfoot	ALRU2/PEFR5
HAF224	Red alder/coastal hedgenettle	ALRU2/STCHC3
HAF225	Red alder/youth on age-Siberian springbeauty	ALRU2/TOME-CLISIS
HAS111	Red alder/thimbleberry	ALRU2/RUPA

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
HAS112	Red alder/salmonberry/woodsorrel	ALRU2/RUSP/OXALI
HAS113	Red alder/salmonberry/youth on age	ALRU2/RUSP/TOME
HAS311	Red alder/vine maple	ALRU2/ACCI
HAS411	Red alder/devilsclub	ALRU2/OPHO
HCS1	Black cottonwood	POBAT
MM2931	Lakeshore sedge	CALE8
MT1921	Panicled bulrush	SCMI2
SW1131	Sitka willow	SASI2
SW1132	Sitka willow/arctic sweet coltsfoot	SASI2/PEFR5
SW2131	Gray alder-oval-leaf blueberry	ALIN2-VAOV
SW2132	Sitka alder	ALVIS
SW2511	Red alder (shrub)	ALRU2
SW2512	Red alder (shrub)/Carolina bugbane	ALRU2/TRCA
SW4131	Redosier dogwood	COSES
SW4132	Oval-leaf blueberry	VAOV
SW5121	Stink currant-salmonberry/woodsorrel	RIBR-RUSP/OXALI
SW5122	Stink currant-salmonberry/arctic sweet coltsfoot	RIBR-RUSP/PEFR5
SW5123	Stink currant-salmonberry/youth on age	RIBR-RUSP/TOME
SW70	Vine maple	ACCI
SW7111	Vine maple-gray alder	ACCI-ALIN2
SW7112	Vine maple/coastal hedgenettle	ACCI/STCHC3
SW7113	Devilsclub	OPHO

Table 36: Reference Code 626

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAC111	Subalpine larch/western moss heather-partridgefoot	LALY/CAME7-LUPE
CAC112	Subalpine larch/eightpetal mountain-avens	LALY/DROC
CAC113	Subalpine larch/common juniper	LALY/JUCO6
CAC114	Subalpine larch/Cascade bilberry-western moss heather	LALY/VADE-CAME7
CAC115	Subalpine larch/grouse whortleberry/Hitchcock's smooth woodrush	LALY/VASC/LUGLH
CAF321	Whitebark pine/eightpetal mountain-avens	PIAL/DROC
CAG112	Whitebark pine/pinegrass	PIAL/CARU
CAG221	Whitebark pine/Greenleaf fescue	PIAL/FEVI
CAS221	Whitebark pine/western moss heather/partridgefoot	PIAL/CAME7-LUPE
CAS311	Whitebark pine/grouse whortleberry/Hitchcock's smooth woodrush	PIAL/VASC/LUGLH
CAS421	Whitebark pine/common juniper	PIAL/JUCO6
CCS211	Western red cedar/devilsclub	PSME/OPHO
CDF411	Douglas-fir/bush penstemon	PSME/PEFR3
CDG131	Douglas-fir/pinegrass (Ikanogan and Colville)	PSME/CARU
CDG132	Douglas-fir/Geyer's sedge (Wenatchee)	PSME/CAGE2
CDG134	Douglas-fir/pinegrass-bluebunch wheatgrass	PSME/CARU-PSSPS
CDG322	Douglas-fir/bluebunch wheagreass (Wenatchee)	PSME/PSSPS
CDG323	Douglas-fir/bluebunch wheatgrass-Indian's dream	PSME/PSSPS-ASDE6
CDS411	Douglas-fir/Oregon boxleaf	PSME/PAMY
CDS412	Douglas-fir/Oregon boxleaf/pinegrass	PSME/PAMY/CARU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS632	Douglas-fir/mountain snowberry (Okanogan and Colville)	PSME/SYOR2
CDS636	Douglas-fir/common snowberry (Wenatchee)	PSME/SYAL
CDS637	Douglas-fir/common snowberry/bluebunch wheatgrass	PSME/SYAL/PSSPS
CDS638	Douglas-fir/common snowberry/pinegrass	PSME/SYAL/CARU
CDS639	Douglas-fir/shinyleaf spirea/pinegrass	PSME/SPBEL/CARU
CDS640	Douglas-fir/shinyleaf spirea	PSME/SPBEL
CDS653	Douglas-fir/kinnikinnick (Wenatchee)	PSME/ARUV
CDS654	Douglas-fir/kinnikinnick-antelope bitterbrush	PSME/ARUV-PUTR2
CDS655	Douglas-fir/kinnikinnick/pinegrass	PSME/ARUV/CARU
CDS673	Douglas-fir/antelope bitterbrush	PSME/PUTR2
CDS674	Douglas-fir/antelope bitterbrush/bluebunch wheatgrass	PSME/PUTR2/PSSPS
CDS675	Douglas-fir/antelope bitterbrush/pinegrass	PSME/PUTR2/CARU
CDS831	Douglas-fir/dwarf bilberry	PSME/VACA13
CDS832	Douglas-fir/velvetleaf huckleberry (Wenatchee)	PSME/VAMY
CDS833	Douglas-fir/velvetleaf huckleberry/pinegrass	PSME/VAMY/CARU
CEF222	Subalpine fir/longtube twinflower (Wenatchee)	ABLA/LIBOL2
CEF422	Subalpine fir/Carolina bugbane	ABLA/TRCA
CEF424	Subalpine fir/broadleaf arnica-Jacob's ladder	ABLA/ARLA8-POPU3
CEG121	Subalpine fir/Hitchcock's smooth woodrush (Wenatchee)	ABLA/LUGLH
CEG311	Subalpine fir/pinegrass	ABLA/CARU
CEM211	Engelmann spruce/horsetail	PIEN/EQUIS
CES112	Subalpine fir/Oregon boxleaf/pinegrass	ABLA/PAMY/CARU
CES113	Subalpine fir/Oregon boxleaf (Wenatchee)	ABLA/PAMY

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CES211	Subalpine fir/Cascade azalea	ABLA/RHAL2
CES213	Subalpine fir/Cascade azalea/Hitchcock's smooth woodrush	ABLA/RHAL2/LUGLH
CES341	Subalpine fir/Cascade bilberry	ABLA/VADE
CES342	Subalpine fir/thinleaf huckleberry (Wenatchee)	ABLA/VAME
CES413	Subalpine fir/grouse whortleberry/pinegrass	ABLA/VASC/CARU
CES422	Subalpine fir/dwarf bilberry	ABLA/VACA13
CES423	Subalpine fir/roughfruit berry	ABLA/RULA2
CES424	Subalpine fir/grouse whortleberry/broadleaf arnica	ABLA/VASC/ARLA8
CES425	Subalpine fir/grouse whortleberry/Hitchcock's smooth woodrush	ABLA/VASC/LUGLH
CES426	Subalpine fir/grouse whortleberry (Wenatchee)	ABLA/VASC
CFF162	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF254	Pacific silver fir/sweet after death (Wenatchee)	ABAM/ACTR
CFS232	Pacific silver fir/oval-leaf blueberry (Wenatchee)	ABAM/VAOV
CFS233	Pacific silver fir/thinleaf huckleberry/bride's bonnet	ABAM/VAME/CLUN2
CFS234	Pacific silver fir/thinleaf huckleberry-sidebells wintergreen	ABAM/VAME-ORSE
CFS351	Pacific silver fir/devilsclub	ABAM/OPHO
CFS413	Pacific silver fir/roughfruit berry (Wenatchee)	ABAM/RULA2
CFS542	Pacific silver fir/rusty menziesia (Wenatchee)	ABAM/MEFE
CFS556	Pacific silver fir/Cascade azalea-thinleaf huckleberry (Wenatchee)	ABAM/RHAL2-VAME
CFS621	Pacific silver fir/vine maple	ABAM/ACCI
CHF223	Western hemlock/sweet after death (Wenatchee)	TSHE/ACTR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHF313	Western hemlock/British Columbia wildginger	TSHE/ASCA2
CHM121	Western hemlock/American skunkcabbage	TSHE/LYAM3
CHS142	Western hemlock/Cascade barberry (Wenatchee)	TSHE/MANE2
CHS143	Western hemlock/Oregon boxleaf/bride's bonnet	TSHE/PAMY/CLUN2
CHS144	Western hemlock/pinemat manzanita	TSHE/ARNE
CHS225	Western hamlock/vine maple/sweet after death (Wenatchee)	TSHE/ACCI/ACTR
CHS226	Western hemlock/vine maple/British Columbia wildginger	TSHE/ACCI/ASCA2
CHS227	Western hemlock/vine maple/bride's bonnet	TSHE/ACCI/CLUN2
CMF131	Mountain hemlock/common beargrass- whortleberry	TSME/XETE/VAMY2
CMG221	Mountain hemlock/Hitchcock's smooth woodrush	TSME/LUGHL
CMS121	Mountain hemlock/grouse whortleberry/Hitchcock's smooth woodrush	TSME/VASC/LUGHL
CMS122	Mountain hemlock/roughfruit berry	TSME/RULA2
CMS256	Mountain hemlock/rusty menziesia-oval-leaf blueberry	TSME/MEFE-VAOV
CMS257	Mountain hemlock/rusty menziesia-thinleaf huckleberry	TSME/MEFE-VAME
CMS258	Mountain hemlock/oval-leaf blueberry (Wenatchee)	TSME/VAOV
CMS259	Mountain hemlock/thinleaf huckleberry (Wenatchee)	TSME/VAME
CMS354	Mountain hemlock/pink mountainheath- Cascade bilberry	TSME/PHEM-VADE
CMS355	Mountain hemlock/Cascade azalea-oval-leaf blueberry	TSME/RHAL2-VAOV

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMS356	Mountain hemlock/Cascade azalea-thinleaf huckleberry	TSME/RHAL2-VAME
CPG141	Ponderosa pine/bluebunch wheatgrass (Wenatchee)	PIPO/PSSPS
CPG142	Ponderosa pine/bluebunch wheatgrass-Indian's dream	PIPO/PSSPS-ASDE6
CPG231	Ponderosa pine/pinegrass-bluebunch wheatgrass	PIPO/CARU-PSSPS
CPS241	Ponderosa pine/antelope bitterbrush/bluebunch wheatgrass	PIPO/PUTR2/PSSPS
CWF444	Grand fir/heartleaf arnica	ABGR/ARCO9
CWF524	Grand fir/sweet after death (Wenatchee)	ABGR/ACTR
CWG124	Grand fir/pinegrass (Wenatchee)	ABGR/CARU
CWG125	Grand fir/pinegrass-lupine	ABGR/CARU-LUPIN
CWS225	Grand fir/Cascade barberry	ABGR/MANE2
CWS226	Grand fir/Cascade barberry/pinegrass (Wenatchee)	ABGR/MANE2/CARU
CWS335	Grand fir/shinyleaf spirea/western brackenfern	ABGR/SPBEL/PTAQ
CWS336	Grand fir/common snowberry/pinegrass	ABGR/SYAL/CARU
CWS337	Grand fir/mountain snowberry	ABGR/SYOR
CWS338	Grand fir/pinemat manzanita	ABGR/ARNE
CWS551	Grand fir/vine maple (Wenatchee)	ABGR/ACCI
CWS552	Grand fir/vine maple-pipsissewa	ABGR/ACCI-CHUM
CWS553	Grand fir/vine maple/bride's bonnet	ABGR/ACCI/CLUN2
CWS554	Grand fir/oceanspray/pinegrass	ABGR/HODI/CARU
HOG111	Oregon white oak/bluebunch wheatgrass	QUGA4/PSSPS
HOG211	Oregon white oak/pinegrass-Geyer's sedge	QUGA4/CARU-CAGE2
HOS311	Oregon white oak/beaked hazelnut-common snowberry	QUGA4/COCO6-SYAL

Table 37: Reference Code 627

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CCF221	Western red cedar/bride's bonnet	THPL/CLUN2
CCF222	Western red cedar/wild sarsaparilla	THPL/ARNU2
CCS211	Western red cedar/devilsclub	THPL/OPHO
CCS311	Western red cedar/thinleaf huckleberry	THPL/VAME
CDG123	Douglas-fir/kinnikinnik	PSME/ARUV
CDG131	Douglas-fir/pinegrass	PSME/CARU
CDG311	Ponderosa pine-Douglas-fir/bluebunch wheatgrass	PIPO-PSME/PSSPS
CDS632	Douglas-fir/mountain snowberry	PSME/SYOR2
CDS633	Douglas-fir/common snowberry	PSME/SYAL
CDS715	Douglas-fir/mallow ninebark	PSME/PHMA5
CDS716	Douglas-fir/mallow ninebark/longtube twinflower	PSME/PHMA5/LIBOL2
CDS813	Douglas-fir/dwarf bilberry	PSME/VACA13
CDS814	Douglas-fir/thinleaf huckleberry	PSME/VAME
CEF111	Subalpine fir/common beargrass	ABLA/XETE
CEF211	Subalpine fir/longtube twinflower	ABLA/LIBOL2
CEF421	Subalpine fir/bride's bonnet	ABLA/CLUN2
CEF422	Subalpine fir/Carolina bugbane	ABLA/TRCA
CEF423	Subalpine fir/bunchberry dogwood	ABLA/COCA13
CEG311	Subalpine fir/pinegrass	ABLA/CARU
CEM211	Engelmann spruce/field horsetail	PIEN/EQAR
CES210	Subalpine fir/Cascade azalea/common beargrass	ABLA/RHAL2/XETE
CES211	Subalpine fir/Cascade azalea	ABLA/RHAL2
CES313	Subalpine fir/thinleaf huckleberry	ABLA/VAME

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CES412	Subalpine fir/grouse whortleberry	ABLA/VASC
CES422	Subalpine fir/dwarf bilberry	ABLA/VACA13
CHF311	Western hemlock/bride's bonnet	TSHE/CLUN2
CHF312	Western hemlock/wild sarsaparilla	TSHE/ARNU2
CHF422	Western hemlock/Pacific oakfern	TSHE/GYDI2
CHF521	Western hemlock/common beargrass	TSHE/XETE
CHS411	Western hemlock/strawberryloaf raspberry	TSHE/RUPE
CHS711	Western hemlock/rusty menziesia	TSHE/MEFE
CLS521	Lodgepole pine/russet buffaloberry	PICO/SHCA
CWS214	Grand fir/thinleaf huckleberry/bride's bonnet (Colville)	ABGR/VAME/CLUN2
CWS421	Grand fir/mallow ninebark	ABGR/PHMA5
CWS422	Grand fir/Douglas maple/bride's bonnet	ABGR/ACGLD4/CLUN2
CWS821	Grand fir/dwarf bilberry	ABGR/VACA13
HQG111	Quaking aspen/pinegrass	POTR5/CARU
HQG211	Quaking aspen/common snowberry	POTR5/SYAL

Table 38: Reference Code 628

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDG112	Douglas-fir/pinegrass	PSME/CARU
CDG331	Douglas-fir/bluebunch wheatgrass	PSME/PSSPS
CDG511	Douglas-fir/creeping barberry	PSME/MARE11
CDS7	Douglas-fir/mallow ninebark	PSME/PHMA5
CES311	Subalpine fir/thinleaf huckleberry	ABLA/VAME
CES411	Subalpine fir/grouse huckleberry	ABLA/VASC
CLS415	Lodgepole pine/grouse whortleberry	PICO/VASC

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLS416	Lodgepole pine/pinegrass	PICO/CARU
CLS515	Lodgepole pine/thinleaf huckleberry	PICO/CAME
GSXX	Grasslands (alpine xeric)	2GRAM
HQ	Quaking aspen	POTR5
MS20	Meadow, subalpine	N/A
MS2111	Black alpine sedge	CANI2
NA	Avalanche paths, sparsely to non-vegetated	N/A
NCA1	Whitebark pine-subalpine fir	PIAL-ABLA
NRA0	Rocky land in alpine or subalpine locations	N/A
SD21	Big sagebrush	ARTR2
SM21	Sitka alder	ALVIS
SS1911	Pink mountainheath	PHEM

Table 39: Reference Code 631

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CCF222	Western red cedar/wild sarsparilla	THPL/ARNU2
CCF231	Western red cedar/twinflower	THPL/LIBO3
CCR232	Western red cedar/oakfern	THPL/GYDR
CDG122	Douglas-fir/pinegrass-kinnikinnick	PSME/CARU-ARUV
CDG131	Douglas-fir/pinegrass	PSME/CARU
CDG332	Douglas-fir/Idaho fescue	PSME/FEID
CDS611	Douglas-fir/oceanspray	PSME/HODI
CDS627	Douglas-fir/common snowberry	PSME/SYAL
CDS635	Douglas-fir/white spirea	PSME/SPBE2
CDS715	Douglas-fir/mallow ninebark-heartleaf arnica	PSME/PHMA5-ARCO9
CDS716	Douglas-fir/mallow ninebark-Oregon boxleaf	PSME/PHMA5-PAMY

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEF211	Subalpine fir/twinflower	ABLA/LIBO3
CEF441	Subalpine fir/oakfern	ABLA/GYRD
CEG311	Subalpine fir/pinegrass	ABLA/CARU
CES111	Subalpine fir/Oregon boxleaf	ABLA/PAMY
CES151	Subalpine fir-whitebark pine/bearberry	ABLA-PAIL/ARUV
CES211	Subalpine fir/Cascade azalea	ABLA/RHAL2
CES312	Subalpine fir/blueberry	ABLA/VACCI
CES611	Subalpine fir/pink mountain heath	ABLA/PHEM
CPG121	Ponderosa pine/bluebunch wheatgrass	PIPO/PSSPS
CPG122	Ponderosa pine/Idaho fescue	PIPO/FEID
CPS227	Ponderosa pine/antelope bitterbrush-Indian ricegrass	PIPO/PUTR2-ACHY
CPS228	Ponderosa pine/antelope bitterbrush-bluebunch wheatgrass	PIPO/PUTR2-PSSPS
CPS229	Ponderosa pine/antelope bitterbrush-Idaho fescue	PIPO/PUTR2-FEID
CPS521	Ponderosa pine/common snowberry	PIPO/SYAL
CWC812	Grand fir/twinflower/Pacific yew	ABGR/LIBO3/TABR2
CWF313	Grand fir/twinflower	ABGR/LIBO3
CWF551	White fir/drops-of-gold	ABGR/PRHOH

Table 40: Reference Code 632

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAG1	Park	N/A
CCF121	Western red cedar/common ladyfern	THPL/ATFI
CCS211	Western red cedar/devilsclub	THPL/OPHO
CCS321	Western red cedar/Oregon boxleaf	THPL/PAMY

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDG121	Douglas-fir/pinegrass	PSME/CARU
CDG122	Douglas-fir/pinegrass-kinnikinnick	PSME/CARU-ARUV
CDS627	Douglas-fir/mallow ninebark	PSME/PHMA5
CEF111	Subalpine fir/common beargrass	ABLA/XETE
CEF121	Subalpine fir/Oregon boxleaf	ABLA/PAMY
CES231	Subalpine fir/rusty menziesia	ABLA/MEFE
CES421	Subalpine fir/grouse whortleberry	ABLA/VASC
CMF121	Mountain hemlock/common beargrass	TSME/XETE
CMS220	Mountain hemlock/rusty menziesia	TSME/MEFE
CPG121	Ponderosa pine/bluebunch wheatgrass	PIPO/PSSPS
CPG122	Ponderosa pine/Idaho fescue	PIPO/FEID
CPG123	Ponderosa pine/western needlegrass	PIPO/ACOCO
CPS227	Ponderosa pine/antelope bitterbrush	PIPO/PUTR2
CPS521	Ponderosa pine/common snowberry	PIPO/SYAL
CPS721	Ponderosa pine/mallow ninebark	PIPO/PHMA5
CWS722	Grand fir/Oregon boxleaf	ABGR/PAMY
HCS1	Black cottonwood	POBAT
NCA1	Whitebark pine-subalpine fir	PIAL-ABLA
SM8111	Sitka alder (scrub)	ALVIS

Table 41: Reference Code 634

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLS811	Lodgepole pine/salal-California huckleberry/sedge (deflation plain)	PICO/GASH-VAOV2/CAREX
CLS812	Lodgepole pine/rhododendron/California huckleberry (floodplain, dune)	PICO/RHODO/VAOV2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLS821	Lodgepole pine/rhododendron/California huckleberry (stabilized dune)	PICO/RHODO/VAOV2
CLS822	Lodgepole pine/rhododendron/California huckleberry (eroding dune)	PICO/RHODO/VAOV2
CLS823	Lodgepole pine/rhododendron/California huckleberry (dune slipface)	PICO/RHODO/VAOV2
CLS931	Lodgepole pine/kinnikinnick-hairy manzanita (rolling dune, open)	PICO/ARUV-ARCO3
CSS411	Sitka spruce-Douglas-fir/rhododendron-California huckleberry (stabilized dune)	PISI-PSME/RHODO-VAOV2
CSS412	Sitka spruce-lodgepole pine-western hemlock/rhododendron (flood plain)	PISI-PICO-TSHE/RHODO
CSS421	Sitka spruce-Douglas-fir/rhododendron-California huckleberry (sandy, steep)	PISI-PSME/RHODO-VAOV2
CSS422	Sitka spruce-Douglas-fir/rhododendron-California huckleberry (sandy, gentle)	PISI-PSME/RHODO-VAOV2
GR8111	Beachgrass (foredune)	AMMOP
GR8211	Beachgrass/lupine/bluegrass (hummocks, occasionally wet, dense)	AMMOP/LUPIN/POA
GR8212	Beachgrass/lupine (hummocks, occasionally wet, unstable, open)	AMMOP/LUPIN
GR8213	Beachgrass (dune slip face, stabilized)	AMMOP
MMB8	Slough sedge-rush-red fescue (deflation plain potholes/slough)	CAOB3-JUNCU-FERU2
MT8111	Cattail-bulrush/waterlily-waterweed	TYPHA-SCIRP/NYMPH- ELODE
MW8111	Slough sedge/American skunk cabbage-red currant (valley fill)	CAOB3/LYAM3-RITR
MW8112	Slough sedge/waterlily-pondweed-cattail	CAOB3/NYMPH-POTAM- TYPHA
NSN111	Pacific coast beach	N/A
NSN211	Transverse ridge, occasionally wet, winter stable	N/A

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
NSN212	Transverse ridge, dry, moving sand	N/A
NSN311	Oblique ridge, fore slope, moving sand	N/A
NSN312	Oblique ridge, precipitation ridge, active sand	N/A
NSN312	Oblique ridge, precipitation ridge, active, threat, veget	N/A
SW8111	Shrub (deflation plain, high water)	2SHRUB
SW8112	Salal-oval-leaf blueberry-willow (deflation plain, high water)	GASH-VAOV-SALIX
WE1311	Bar built, well mixed saline, active flood plain	N/A

Table 42: Reference Code 635

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDC511	Ponderosa pine-Douglas-fir/antelope bitterbrush-snowbrush ceanothus	PIPO-PSME/PUTR2-CEVE
CDC512	Ponderosa pine-Douglas-fir/snowberry	PIPO-PSME/SYMPH
CFF141	Pacific silver fir/bride's bonnet	ABAM/CLUN2
CFF321	Pacific silver fir/common beargrass	ABAM/XETE
CHF531	Western hemlock/common beargrass	TSHE/XETE
CHS211	Western hemlock/vine maple	TSHE/ACCI
CHS329	Western hemlock/Pacific rhododendron	TSHE/RHMA3
CMC311	Mountain hemlock-lodgepole pine/pinemat manzanita	TSME-PICO/ARNE
CMC312	Mountain hemlock-lodgepole pine/grouse whortleberry	TSME-PICO/VASC
CMC313	Mountain hemlock-lodgepole pine-subalpine fir	TSME-PICO-ABLA
CMF111	Mountain hemlock/common beargrass	TSME/XETE
CPC611	Ponderosa pine-Douglas-fir/old man's whiskers-mule-ears (Mutton)	PIPO-PSME/GETR-WYAM

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CPC612	Ponderosa pine-Douglas-fir/antelope bitterbrush (Mutton)	PIPO-PSME/PUTR2
CPC613	Ponderosa pine-Douglas-fir/Greenleaf manzanita-snowbrush ceanothus (Mutton)	PIPO-PSME/ARPA6-CEVE
CPC614	Ponderosa pine-Douglas-fir/snowberry (Mutton)	PIPO-PSME/SYMPH
CPF121	Ponderosa pine/old man's whiskers-mule-ears	PIPO/GETR-WYAM
CPF131	Ponderosa pine/meadow	PIPO/MEADOW
CPS227	Ponderosa pine/antelope bitterbrush	PIPO/PUTR2
CPS228	Ponderosa pine/antelope bitterbrush-greenleaf manzanita	PIPO/PUTR2-ARPA6
CWS121	Mixed conifer/snowbrush ceanothus	2TE/CEVE
CWS213	Grand fir/thinleaf huckleberry	ABGR/VAME
CWS333	Grand fir/snowberry	ABGR/SYMPH
CWS334	Mixed conifer/snowberry/Geyer's sedge	2TE/SYMPH/CAGE2
CWS538	Grand fir/vine maple	ABGR/ACCI
CWS711	Grand fir/Oregon boxleaf	ABGR/PAMY
CWS712	Grand fir-lodgepole pine/Oregon boxleaf/pinegrass	ABGR-PICO/PAMY/CARU
DCC512	Mixed conifer/snowberry	2TE/SYMPH

Table 43: Reference Code 636

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS652	Douglas-fir/kinnikinnick	PSME/ARUV
CFC412	Alaska cedar/oval-leaf blueberry	CHNO/VAOV
CFF161	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF312	Pacific silver fir/common beargrass	ABAM/XETE
CFS151	Pacific silver fir/Cascade barberry	ABAM/MANE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS152	Pacific silver fir/salal	ABAM/GASH
CFS216	Pacific silver fir/oval-leaf blueberry-Cascade barberry	ABAM/VAOV-MANE2
CFS241	Pacific silver fir/oval-leaf blueberry	ABAM/VAOV
CFS242	Pacific silver fir/oval-leaf blueberry-strawberryleaf raspberry	ABAM/VAOV-RUPE
CFS321	Pacific silver fir/devilsclub	ABAM/OPHO
CFS411	Pacific silver fir/roughfruit berry	ABAM/RULA2
CFS541	Pacific silver fir/rusty menziesia	ABAM/MEFE
CFS550	Pacific silver fir/Cascade azalea	ABAM/RHAL2
CHF125	Western hemlock/western swordfern	TSHE/POMU
CHF221	Western hemlock/sweet after death	TSHE/ACTR
CHS128	Western hemlock/salal	TSHE/GASH
CHS514	Western hemlock/devilsclub	TSHE/OPHO

Table 44: Reference Code 638

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CCF221	Western redcedar/bride's bonnet	THPL/CLUN2
CDG131	Douglas-fir/pinegrass	PSME/CARU
CDS627	Douglas-fir/common snowberry	PSME/SYAL
CDS715	Douglas-fir/mallow ninebark	PSME/PHMA5
CHF311	Western hemlock/bride's bonnet	TSHE/CLUN2
CPG121	Ponderosa pine/bluebunch wheatgrass	PIPO/PSSPS
CPG122	Ponderosa pine/Idaho fescue	PIPO/FEID
CPG151	Ponderosa pine/needle-and-thread	PIPO/HECOC8
CPS227	Ponderosa pine/antelope bitterbrush	PIPO/PUTR2
CPS521	Ponderosa pine/common snowberry	PIPO/SYAL

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWF313	Grand fir/twinflower	ABGR/LIBO3

Table 45: Reference Code 639

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
AB	Buildings, structures, roads	N/A
ABA1	Heliport	N/A
ABA2	Runway, landing strip	N/A
ABA9	Aircraft facilities	N/A
ABC9	Campground, developed	N/A
ABP9	Parking area	N/A
ABR8	Road, boat launch area	N/A
ABS1	Rock and gravel storage area	N/A
ABS9	Open storage area	N/A
AC	Cultivated land	N/A
AD	Dump for trash, garbage, etc.	N/A
ADG9	Garbage dump	N/A
ADL9	Land fill, soil, gravel, and/or rock dump (sanitary)	N/A
ADT9	Trash dump, refuse dump	N/A
AG	Grassland, permanent pasture	N/A
AO	Orchards	N/A
AR	Recreation areas, parks, play areas, golf courses	N/A
AX	Administrative or agricultural	N/A
CA	Subalpine fir-mountain hemlock-whitebark pine (open parks)	ABLA-TSME-PIAL
CAC0	Subalpine fir-mountain hemlock-whitebark pine (open parks)	ABLA-TSME-PIAL

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAC1	Subalpine larch (Okanogan)	LALY
CAC111	Subalpine larch/western moss heather-partridgefoot	LALY/CAME7-LUPE
CAC112	Subalpine larch/eightpetal mountain avens	LALY/DROC
CAC113	Subalpine larch/common juniper	LALY/JUCO6
CAC114	Subalpine larch/Cascade bilberry-western moss heather	LALY/VADE-CAME7
CAC115	Subalpine larch/grouse whortleberry/Hitchcock's smooth woodrush	LALY/VASC/LUGLH
CAC2	Alaska cedar	CHNO
CAC3	Lodgepole pine dominant	PICO
CAC4	Whitebark pine dominant	PIAL
CAC5	Subalpine fir dominant	ABLA
CAC6	Mountain hemlock dominant	TSME
CAF0	Subalpine fir-hemlock-whitebark pine/form	ABLA-TSUGA-PIAL/2FORB
CAF1	Common beargrass (subalpine park)	XETE
CAF2	Poke knotweed (subalpine park)	POPH
CAF211	Mountain hemlock-subalpine fir/Davis' knotweed	TSME-ABLA/PODA
CAF311	Mountain hemlock-subalpine fir/Cascade aster	TSME-ABLA/EULEL2
CAF321	Whitebark pine/eightpetal mountain-avens	PIAL/DROC
CAG0	Subalpine fir-hemlock-whitebark pine/grass (open parks)	ABLA-TSUGA-PIAL/2GRAM
CAG1	Sedge (subalpine park)	CAREX
CAG111	Subalpine fir/Geyer's sedge	ABLA/CAGE2
CAG112	Whitebark pine/pinegrass	PIAL/CARU
CAG2	Greenleaf fescue (subalpine park)	FEVI

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAG211	Mountain hemlock-subalpine fir/greenleaf fescue	TSME-ABLA/FEVI
CAG221	Whitebark pine/Greenleaf fescue	PIAL/FEVI
CAG3	Woodrush (subalpine park)	LUZUL
CAG311	Mountain hemlock/Hitchcock's smooth woodrush	TSME/LUGLH
CAG312	Mountain hemlock-whitebark pine/Hitchcock's smooth woodrush	TSME-PIAL/LUGLH
CAG4	Western needlegrass (subalpine park)	ACOCO
CARR	Subalpine fir-whitebark pine (rocky)	ABLA-PIAL
CARS	Subalpine fir-whitebark pine (steep, rocky)	ABLA-PIAL
CARX	Subalpine fir-whitebark pine (rocky, parks, rough, steep)	ABLA-PIAL
CAS0	Subalpine fir-mountain hemlock-whitebark pine/shrub (open park)	ABLA-TSME-PIAL/2SHRUB
CAS1	Sagebrush (subalpine park)	ARTEM
CAS2	Mountain heather-heath (subalpine park)	CASSI3-ERICA
CAS211	Mountain heather/pink mountainheath-Cascade bilberry	TSME/PHEM-VADE
CAS221	Whitebark pine/western moss heather/partridgefoot	PIAL/CAME7/LUPE
CAS3	Grouse whortleberry (subalpine park)	VASC
CAS311	Whitebark pine/grouse whortleberry/Hitchcock's smooth woodrush	PIAL/VASC/JUCO6
CAS4	Common juniper-pinemat manzanita (subalpine park)	JUCO6/ARNE
CAS411	Mountain hemlock-subalpine fir/common juniper	TSME-ABLA/JUCO6
CAS421	Whitebark pine/common juniper	PIAL/JUCO6
CAXX	Mountain hemlock (subalpine parks)	TSME

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CC	Western red cedar	THPL
CCC0	Western red cedar-important conifers	THPL-2TE
CCC1	Western red cedar-Pacific yew	THPL-TABR2
CCC2	Western red cedar-western hemlock	THPL-TSHE
CCF0	Western red cedar/forb	THPL/2FORB
CCF1	Western red cedar/common ladyfern	THPL/ATFI
CCF110	Western red cedar/common ladyfern-coastal hedgenettle	THPL/ATFI-STCHC3
CCF121	Western red cedar/common ladyfern	THPL/ATFI
CCF211	Western red cedar/Pacific rhododendron/western twinflower	THPL/RHMA/LIBOL
CCF212	Western red cedar/sweet after death	THPL/ACTR
CCF221	Western red cedar/whipplevine/threeleaf anemone	THPL/WHMO/ANDE
CCF222	Western red cedar/wild sarsaparilla	THPL/ARNU2
CCFA	Western red cedar/bride's bonnet-low forb	THPL/CLUN2-2FORB
CCM0	Western red cedar (wetlands, moist to wet soil)	THPL
CCM1	Western red cedar/American skunk cabbage (wetlands)	THPL/LYAM3
CCM2	Western red cedar/sedge (wedland)	THPL/CAREX
CCM3	Western red cedar-lodgepole pine/Labrador tea	THPL-PICO/LEDUM
CCS0	Western red cedar/shrub	THPL/2SHRUB
CCS1	Western red cedar/salmonberry-thimbleberry	THPL/RUSP-RUPA
CCS110	Western red cedar/salmonberry-woodsorrel	THPL/RUSP-OXALI
CCS2	Western red cedar/devilsclub	THPL/OPHO
CCS211	Western red cedar/devilsclub	THPL/OPHO
CCS221	Western red cedar-grand fir/devilsclub	THPL-ABGR/OPHO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CCS3	Western red cedar/Oregon boxleaf-thinleaf huckleberry	THPL/PAMY-VAME
CCS311	Western red cedar/thinleaf huckleberry	THPL/VAME
CCS321	Western red cedar/Oregon boxleaf	THPL/PAMY
CCS4	Western red cedar/Sitka alder	THPL/ALVIS
CCS5	Western red cedar/salal-creeping barberry	THPL/GASH-MARE11
CD	Douglas-fir	PSME
CDC0	Douglas-fir with important conifers	PSME-2TE
CDC1	Douglas-fir/Port Orford cedar/Pacific yew	PSME-CHLA/TABR2
CDC2	Douglas-fir-sugar pine (S.W. Oregon)	PSME-PILA
CDC3	Douglas-fir-incense cedar (S.W. Oregon, Douglas-fir infertile)	PSME-CADE27
CDC4	Douglas-fir-white fir-grand fir	PSME-ABCO-ABGR
CDC412	Douglas-fir-white fir-ponderosa pine	PSME-ABCO-PIPO
CDC431	Douglas fir-white fir/creambush oceanspray	PSME-ABCO/HODI
CDC432	Douglas-fir-white fir/dwarf Oregon grape	PSME-ABCO/BENE
CDC5	Douglas-fir-ponderosa pine-Jeffrey pine (S. Oregon)	PSME-PIPO-PIJE
CDC511	Ponderosa pine-Douglas-fir/antelope bitterbrush-snowbrush ceanothus	PIPO-PSME/PUTR2-CEVE
CDC512	Ponderosa pine-Douglas-fir/snowberry	PIPO-PSME/SYMPH
CDC6	Douglas-fir-redwood	PSME-SESE3
CDC7	Douglas-fir-western hemlock	PSME-TSHE
CDC711	Douglas-fir-western hemlock/Cascade barberry	PSME-TSHE/MANE2
CDC712	Douglas-fir-western hemlock/Pacific rhododendron	PSME-TSHE/RHMA3
CDC713	Douglas-fir-western hemlock/salal	PSME-TSHE/GASH
CDF0	Douglas-fir/forb	PSME/2FORB

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDF1	Douglas-fir/common beargrass	PSME/XETE
CDF2	Douglas-fir/twinflower	PSME/LIBO3
CDF211	Douglas-fir/twinflower	PSME/LIBO3
CDF3	Douglas-fir/arnica-low forbs	PSME/ARNIC-2FORB
CDF311	Douglas-fir/heartleaf arnica	PSME/ARCO9
CDF312	Douglas-fir/sweetroot	PSME/OSMOR
CDF4	Douglas-fir/forb (medium-tall)	PSME/2FORB
CDF411	Douglas-fir/bush penstemon	PSME/PEFR3
CDF911	Douglas-fir/depauperate	PSME/DEPAUPERATE
CDG0	Douglas-fir/grass	PSME/2GRAM
CDG1	Douglas-fir/pinegrass-Geyer's sedge	PSME/CARU-CAGE2
CDG111	Douglas-fir/Geyer's sedge (Blue Mountains)	PSME/CAGE2
CDG112	Douglas-fir/pinegrass (Blue Mountains)	PSME/CARU
CDG113	Douglas-fir/pinegrass (Idaho)	PSME/CARU
CDG121	Douglas-fir/pinegrass	PSME/CARU
CDG122	Douglas-fir/pinegrass-kinnikinnick	PSME/CARU-ARUV
CDG123	Douglas-fir/kinnikinnick (Okanogan)	PSME/ARUV
CDG131	Douglas-fir/pinegrass (Okanogan and colville)	PSME/CARU
CDG132	Douglas-fir/Geyer's sedge (Wenatchee)	PSME/CAGE2
CDG134	Douglas-fir/pinegrass-bluebunch wheatgrass	PSME/CARU-PSSPS
CDC141	Douglas-fir/Geyer's sedge	PSME/CAGE2
CDC142	Douglas-fir/Geyer's sedge (Idaho)	PSME/CAGE2
CDG2	Douglas-fir/blue wildrye	PSME/ELGL
CDG3	Douglas-fir/bunchgrass	PSME/2GRAM
CDG311	Ponderosa pine-Douglas-fir/bluebunch wheatgrass	PIPO-PSME/PSSPS

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDG321	Douglas-fir/western fescue	PSME/FEOC
CDG322	Douglas-fir/bluebunch wheatgrass (Wenatchee)	PSME/PSSPS
CDG323	Douglas-fir/bluebunch wheatgrass-Indian's dream	PSME/PSSPS-ASDE6
CDG331	Douglas-fir/bluebunch wheatgrass	PSME/PSSPS
CDG332	Douglas-fir/Idaho fescue	PSME/FEID
CDG8	Douglas-fir/subalpine sedge	PSME/CAREX
CDH0	Douglas-fir-important hardwoods	PSME-2TD
CDH1	Douglas-fir/tanoak	PSME/LIDE3
CDH111	Douglas-fir-tanoal/salal	PSME-LIDE2/GASH
CDH112	Douglas-fir/Pacific rhododendron	PSME/RHMA
CDH121	Douglas-fir-tanoak-sugar pine	PSME-LIDE3-PILA
CDH131	Douglas-fir-tanoak	PSME-LIDE3
CDH141	Douglas-fir-tanoak-canyon live oak	PSME-LIDE3-QUCH
CDH142	Douglas-fir-tanoak/poison oak	PSME-LIDE3/RHDI
CDH2	Douglas-fir/Pacific mandrone	PSME/ARME
CDH3	Douglas-fir/Oregon white oak	PSME/QUGA4
CDH311	Douglas-fir-Oregon white oak/poison oak	PSME-QUGA4/RHDE
CDH4	Douglas-fir/bigleaf maple	PSME/ACMA3
CDH5	Douglas-fir/chinquapin-canyon live oak	PSME/CHRY15-QUCH2
CDH6	Douglas-fir/California laurel-California buckthorn	PSME/UMCA-FRCA12
CDRR	Douglas-fir (rocky)	PSME
CDRS	Douglas-fir (steep, with little ground vegetation)	PSME
CDRX	Douglas-fir (rocky, steep with little ground vegetation)	PSME

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS0	Douglas-fir/kinnikinnick	PSME/ARUV
CDS1	Douglas-fir/canyon live oak-Pacific poison oak-rose	PSME/QUCH2-TODI-ROSA5
CDS111	Douglas-fir/poison oak-Piper's Oregon grape	PSME/RHDI-BEPI
CDS112	Douglas-fir/poison oak	PSME/RHDI
CDS151	Douglas-fir/oceanspray	PSME/HODI
CDS2	Douglas-fir/oceanspray-vine maple	PSME/HODI-ACCI
CDS211	Douglas-fir/oceanspray-Cascade barberry	PSME/HODI-MANE2
CDS212	Douglas-fir/oceanspray/grass	PSME/HODI/2GRAM
CDS213	Douglas-fir/oceanspray-common whipplea	PSME/HODI-WHMO
CDS221	Douglas-fir/oceanspray-dwarf rose	PSME/HODI-ROGY
CDS231	Douglas-fir/oceanspray/Geyer's sedge	PSME/HODI/CAGE2
CDS241	Douglas-fir/vine maple/western fescue	PSME/ACCI/FEOC
CDS252	Douglas-fir/vine maple/salal	PSME/ACCI/GASH
CDS253	Douglas-fir/vine maple/Cascade barberry	PSME/ACCI/MANE2
CDS254	Douglas-fir/vine maple/common whipplea	PSME/ACCI-WHMO
CDS255	Douglas-fir/salal	PSME/GASH
CDS3	Douglas-fir/rhododendron-hazelnut-dogwood	PSME/RHODO-CORYL-CORNU
CDS311	Douglas-fir-western hemlock/California hazelnut (steep, shallow soil)	PSME-TSHE/COCOC
CDS4	Douglas-fir/ceanothus-manzanita-Oregon boxleaf	PSME/CEANO-ARCT03-PAMY
CDS411	Douglas-fir/Oregon boxleaf (Okanogan)	PSME/PAMY
CDS412	Douglas-fir/Oregon boxleaf/pinegrass	PSME/PAMY/CARU
CDS421	Douglas-fir/buckbrush	PSME/CECU
CDS5	Douglas-fir/salal-creeping barberry	PSME/GASH-MARE11

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS511	Douglas-fir/creeping barberry	PSME/MARE11
CDS512	Douglas-fir/dwarf Oregon grape/western sword-fern	PSME/BENE/POMU
CDS531	Douglas-fir/salal/western sword-fern	PSME/GASH/POMU
CDS6	Douglas-fir/spirea-common snowberry-kinnikinnick	PSME/SPIRA-SYAL-ARUV
CDS611	Douglas-fir/oceanspray	PSME/HODI
CDS612	Douglas-fir-white fir/common snowberry/twinflower	PSME-ABCO/SYAL/LIBO3
CDS613	Douglas-fir-white fir/common snowberry/forb	PSME-ABCO/SYAL/2FORB
CDS614	Douglas-fir-white fir/common snowberry/pinegrass	PSME-ABCO/SYAL/CARU
CDS621	Douglas-fir/common snowberry (same as CDS633)	PSME/SYAL
CDS622	Douglas-fir/common snowberry (Wallowa)	PSME/SYAL
CDS623	Douglas-fir/mountain snowberry (Wallowa)	PSME/SYOR2
CDS624	Douglas-fir/common snowberry (Blue Mountains)	PSME/SYAL
CDS625	Douglas-fir/mountain snowberry (Blue Mountains)	PSME/SYOR2
CDS626	Douglas-fir/mountain snowberry (Idaho)	PSME/SYOR2
CDS627	Douglas-fir/common snowberry (Idaho)	PSME/SYAL
CDS628	Douglas-fir/common snowberry (floodplain)	PSME/SYAL
CDS631	Douglas-fir/kinnikinnick-antelope bitterbrush	PSME/ARUV-PUTR2
CDS632	Douglas-fir/mountain snowberry (Okanogan and Colville)	PSME/SYOR
CDS633	Douglas-fir/common snowberry	PSME/SYAL
CDS634	Douglas-fir/white spirea	PSME/SPBE2
CDS635	Douglas-fir/white spirea (Idaho)	PSME/SPBE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS636	Douglas-fir/common snowberry (Wenatchee)	PSME/SYAL
CDS637	Douglas-fir/common snowberry/bluebunch wheatgrass	PSME/SYAL/PSSPS
CDS638	Douglas-fir/common snowberry/pinegrass	PSME/SYAL/CARU
CDS639	Douglas-fir/shinyleaf spirea/pinegrass	PSME/SPBEL/CARU
CDS640	Douglas-fir/shinyleaf spirea	PSME/SPBEL
CDS641	Douglas-fir/creeping snowberry	PSME/SYMO
CDS651	Douglas-fir/kinnikinnick	PSME/ARUV
CDS652	Douglas-fir/kinnikinnick (Mt. Rainier)	PSME/ARUV
CDS653	Douglas-fir/kinnikinnick (Wenatchee)	PSME/ARUV
CDS654	Douglas-fir/kinnikinnick-antelope bitterbrush	PSME/ARUV-PUTR2
CDS655	Douglas-fir/kinnikinnick/pinegrass	PSME/ARUV/SYAL
CDS661	Douglas-fir/common snowberry (Mt. Hood)	PSME/SYAL
CDS662	Douglas-fir/pinemat manzanita	PSME/ARNE
CDS671	Douglas-fir/common juniper	PSME/JUCO6
CDS672	Douglas-fir/curl-leaf mountain mahogany	PSME/CELE3
CDS673	Douglas-fir/antelope bitterbrush	PSME/PUTR2
CDS674	Douglas-fir/antelope bitterbrush/bluebunch wheatgrass	PSME/PUTR2/PSSPS
CDS675	Douglas-fir/antelope bitterbrush/pinegrass	PSME/PUTR2/CARU
CDS7	Douglas-fir/mallow ninebark	PSME/PHMA5
CDS711	Douglas-fir/mallow ninebark (Blue Mountains)	PSME/PHMA5
CDS715	Douglas-fir/mallow ninebark (Okanogan and Colville)	PSME/PHMA5
CDS716	Douglas-fir/mallow ninebark/longtube twinflower	PSME/PHMA5/LIBOL2
CDS717	Douglas-fir/mallow ninebark (Idaho)	PSME/PHMA5

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS721	Douglas-fir/mallow ninebark (Daubenmier)	PSME/PHMA5
CDS722	Douglas-fir/Rocky Mountain maple-mallow ninebark	PSME/ACGL-PHMA5
CDS723	Douglas-fir/Rocky Mountain maple	PSME/ACGL
CDS724	Douglas-fir/Rocky Mountain maple (floodplain)	PSME/ACGL
CDS8	Douglas-fir/blueberry	PSME/VACCI
CDS811	Douglas-fir/blueberry	PSME/VACCI
CDS812	Douglas-fir/thinleaf huckleberry	PSME/VAME
CDS813	Douglas-fir/dwarf bilberry (Colville)	PSME/VACA13
CDS814	Douglas-fir/thinleaf huckleberry (Colville)	PSME/VAME
CDS815	Douglas-fir/dwarf bilberry	PSME/VACA13
CDS821	Douglas-fir/thinleaf huckleberry (Blue Mountains)	PSME/VAME
CDS822	Douglas-fir/thinleaf huckleberry	PSME/VAME
CDS831	Douglas-fir/dwarf bilberry	PSME/VACA13
CDS832	Douglas-fir/velvetleaf huckleberry (Wenatchee)	PSME/VAMY
CDS833	Douglas-fir/velvetleaf huckleberry/pinegrass	PSME/VAMY/CARU
CDSD	Douglas-fir/shrub (dry)	PSME/2SHRUB
CE	Subalpine fir-Engelmann spruce (closed forest)	ABLA-PIEN
CEC0	Subalpine fir-Engelmann spruce-associated conifers	ABLA-PIEN-2TE
CEC1	Subalpine fir-lodgepole pine	ABLA-PICO
CEC2	Engelmann spruce-fir	PINE-ABIES
CEF0	Subalpine fir-spruce/forbs	ABLA-PICEA/2FORB
CEF1	Subalpine fir-spruce/common beargrass	ABLA-PICEA/XETE
CEF111	Subalpine fir/common beargrass	ABLA/XETE
CEF2	Subalpine fir-spruce/twinflower	ABLA-PICEA/LIBO3

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEF211	Subalpine fir/twinflower (Okanogan and Colville)	ABLA/LIBO3
CEF221	Subalpine fir/twinflower	ABLA/LIBO3
CEF222	Subalpine fir/twinflower (Wenatchee)	ABLA/LIBO3
CEF231	Subalpine fir/twinflower (Idaho)	ABLA/LIBO3
CEF3	Subalpine fir-spruce/tall forb	ABLA-PICEA/2FORB
CEF311	Subalpine fir/claspleaf twistedstalk	ABLA/STAM2
CEF321	Subalpine fir/broadleaf lupine	ABLA/LULA4
CEF331	Subalpine fir/Carolina bugbane (Blue Mountains)	ABLA/TRCA
CEF332	Subalpine fir/common ladyfern	ABLA/ATFI
CEF333	Subalpine fir/arrowleaf ragwort	ABLA/SETR
CEF334	Engelmann spruce/common ladyfern	PIEN/ATFI
CEF335	Engelmann spruce/arrowleaf ragwort	PIEN/SETR
CEF341	Subalpine fir/Sitka valerian	ABLA/VASI
CEF4	Subalpine fir/forb (short)	ABLA/2FORB
CEF411	Subalpine fir/Jacob's-ladder	ABLA/POPU3
CEF421	Subalpine fir/bride's bonnet (Rocky Mountains)	ABLA/CLUN2
CEF422	Subalpine fir/Carolina bugbane	ABLA/TRCA
CEF423	Subalpine fir/bunchberry dogwood	ABLA/COCA13
CEF424	Subalpine fir/broadleaf arnica-Jacob's-ladder	ABLA/ARLA8-POPU3
CEF431	Subalpine fir/hypnum moss	ABLA/HYPAP
CEF432	Subalpine fir/Howell's marsh marigold	ABLA/CALEH2
CEF433	Subalpine fir/claspleaf twistedstalk (Rocky Mountains)	ABLA/STAM2
CEF434	Subalpine fir/Oregon goldthread	ABLA/COLA3
CEF435	Subalpine fir/heartleaf arnica	ABLA/ARCO9

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEFM	Subalpine fir/forb (mesic)	ABLA/2FORB
CEFW	Subalpine fir/forb (wet)	ABLA/2FORB
CEG0	Subalpine fir-spruce/grass	ABLA-PICEA/2GRAM
CEG1	Subalpine fir-spruce/woodrush	ABLA-PICEA/LUZUL
CEG111	Subalpine fir/Hitchcock's smooth woodrush	ABLA/LUGLH
CEG121	Subalpine fir/Hitchcock's smooth woodrush (Wenatchee)	ABLA/LUGLH
CEG2	Subalpine fir-spruce/sedge	ABLA-PICEA/CAREX
CEG211	Subalpine fir/Geyer's sedge	ABLA/CAGE2
CEG3	Subalpine fir-spruce/grass	ABLA-PICEA/2GRAM
CEG310	Subalpine fir/pinegrass (Wenatchee)	ABLA/CARU
CEG311	Subalpine fir/pinegrass (Okanogan and Colville)	ABLA/CARU
CEG312	Subalpine fir/pinegrass	ABLA/CARU
CEG321	Subalpine fir/pinegrass (Idaho)	ABLA/CARU
CEG322	Subalpine fir/bluejoint	ABLA/CACA4
CEM0	Subalpine fir-Engelmann spruce (wetlands)	ABLA-PIEN
CEM1	Subalpine fir-Engelmann spruce/grass-sedge (wetlands)	ABLA-PIEN/2GRAM-CAREX
CEM111	Engelmann spruce/widefruit sedge	PIEN/CAAN15
CEM121	Engelmann spruce/softleaf sedge	PIEN/CADI6
CEM2	Subalpine fir-Engelmann spruce/forb (wetlands)	ABLA-PIEN/2FORB
CEM211	Engelmann spruce/field horsetail	PIEN/EQAR
CEM212	Engelmann spruce/field horsetail (Idaho)	PIEN/EQAR
CEM213	Engelmann spruce/frAGRANT bedstraw	PIEN/GATR3
CEM221	Engelmann spruce/field horsetail-twistedstalk	PIEN/EQAR-STREP3
CEM222	Engelmann spruce/bride's bonnet	PIEN/CLUN2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEM3	Subalpine fir-Engelmann spruce/shrub (short, wetlands)	ABLA-PIEN/2SHRUB
CEM311	Engelmann spruce/bog blueberry/forb	PIEN/VAUL/2FORB
CEM312	Engelmann spruce/bog blueberry/widefruit sedge	PIEN/VAUL/CAAN15
CERR	Subalpine fir (rocky with little ground vegetation)	ABLA
CERS	Subalpine fir (steep with little ground vegetation)	ABLA
CERX	Subalpine fir (rocky, steep with little ground vegetation)	ABLA
CES0	Subalpine fir-spruce/shrub	ABLA-PICEA/2SHRUB
CES1	Subalpine fir-spruce/Oregon boxleaf	ABLA-PICEA/PAMY
CES111	Subalpine fir/Oregon boxleaf (Okanogan)	ABLA/PAMY
CES112	Subalpine fir/Oregon boxleaf/pinegrass	ABLA/PAMY/CARU
CES113	Subalpine fir/Oregon boxleaf (Wenatchee)	ABLA/PAMY
CES121	Subalpine fir/Oregon boxleaf (Daubenmeir)	ABLA/PAMY
CES131	Subalpine fir/bride's bonnet	ABLA/CLUN2
CES141	Subalpine fir/Douglas maple	ABLA/ACGLD4
CES142	Subalpine fir/Sitka alder	ABLA/ALVIS
CES143	Subalpine fir/white spirea	ABLA/SPBE2
CES2	Subalpine fir-spruce/rusty menziesia-rhododendron	ABLA-PICEA/MEFE-RHODO
CES210	Subalpine fir/Cascade azalea/common beargrass	ABLA/RHAL2/XETE
CES211	Subalpine fir/Cascade azalea	ABLA/RHAL2
CES212	Subalpine fir/Cascade azalea (Olympic)	ABLA/RHAL2
CES213	Subalpine fir/Cascade azalea/Hitchcock's smooth woodrush	ABLA/RHAL2/LUGLH

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CES221	Subalpine fir/rusty menziesia	ABLA/MEFE
CES231	Subalpine fir/rusty menziesia (Idaho)	ABLA/MEFE
CES232	Subalpine fir/gooseberry currant	ABLA/RIMO2
CES3	Subalpine fir-spruce/thinleaf huckleberry	ABLA-PICEA/VAME
CES311	Subalpine fir/thinleaf huckleberry (Blue Mountains)	ABLA/VAME
CES312	Subalpine fir/blueberry	ABLA/VACCI
CES313	Subalpine fir/thinleaf huckleberry (Colville)	ABLA/VAME
CES314	Subalpine fir/bride's bonnet (Blue Mountains)	ABLA/CLUN2
CES315	Subalpine fir/thinleaf huckleberry (Wallowa)	ABLA/VAME
CES321	Subalpine fir/thinleaf huckleberry (Olympic)	ABLA/VAME
CES331	Subalpine fir/thinleaf huckleberry	ABLA/VAME
CES341	Subalpine fir/Cascade bilberry	ABLA/VADE
CES342	Subalpine fir/thinleaf huckleberry (Wenatchee)	ABLA/VAME
CES4	Subalpine fir-spruce/grouse whortleberry-pinemat manzanita	ABLA-PICEA/VASC-ARNE
CES411	Subalpine fir/grouse whortleberry (Blue Mountains)	ABLA/VASC
CES412	Subalpine fir/grouse whortleberry (Okanogan and Colville)	ABLA/VASC
CES413	Subalpine fir/grouse whortleberry/pinegrass (Okanogan)	ABLA/VASC/CARU
CES414	Subalpine fir/twinflower	ABLA/LIBO3
CES415	Subalpine fir/grouse whortleberry/Jacob's ladder	ABLA/VASC/POPU3
CES421	Subalpine fir/grouse whortleberry (Daubenmeir)	ABLA/CASC
CES422	Subalpine fir/dwarf bilberry	ABLA/VACA13
CES423	Subalpine fir/roughfruit berry	ABLA/RULA2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CES424	subalpine fir/grouse whortleberry/broadleaf arnica	ABLA/VASC/ARLA8
CES425	Subalpine fir/grouse whortleberry/Hitchcock's smooth woodrush	ABLA/VASC/LUGHL
CES426	Subalpine fir/grouse whortleberry (Wenatchee)	ABLA/VASC
CES5	Subalpine fir/snowberry-dogwood	ABLA/SYMPH-CORNU
CES511	Engelmann spruce/redosier dogwood	PIEN/COSES
CES6	Subalpine fir-spruce/mountainheath-laborador tea	ABLA-PICEA/PHYLL2-LEDUM
CES611	Subalpine fir/pink mountainheath	ABLA/PHEM
CES621	Subalpine fir/common juniper	ABLA/JUCO6
CES631	Subalpine fir/common juniper (Idaho)	ABLA/JUCO6
CES7	Subalpine fir-spruce/devilsclub	ABLA-PICEA/OPHO
CEX104	Malheur (04) 2A: slope less 30%	N/A
CEX204	Malheur (04) 2B: slope 30-70%	N/A
CF	Pacific silver fir-noble fir	ABAM-ABPR
CFC0	Pacific silver fir-noble fir-associated conifers	ABAM-ABPR-2TE
CFC1	Pacific silver fir-mountain hemlock	ABAM-TSME
CFC151	Pacific silver fir-mountain hemlock/common beargrass	ABAM-TSME/XETE
CFC2	Pacific silver fir-western hemlock	ABAM-TSHE
CFC251	Pacific silver fir-western hemlock/Pacific rhododendron-salal	ABAM-TSHE/RHMA3-GASH
CFC261	Pacific silver fir-western hemlock/queen's cup	ABAM-TSHE/CLUN
CFC3	Pacific silver fir-white fir-grand fir	ABAM-ABCO-ABGR
CFC311	Pacific silver fir-grand fir/starry false lily of the valley	ABAM-ABGR/MAST4
CFC4	Pacific silver fir-Alaska cedar (Alaska cedar dominant)	ABAM-CHNO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFC411	Pacific silver fir-Alaska cedar/oval-leaf blueberry	ABAM-CHNO/VAOV
CFC412	Alaska cedar/oval-leaf blueberry	CHNO/VAOV
CFF0	Pacific silver fir-noble fir/forbs	ABAM-ABPR/2FORB
CFF1	Pacific silver fir-noble fir/woodsorrel-twistedstalk-foamflower-bluebead	ABAM-ABPR/OXALI-STREP3-TIARE-CLINT
CFF111	Pacific silver fir/redwood-sorrel (Olympic)	ABAM/OXOR
CFF141	Pacific silver fir/bride's bonnet (Warm Springs)	ABAM/CLUN2
CFF151	Pacific silver fir/bride's bonnet	ABAM/CLUN2
CFF152	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF153	Pacific silver fir/redwood-sorrel	ABAM/OXOR
CFF154	Pacific silver fir/oneleaf foamflower-twistedstalk	ABAM/TITRU-STLAR
CFF161	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF162	Pacific silver fir/oneleaf foamflower	ABAM/TITRU
CFF2	Pacific silver fir-noble fir/sweet after death	ABAM-ABPR/ACTR
CFF211	Pacific silver fir/sweet after death-oneleaf foamflower	ABAM/ACTR-TITRU
CFF250	Pacific silver fir/sweet after death (Mt. Baker-Snoqualmie)	ABAM/ACTR
CFF251	Noble fir/sweet after death	ABPR/ACTR
CFF252	Pacific silver fir/sweet after death	ABAM/ACTR
CFF253	Pacific silver fir/sweet after death-bride's bonnet	ABAM/ACTR-CLUN2
CFF254	Pacific silver fir/sweet after death (Wenatchee)	ABAM/ACTR
CFF3	Pacific silver fir-noble fir/common beargrass	ABAM-ABPR/XETE
CFF311	Pacific silver fir/common beargrass (Olympic)	ABAM/XETE
CFF312	Pacific silver fir/common beargrass (Mt. Baker)	ABAM/XETE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFF321	Pacific silver fir/common beargrass (Warm Springs)	ABAM/XETE
CFF4	Pacific silver fir-noble fir/blue windflower-wildginger-wintergreen	ABAM-ABPR/ANOR-ASARU-PYROL
CFF450	Pacific silver fir/strawberryleaf raspberry-deer fern	ABAM/RUPE-BLSP
CFF5	Pacific silver fir-noble fir/twinflower	ABAM-ABPR/LIBO3
CFF6	Pacific silver fir-noble fir/western swordfern	ABAM-ABPR/POMU
CFF611	Pacific silver fir/western swordfern	ABAM/POMU
CFF612	Pacific silver fir/western swordfern-redwood-sorrel	ABAM/POMU-OXOR
CFF911	Pacific silver fir (depauperate)	ABAM
CFFM	Pacific silver fir/forb (mesic)	ABAM/2FORB
CFFS	Pacific silver fir/forb-shrub	ABAM/2FORB-2SHRUB
CFG0	Pacific silver fir/grass	ABAM/2GRAM
CFM0	Pacific silver fir-noble fir (wetlands)	ABAM-ABPR
CFM1	Pacific silver fir-noble fir/American skunkcabbage	ABAM-ABPR/LYAM3
CFM111	Pacific silver fir/American skunkcabbage	ABAM/LYAM3
CFRR	Pacific silver fir-noble fir (rocky, little ground vegetation)	ABAM-ABPR
CFRS	Pacific silver fir-noble fir (steep, little ground vegetation)	ABAM-ABPR
CFRX	Pacific silver fir-noble fir (rocky, steep with scant ground vegetation)	ABAM-ABPR
CFS0	Pacific silver fir-noble fir/shrub	ABAM-ABPR/2SHRUB
CFS1	Pacific silver fir-noble fir/Cascade barberry-salal	ABAM-ABPR/MANE2-GASH
CFS110	Pacific silver fir/Cascade barberry (Mt. Baker-Snoqualamie)	ABAM/MANE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS151	Pacific silver fir/Cascade barberry	ABAM/MANE2
CFS152	Pacific silver fir/salal (Gifford Pinchot)	ABAM/GASH
CFS154	Pacific silver fir/salal-Cascade barberry	ABAM/GASH-MANE2
CFS155	Pacific silver fir/salal/deer fern	ABAM/GASH/BLSP
CDS156	Pacific silver fir/salal/redwood-sorrel	ABAM/GASH/OXOR
CFS2	Pacific silver fir-noble fir/thinleaf huckleberry-rusty menziesia-Oregon boxleaf	ABAM-ABPR/VAME-MEFE-PAMY
CFS211	Pacific silver fir/thinleaf huckleberry/common beargrass (Olympic)	ABAM/VAME/XETE
CFS212	Pacific silver fir/oval-leaf blueberry (Olympic)	ABAM/VAOV
CFS213	Pacific silver fir/oval-leaf blueberry/white avalanche-lily	ABAM/VAOV/ERMO8
CFS214	Pacific silver fir/oval-leaf blueberry/common beargrass (Olympic)	ABAM/VAOV/XETE
CFS215	Pacific silver fir/oval-leaf blueberry/oneleaf foamflower	ABAM/VAOV/TITRU
CFS216	Pacific silver fir/oval-leaf blueberry-Cascade barberry	ABAM/VAOV-MANE2
CFS217	Pacific silver fir/oval-leaf blueberry/redwood-sorrel	AMAB/VAOV/OXOR
CFS218	Pacific silver fir/oval-leaf blueberry/bride's bonnet (Olympic)	AMAB/VAOV/CLUN2
CFS219	Pacific silver fir/oval-leaf blueberry/twinflower	ABAM/VAOV/LIBO3
CFS220	Pacific silver fir/oval-leaf blueberry-Cascade azalea	ABAM/VAOV-RHAL2
CFS221	Pacific silver fir/thinleaf huckleberry/Sitka valerian	ABAM/VAME/VASI
CFS222	Pacific silver fir/thinleaf huckleberry/twistedstalk	ABAM/VAME/STLAR
CFS223	Pacific silver fir/thinleaf huckleberry-oval-leaf blueberry	ABAM/VAME-VAOV

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS224	Pacific silver fir/thinleaf huckleberry	ABAM/VAME
CFS225	Pacific silver fir/oval-leaf blueberry/false lily of the valley	ABAM/VAOV/MADI
CFS226	Pacific silver fir/oval-leaf blueberry/oneleaf foamflower (Mt. Baker-Snoqualmie)	ABAM/VAOV/TITRU
CFS228	Pacific silver fir/oval-leaf blueberry/sidebells wintergreen	ABAM/VAOV/ORSE
CFS229	Pacific silver fir/thinleaf huckleberry/sidebells wintergreen	ABAM/VAME/ORSE
CFS230	Pacific silver fir/oval-leaf blueberry-salal (Mt. Baker-Snoqualmie)	ABAM/VAOV-GASH
CFS231	Pacific silver fir/oval-leaf blueberry/western swordfern	ABAM/VAOV/POMU
CFS232	Pacific silver fir/oval-leaf blueberry (Wenatchee)	ABAM/VAOV
CFS233	Pacific silver fir/thinleaf huckleberry/bride's bonnet (Wenatchee)	ABAM/VAME/CLUN2
CFS234	Pacific silver fir/thinleaf huckleberry-sidebells	ABAM/VAME-ORSE
CFS241	Pacific silver fir/oval-leaf blueberry (Mt. Rainier)	ABAM/VAOV
CFS242	Pacific silver fir/oval-leaf blueberry-strawberry leaf raspberry	ABAM/VAOV-RUPE
CFS251	Pacific silver fir/thinleaf huckleberry/common beargrass	ABAM/VAME/XETE
CFS252	Pacific silver fir/thinleaf huckleberry/common beargrassm (Mt. Baker-Snoqualmie)	ABAM/VAME/XETE
CFS253	Pacific silver fir/oval-leaf blueberry/bunchberry dogwood	ABAM/VAOV/COCA13
CFS254	Pacific silver fir/rusty menziesia	ABAM/MEFE
CFS255	Pacific silver fir/oval-leaf blueberry-salal	ABAM/VAOV-GASH
CFS256	Pacific silver fir/thinleaf huckleberry/bride's bonnet	ABAM/VAME/CLUN2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS257	Pacific silver fir/oval-leaf blueberry	ABAM/VAOV
CFS258	Pacific silver fir/oval-leaf blueberry (Mt. Baker-Snoqualmie)	ABAM/VAOV
CFS259	Pacific silver fir/oval-leaf blueberry/common beargrass (Mt. Baker-Snoqualmie)	ABAM/VAOV/XETE
CFS260	Pacific silver fir/oval-leaf blueberry/bride's bonnet (Mt. Baker-Snoqualmie)	ABAM/VAOV/CLUN2
CFS3	Pacific silver fir-noble fir/devilsclub	ABAM-ABPR/OPHO
CFS311	Pacific silver fir/devilsclub (Olympic)	ABAM/OPHO
CFS321	Pacific silver fir/devilsclub (Mt. Rainier)	ABAM/OPHO
CFS351	Pacific silver fir/devilsclub	ABAM/OPHO
CFS352	Pacific silver fir/devilsclub-oval-leaf blueberry	ABAM/OPHO-VAOV
CFS4	Pacific silver fir-noble fir/grouse whortleberry	ABAM-ABPR/VASC
CFS411	Pacific silver fir/roughfruit berry	ABAM/RULA2
CFS412	Pacific silver fir/white avalanche lily	ABAM/ERMO8
CFS413	Pacific silver fir/roughfruit berry (Wenatchee)	ABAM/RULA2
CFS5	Pacific silver fir-noble fir/Cascade azalea	ABAM-ABPR/RHAL2
CFS541	Pacific silver fir/rusty menziesia	ABAM/MEFE
CFS542	Pacific silver fir/rusty menziesia (Wenatchee)	ABAM/MEFE
CFS550	Pacific silver fir/Cascade azalea (Gifford Pinchot)	ABAM/RHAL2
CFS551	Pacific silver fir/Cascade azalea/common beargrass	ABAM/RHAL2/XETE
CFS552	Pacific silver fir/Cascade azalea/bride's bonnet	ABAM/RHAL2/CLUN2
CFS553	Pacific silver fir/Cascade azalea (Okanogan)	ABAM/RHAL2
CFS554	Pacific silver fir/Cascade azalea-thinleaf huckleberry	ABAM/RHAL2-VAME
CFS555	Pacific silver fir/Cascade azalea-oval-leaf blueberry	ABAM/RHAL2-VAOV

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS556	Pacific silver fir/Cascade azalea-thinleaf huckleberry	ABAM/RHAL2-VAME
CFS558	Pacific silver fir/Oregon boxleaf	ABAM/PAMY
CFS6	Pacific silver fir-noble fir/Pacific rhododendron-vine maple	ABAM-ABPR/RHMA3-ACCI
CFS611	Pacific silver fir/Pacific rhododendron (Olympic)	ABAM/RHMA3
CFS612	Pacific silver fir/Pacific rhododendron-oval-leaf blueberry	ABAM/RHMA3-VAOV
CFS621	Pacific silver fir/vine maple	ABAM/ACCI
CFS641	Pacific silver fir/vine maple/foamflower	ABAM/ACCI/TITR
CFS651	Pacific silver fir/vine maple/oneleaf foamflower	ABAM/ACCI/TITRU
CFS652	Pacific silver fir/Pacific rhododendron-Cascade barberry	ABAM/RHMA3-MANE2
CFS653	Pacific silver fir/Pacific rhododendron/common beargrass	ABAM/RHMA3/XETE
CFS654	Pacific silver fir/Pacific rhododendron-oval-leaf blueberry/bunchberry dogwood	ABAM/RHMA3-VAOV/COCA13
CFSC	Pacific silver fir/shrub (cool)	ABAM/2SHRUB
CFSD	Pacific silver fir/shrub (dry)	ABAM/2SHRUB
CFSF	Pacific silver fir/shrub-forb (coastal)	ABAM/2SHRUB-2FORB
CFSM	Pacific silver fir/shrub (mesic)	ABAM/2SHRUB
CH	Western hemlock	TSHE
CHC0	Western hemlock-important conifers	TSHE-2TE
CHC1	Western hemlock-Port Orford cedar	TSHE-CHLA
CHC111	Western hemlock-Port Orford cedar	TSHE-CHLA
CHC2	Western hemlock-Douglas-fir/shrub (dry)	TSHE-PSME/2SHRUB
CHC211	Western hemlock-Douglas-fir/beaked hazelnut (steep, shallow soil, Willamette)	TSHE-PSME/COCO6
CHC212	Western hemlock-Douglas-fir/oceanspray	TSHE-PSME/HODI

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHC213	Western hemlock-Douglas-fir-Pacific madrone	TSHE-PSME-ARME
CHC3	Western hemlock-white fir-grand fir	TSME-ABCO-ABGR
CHC311	Western hemlock-grand fir/bride's bonnet	TSME-ABGR/CLUN2
CHC341	Western hemlock/dwarf Oregon grape/vanillaleaf (SWO)	TSHE/BENE/ACTR (SWO)
CHC4	Western hemlock-western red cedar	TSHE-THPL
CHC412	Western hemlock-Douglas-fir/salal	TSHE-PSME/GASH
CHC422	Western hemlock/vine maple-snow bramble	TSHE/ACCI-RUNI
CHC441	Western hemlock-bigleaf maple/western sword-fern	TSHE-ACMA/POMU
CHC442	Western hemlock-western redcedar/western sword-fern	TSHE-THPL/OXOR
CHC461	Western hemlock-western redcedar	TSHE-THPL
CHC5	Western hemlock-Paciic silver fir	TSHE-ABAM
CHC551	Western hemlock-Pacific silver fir/Pacific rhododendron-Cascade barberry	TSHE-ABAM/RHMA3-MANE2
CHC552	Western hemlock-Pacific silver fir/Pacific rhododendron/twinflower	TSHE-ABAM/RHMA3/LIBO3
CHC553	Western hemlock-Pacific silver fir/twinflower	TSHE-ABAM/LIBO3
CHC554	Western hemlock-Pacific silver fir/thin-leaved huckleberry	TSHE-ABAM/VAME
CHC6	Western hemlock-incense cedar	TSHE-CADE27
CHC611	Western hemlock-white fir	TSHE-ABCO
CHC612	Western hemlock-white fir/Pacific rhododendron	TSHE-ABCO/RHMA
CHC613	Western hemlock-incense cedar/salal	TSHE-CADE3/GASH
CHC911	Western hemlock/thin-leaved huckleberry/western	TSHE/VAME/LIBOL
CHC921	Western hemlock-Pacific yew/Pacific rhododendron	TSHE-TABR/RHMA

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHF0	Western hemlock/forbs	TSHE/2FORB
CHF1	Western hemlock/western swordfern/redwood-sorrel	TSHE/POMU/OXOR
CHF111	Western hemlock/redwood-sorrel (Willamette)	TSHE/OXOR
CHF112	Western hemlock/redwood-sorrel (Olympic)	TSHE/OXOR
CHF121	Western hemlock/redwood-sorrel (coastal)	TSHE/OXOR
CHF122	Western hemlock/western swordfern (coastal)	TSHE/POMU
CHF123	Western hemlock/western swordfern (Mt. Baker)	TSHE/POMU
CHF124	Western hemlock/western swordfern-redwood-sorrel	TSHE/POMU-OXOR
CHF125	Western hemlock/western swordfern (Gifford Pinchot)	TSHE/POMU
CHF131	Western hemlock/western swordfern-redwood-sorrel (Olympic)	TSHE/POMU-OXOR
CHF132	Western hemlock/western swordfern-threeleaf foamflower (Olympic)	TSHE/POMU-TITR
CHF133	Western hemlock/western swordfern-salal	TSHE/POMU-GASH
CHF134	Western hemlock/western swordfern-Cascade barberry	TSHE/POMU-MANE2
CHF135	Western hemlock/western swordfern-threeleaf foamflower (Mt. Baker-Snoqualmie)	TSHE/POMI-TITR
CHF151	Western hemlock/western swordfern (Willamette)	TSHE/POMU
CHF2	Western hemlock/sweet after death-threeleaf foamflower (dry)	TSHE/ACTR-TITR
CHF211	Western hemlock/sweet after death (Olympic)	TSHE/ACTR
CHF221	Western hemlock/sweet after death	TSHE/ACTR
CHF222	Western hemlock/threeleaf foamflower	TSHE/TITR
CHF223	Western hemlock/sweet after death (Wenatchee)	TSHE/ACTR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHF250	Western hemlock/threeleaf foamflower-western oakfern	TSHE/TITR-GYDR
CHF3	Western hemlock/bride's bonnet-twinflower (mesic)	TSHE/CLUN2-LIBO3
CHF311	Western hemlock/bride's bonnet	TSHE/CLUN2
CHF312	Western hemlock/wild sarsaparilla	TSHE/ARNU2
CHF313	Western hemlock/British Columbia wildginger	TSHE/ASCA2
CHF321	Western hemlock/twinflower	TSHE/LIBO3
CHF4	Western hemlock/fern	TSHE/2FERN
CHF421	Western hemlock/common ladyfern	TSHE/ATFI
CHF422	Western hemlock/Pacific oakfern	TSHE/GYDI2
CHF5	Western hemlock/common beargrass	TSHE/XETE
CHF511	Western hemlock/common beargrass (Olympic)	TSHE/XETE
CHF521	Western hemlock/common beargrass (Colville)	TSHE/XETE
CHF531	Western hemlock/common beargrass (Warm Springs)	TSHE/XETE
CHF911	Western hemlock/depauperate	TSHE
CHH0	Western hemlock-important hardwoods	TSHE-2TD
CHH1	Western hemlock/tanoak-California laurel	TSHE/LIDE3/UMCA
CHH111	Western hemlock-California laurel	TSHE-UMCA
CHH2	Western hemlock/bigleaf maple	TSHE/ACMA3
CHH3	Western hemlock/giant chinquapin	TSHE/CHCHC4
CHH351	Western hemlock/giant chinquapin	TSHE/CHCHC4
CHH4	Western hemlock/alder	TSHE/ALNUS
CHH5	Western hemlock/oak	TSHE/QUERC
CHM0	Western hemlock (wetlands, moist to west soil)	TSHE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHM1	Western hemlock/American skunkcabbage (wetlands)	TSHE/LYAM3
CHM111	Western hemlock/American skunkcabbage (Olympic)	TSHE/LYAM3
CHM121	Western hemlock/American skunkcabbage	TSHE/LYAM3
CHS0	Western hemlock/shrub	TSHE/2SHRUB
CHS1	Western hemlock/salal-Cascade barberry	TSHE/GASH-MANE2
CHS111	Western hemlock/salal (Willamette)	TSHE/GASH
CHS112	Western hemlock/Pursh's buckthorn/salal (flat deep soil)	TSHE/FRPU/GASH
CHS113	Western hemlock/Cascade barberry/redwood-sorrel	TSHE/MANE2/OXOR
CHS114	Western hemlock/Cascade barberry/sweet after death	TSHE/MANE2/ACTR
CHS121	Western hemlock/Cascade barberry (coastal)	TSHE/MANE2
CHS122	Western hemlock/Cascade barberry-salal (coastal)	TSHE/MANE2-GASH
CHS123	Western hemlock/salal (coastal)	TSHE/GASH
CHS124	Western hemlock/Cascade barberry-salal	TSHE/MANE2-GASH
CHS125	Western hemlock/Cascade barberry	TSHE/MANE2
CHS126	Western hemlock/Cascade barberry/western swordfern	TSHE/MANE2/POMU
CHS127	Western hemlock/Cascade barberry-salal (Gifford Pinchot)	TSHE/MANE2-GASH
CHS128	Western hemlock/salal (Gifford Pinchot)	TSHE/GASH
CHS129	Western hemlock/salal (Mt. Baker-Snoqualmie)	TSHE/GASH
CHS130	Western hemlock/Cascade barberry (Mt. Baker-Snoqualmie)	TSHE/MANE2
CHS131	Western hemlock/salal (SWO)	TSHE/GASH (SWO)
CHS132	Western hemlock/salal/common beargrass	TSHE/GASH/XETE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS133	Western hemlock/salal-California huckleberry	TSHE/GASH-VAOV2
CHS134	Western hemlock/salal-oceanspray	TSHE/GASH-HODI
CHS135	Western hemlock/salal-Cascade barberry	TSHE/GASH-MANE2
CHS136	Western hemlock/salal/redwood-sorrel	TSHE/GASH/OXOR
CHS137	Western hemlock/salal/western swordfern	TSHE/GASH/POMU
CHS138	Western hemlock/Cascade barberry (Olympic)	TSHE/MANE2
CHS139	Western hemlock/Cascade barberry/western swordfern (Olympic)	TSHE/MANE2/POMU
CHS140	Western hemlock/salal-thinleaf huckleberry	TSHE/GASH-VAME
CHS141	Western hemlock/Cascade barberry/little prince's pine	TSHE/MANE2/CHME
CHS142	Western hemlock/Cascade barberry (Wenatchee)	TSHE/MANE2
CHS143	Western hemlock/Oregon boxleaf/bride's bonnet	TSHE/PAMY/CLUN2
CHS144	Western hemlock/pinemat manzanita	TSHE/ARNE
CHS2	Western hemlock/vine maple	TSHE/ACCI
CHS211	Western hemlock/vine maple (Warm Springs)	TSHE/ACCI
CHS221	Western hemlock/vine maple-salal	TSHE/ACCI-GASH
CHS222	Western hemlock/vine maple/western swordfern (coast)	TSHE/ACCI/POMU
CHS223	Western hemlock/vine maple/sweet after death	TSHE/ACCI/ACTR
CHS224	Western hemlock/Pacific dogwood/sweet after death	TSHE/CONU4/ACTR
CHS225	Western hemlock/vine maple/sweet after death	TSHE/ACCI/ACTR
CHS226	Western hemlock/vine maple/British Columbia wild ginger	TSHE/ACCI/ASCA2
CHS227	Western hemlock/vine maple/bride's bonnet	TSHE/ACCI/CLUN2
CHS251	Western hemlock/vine maple-Cascade barberry	TSHE/ACCI-MANE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS261	Western hemlock-red alder/western swordfern	TSHE-ALRU/POMU
CHS271	Western hemlock/Douglas maple/western twinflower	TSHE/ARGL/LIBOL
CHS3	Western hemlock/Pacific rhododendron	TSHE/RHMA3
CHS311	Western hemlock-Pacific silver fir/Pacific rhododendron (rolling, deep, Willamette)	TSHE-ABAM/RHMA3
CHS312	Western hemlock/Pacific rhododendron-vine maple (steep, deep, Willamette)	TSHE/RHMA3-ACCI
CHS313	Western hemlock/vine maple-Pacific rhododendron	TSHE/ACCI-RHMA3
CHS321	Western hemlock/Pacific rhododendron-Cascade barberry (coast)	TSHE/RHMA3-MANE2
CHS322	Western hemlock/Pacific rhododendron-salal (coast)	TSHE/RHMA3-GASH
CHS323	Western hemlock/Pacific rhododendron/western swordfern (coast)	TSHE/RHMA3/POMU
CHS324	Western hemlock/Pacific rhododendron-California huckleberry (coast)	THSE/RHMA3-VAOV2
CHS325	Western hemlock/Pacific rhododendron/common beargrass	TSHE/RHMA3/XETE
CHS326	Western hemlock/Pacific rhododendron-oval-leaf blueberry/bunchberry dogwood	TSHE/RHMA3-VAOV/COCA13
CHS327	Western hemlock/Pacific rhododendron-salal (Mt. Hood)	TSHE/RHMA3-GASH
CHS328	Western hemlock/Pacific rhododendron-Cascade barberry (Mt. Hood)	TSHE/RHMA3-MANE2
CHS329	Western hemlock/Pacific rhododendron (Warm Springs)	TSHE/RHMA3
CHS331	Western hemlock/Pacific rhododendron (SWO)	TSHE/RHMA3
CHS332	Western hemlock/Pacific rhododendron/common beargrass (Olympic)	TSHE/RHMA3/XETE
CHS333	Western hemlock/Pacific rhododendron-Cascade barberry (Olympic)	TSHE/RHMA3-MANE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS334	Western hemlock/Pacific rhododendron-salal (Olympic)	TSHE/RHMA3-GASH
CHS335	Western hemlock/Pacific rhododendron/western swordfern (Olympic)	TSHE/RHMA3/POMU
CHS341	Western hemlock/Pacific rhododendron/western twinflower (SWO)	TSHE/RHMA3/LIBOL (SWO)
CHS351	Western hemlock/Pacific rhododendron-salal	TSHE/RHMA3-GASH
CHS352	Western hemlock/Pacific rhododendron-Cascade barberry (Willamette)	TSHE/RHMA3-MANE2
CHS353	Western hemlock/Pacific rhododendron/common beargrass (Willamette)	TSHE/RHMA3/XETE
CHS354	Western hemlock/Pacific rhododendron/redwood-sorrel	TSHE/RHMA3/OXOR
CHS355	Western hemlock/Pacific rhododendron/twinflower	TSHE/RHMA3/LIBO3
CHS4	Western hemlock/thimbleberry-salmonberry (mesic)	TSHE/RUPA-RUSP
CHS411	Western hemlock/strawberryleaf raspberry	TSHE/RUPE
CHS421	Western hemlock/salmonberry (coastal)	TSHE/RUSP
CHS422	Western hemlock/salmonberry-vine maple (coast)	TSHE/RUSP-ACCI
CHS423	Western hemlock/salmonberry-salal	TSHE/RUSP-GASH
CHS5	Western hemlock/devilsclub	TSHE/OPHO
CHS511	Western hemlock/devilsclub (Willamette)	TSHE/OPHO
CHS512	Western hemlock/devilsclub (Olympic)	TSHE/OPHO
CHS513	Western hemlock/devilsclub-common ladyfern	TSHE/OPHO-ATFI
CHS514	Western hemlock/devilsclub (Mt. Rainier)	TSHE/OPHO
CHS521	Western hemlock/devilsclub (coastal)	TSHE/OPHO
CHS522	Western hemlock/devilsclub/redwood-sorrel	TSHE/OPHO/OXOR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS523	Western hemlock/devilsclub/starry false lily of the valley	TSHE/OPHO/MAST4
CHS524	Western hemlock/devilsclub/western swordfern	TSHE/OPHO/POMU
CHS6	Western hemlock/thinleaf huckleberry	TSHE/VAME
CHS610	Western hemlock/California huckleberry (coastal)	TSHE/VAOV2
CHS611	Western hemlock/oval-leaf blueberry-devilsclub	TSHE/VAOV-OPHO
CHS612	Western hemlock/thinleaf huckleberry/common beargrass	TSHE/VAME/XETE
CHS613	Western hemlock/oval-leaf blueberry/redwood-sorrel	TSHE/VAOV/OXOR
CHS614	Western hemlock/oval-leaf blueberry-salal	TSHE/VAOV-GASH
CHS615	Western hemlock/oval-leaf blueberry/bunchberry	TSHE/VAOV/COCA13
CHS621	Western hemlock/oval-leaf blueberry	TSHE/VAOV
CHS622	Western hemlock/oval-leaf blueberry/common beargrass	TSHE/VAOV/XETE
CHS623	Western hemlock/oval-leaf blueberry/redwood-sorrel (Olympic)	TSHE/VAOV/OXOR
CHS624	Western hemlock/oval-leaf blueberry-salal (Olympic)	TSHE/VAOV-GASH
CHS625	Western hemlock/oval-leaf blueberry-western swordfern	TSHE/VAOV-POMU
CHS626	Western hemlock/oval-leaf blueberry-Cascade barberry	TSHE/VAOV-MANE2
CHS631	Western hemlock/vine maple/Oregon oxalis	TSHE/ACCI/OXOR
CHS7	Western hemlock/rhododendron-rusty menziesia-buffaloberry	TSHE/RHODO-MEFE-SHEPH
CHS711	Western hemlock/rusty menziesia	TSHE/MEFE
CHS8	Western hemlock/oak chapparral	TSHE/QUERC
CHSC	Western hemlock/Pacific rhododendron (cool)	TSHE/RHMA3

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHSD	Western hemlock/salal-Cascade barberry (dry)	TSHE/GASH-MANE2
CHSF	Western hemlock/shrub/redwood-sorrel	TSHE/2SHRUB/OXOR
CHSM	Western hemlock/Pacific rhododendron (mesic)	TSHE/RHMA3
CHZ412	Spruce-hemlock-cedar/hardwood (Siuslaw, 12)	PICEA-TSUGA-CHAMA4/2TD
CHZ612	Spruce-hemlock-cedar (Siuslaw, 12)	PICEA-TSUGA-CHAMA4
CJ	Western juniper	JUOC
CJC0	Western juniper-associated conifers	JUOC-2TE
CJG0	Western juniper/grass	JUOC/2GRAM
CJG1	Western juniper/bluebunch wheatgrass	JUOC/PSSPS
CJG111	Western juniper/Idaho fescue-bluebunch wheatgrass	JUOC/FEID-PSSPS
CJG112	Western juniper/bluebunch wheatgrass-Sanberg bluegrass	JUOC/PSSPS-POSE
CHG2	Western juniper/Idaho fescue	JUOC/FEID
CJRR	Western juniper (very rocky site)	JUOC
CJRS	Western juniper (steep slopes, little ground vegetation)	JUOC
CJRX	Western juniper (rocks, steep slopes, minimal ground vegetation)	JUOC
CJS0	Western juniper/shrub	JUOC/2SHRUB
CJS1	Western juniper/little sagebrush	JUOC/ARAR8
CJS111	Western juniper/little sagebrush/bluebunch wheatgrass-Idaho fescue	JUOC/ARAR8/FEID
CJS112	Western juniper/little sagebrush/Idaho fescue	JUOC/ARAR8/FEID
CJS2	Western juniper/mountain big sagebrush	JUOC/ARTRV
CJS211	Western juniper/big sagebrush/bluebunch wheatgrass-Idaho fescue	JUOC/ARTR2/PSSPS-FEID
CJS212	Western juniper/basin big sagebrush/Idaho fescue-bluebunch wheatgrass (north)	JUOC/ARTRT/FEID-PSSPS

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CJS213	Western juniper/basin big sagebrush/bluebunch wheatgrass-Sanberg bluegrass (south)	JUOC/ARTRT/PSSPS-POSE
CJS221	Western juniper/big sagebrush/bluebunch wheatgrass	JUOC/ARTR2/PSSPS
CJS222	Western juniper/big sagebrush/bluebunch wheatgrass-Douglas' dustymaiden	JUOC/ARTR2/PSSPS-CHDO
CJS223	Western juniper/big sagebrush/bluebunch wheatgrass-woollypod milkvetch	JUOC/ARTR2/PSSPS-ASPUL2
CJS224	Western juniper/big sagebrush/Idaho fescue	JUOC/ARTR2/FEID
CJS225	Western juniper/big sagebrush/Idaho fescue-lupine	JUOC/ARTR2/FEID-LUPIN
CHS226	Western juniper/basin big sagebrush/bluebunch wheatgrass-Idaho fescue (flat)	JUOC/ARTRT/PSSPS-FEID
CJS231	Western juniper/basin big sagebrush-rockspirea/bluebunch wheatgrass-arrowleaf balsamroot (S.CAN)	JUOC/ARTRT-HODU/PSSPS-BASA3
CJS232	Western juniper/basin big sagebrush-yellow rabbitbrush/Idaho fescue-arrowleaf balsamroot (N.CAN)	JUOC/ARTRT-CHVI8/FEID-BASA3
CJS236	Western juniper/big sagebrush-antelope bitterbrush	JUOC/ARTR2-PUTR2
CJS291	Western juniper/rubber rabbitbrush-basin big sagebrush/crested wheatgrass	JUOC/ERNANS-ARTRT/AGCR
CJS292	Western juniper/rubber rabbitbrush-basin big sagebrush/beardless wheatgrass	JUOC/ERNANS-ARTRT/PSSPI
CJS3	Western juniper/antelope bitterbrush	JUOC/PUTR2
CJS311	Western juniper/antelope bitterbrush/bluebunch wheatgrass-Idaho fescue	JUOC/PUTR2/PSSPS-FEID
CJS321	Western juniper/antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	JUOC/PUTRE/FEID-PSSPS
CJS4	Western juniper/mountain mahogany	JUOC/CERCO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CJS8	Western juniper/scabland sagebrush (scabland)	JUOC/ARR12
CJS811	Western juniper/basin big sagebrush/bluebunch wheatgrass-Idaho fescue (mound)	JUOC/ARTRT/PSSPS-FEID
CL	Lodgepole pine-whitebark pine (climax or stable)	PICO-PIAL
CLC0	Lodgepole pine-whitebark pine-associated conifers	PICO-PIAL
CLC1	Lodgepole pine-whitebark pine (alpine)	PICO-PIAL
CLC111	Lodgepole pine-whitebark pine/mountain blue penstemon	PICO-PIAL/PELA7
CLC112	Lodgepole pine-whitebark pine/King's sandwort	PICO-PIAL/ARKI
CLC2	Lodgepole pine-Douglas-fir/juniper-manzanita (serpentine)	PICO-PSME/JUNIP-ARRCT03
CLC3	Lodgepole pine-ponderosa pine	PICO-PIPO
CLC4	Lodgepole pine-Douglas-fir	PICO-PSME
CLC5	Lodgepole pine-mountain hemlock	PICO-TSME
CLC511	Lodgepole pine-mountain hemlock/long-stolen sedge	PIPO-TSME/CAPE5
CLF0	Lodgepole pine/forbs	PICO/2FORB
CLF1	Lodgepole pine/forbs (less than ½ meter tall)	PICO/2FORB
CLF111	Lodgepole pine/little prince's pine-lupine	PICO/CHME-LUPIN
CLF211	Lodgepole pine/twinflower	PICO/LIBO3
CLG0	Lodgepole pine/grass	PICO/2GRAM
CLG1	Lodgepole pine/Idaho fescue	PICO/FEID
CLG111	Lodgepole pine/Idaho fescue	PICO/FEID
CLG2	Lodgepole pine/pinegrass	PICO/CARU
CLG211	Lodgepole pine/pinegrass-grouse whortleberry	PICO/CARU-VASC
CLG3	Lodgepole pine/Idaho fescue (pumice)	PICO/FEID

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLG311	Lodgepole pine/western needlegrass (basins, pumice)	PICO/ACOCO
CLG312	Lodgepole pine/antelope bitterbrush/Idaho fescue (underburned)	PICO/PUTR2/FEID
CLG313	Lodgepole pine/western needlegrass-tailcup lupine-Nuttall's linanthus	PICO/ACOCO-LUCA-LINU3
CLG314	Lodgepole pine/western needlegrass-tailcup lupine (pumice)	PICO/ACOCO-LUCA
CLG315	Lodgepole pine/Virginia strawberry-Idaho fescue	PICO/FRVIP2-FEID
CLG321	Lodgepole pine/Geyer's sedge	PICO/CAGE2
CLG4	Lodgepole pine/rhizomatous grass (pumice)	PICO/2GRAM
CLG411	Lodgepole pine/long-stolon sedge-tailcup lupine (pumice)	PICO/CAIN9-LUCA
CLG412	Lodgepole pine/long-stolon sedge-tailcup lupine-beardtongue	PICO/CAIN9-LUCA-PENST
CLG415	Lodgepole pine/squirreltail-long-stolon sedge	PICO/CAIN9-ACOCO
CLH0	Lodgepole pine-hardwoods	PICO-2TD
CLH1	Lodgepole pine-quaking aspen	PICO-POTR5
CLH111	Lodgepole pine-quaking aspen/Virginia strawberry	PICO-POTR5/FRVIP2
CLM0	Lodgepole pine (wetlands, moist to wet soils)	PICO
CLM1	Lodgepole pine/sedge-grass (wetland)	PICO/CAREX-2GRAM
CLM111	Lodgepole pine/Nebraska sedge-blue wildrye (wetland)	PICO/CANE2-ELGL
CLM112	Lodgepole pine/Kentucky bluegrass	PICO/POPR
CLM113	Lodgepole pine/widefruit sedge	PICO/CAAN15
CLM114	Lodgepole pine/water sedge	PICO/CAAQ
CLM115	Lodgepole pine/tufted hairgrass	PICO/DECA18
CLM2	Lodgepole pine/dwarf shrub-grass (wetland)	PICO/2SHRUB-2GRAM

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLM211	Lodgepole pine/kinnikinnick (pumice)	PICO/ARUV
CLM3	Lodgepole pine/blueberry-grass (wetland)	PICO/VACCI-2GRAM
CLM311	Lodgepole pine/bog blueberry-forb (pumice)	PICO/VAUL-2FORB
CLM312	Lodgepole pine/bog blueberry/widefruit sedge	PICO/VAUL/CAAN15
CLM313	Lodgepole pine/rose spirea/forb	PICO/SPDO/2FORB
CLM314	Lodgepole pine/rose spirea/widefruit sedge	PICO/SPDO/CAAN15
CLM411	Lodgepole pine/common beargrass (pumice)	PICO/XETE
CLM9	Lodgepole pine (invading meadows)	PICO
CLM911	Lodgepole pine-Engelmann spruce/fewflower spikerush	PICO-PIEN/ELQU2
CLRR	Lodgepole pine (very rocky, little ground vegetation)	PICO
CLRS	Lodgepole pine (steep, stony, little ground vegetation)	PICO
CLRX	Lodgepole pine (rocky, steep, little ground vegetation)	PICO
CLS0	Lodgepole pine/shrub	PICO/2SHRUB
CLS1	Lodgepole pine/big sagebrush	PICO/ARTR2
CLS111	Lodgepole pine/big sagebrush/Idaho fescue (pumice)	PICO/ARTR2/FEID
CLS112	Lodgepole pine/big sagebrush (rhyolite, pumice)	PICO/ARTR2
CLS2	Lodgepole pine/antelope bitterbrush (xeric)	PICO/PUTR2
CLS211	Lodgepole pine/antelope bitterbrush/western needlegrass (pumice)	PICO/PUTR2/ACOCO
CLS212	Lodgepole pine/antelope bitterbrush/long-stolon sedge (pumice)	PICO/PUTR2/CAIN9
CLS213	Lodgepole pine/antelope bitterbrush/forb (pumice)	PICO/PUTR2/2FORB

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLS214	Lodgepole pine/antelope bitterbrush/Idaho fescue	PICO/PUTR2/FEID
CLS215	Lodgepole pine/wax currant-antelope bitterbrush/western needlegrass (pumice)	PICO/RICE-PUTR2/ACOCO
CLS216	Lodgepole pine/antelope bitterbrush (rhyolite)	PICO/PUTR2
CLS3	Lodgepole pine/pinemat manzanita	PICO/ARNE
CLS311	Lodgepole pine/pinemat manzanita	PICO/ARNE
CLS312	Lodgepole pine/pinemat manzanita/lupin	PICO/ARNE/LUPIN
CLS4	Lodgepole pine/grouse whortleberry (cool xeric)	PICO/VASC
CLS411	Lodgepole pine/grouse whortleberry (Blue Mountains)	PICO/VASC
CLS412	Lodgepole pine/grouse whortleberry (pumice)	PICO/VASC
CLS413	Lodgepole pine/grouse whortleberry/forb	PICO/VASC/2FORB
CLS414	Lodgepole pine/grouse whortleberry/long-stolon sedge	PICO/VASC/CAIN9
CLS415	Lodgepole pine/grouse whortleberry (Wallowa)	PICO/VASC
CLS416	Lodgepole pine/pinegrass (climax)	PICO/CARU
CLS421	Lodgepole pine/grouse whortleberry (Idaho)	PICO/VASC
CLS422	Lodgepole pine/dwarf bilberry	PICO/VACA13
CLS5	Lodgepole pine/thinleaf huckleberry/pinegrass	PICO/VAME/CARU
CLS511	Lodgepole pine/thinleaf huckleberry (Blue Mountain)	PICO/VAME
CLS515	Lodgepole pine/thinleaf huckleberry (Wallowa)	PICO/VAME
CLS521	Lodgepole pine/russet buffaloberry	PICO/SHCA
CLS6	Lodgepole pine/Sitka alder (moist sites)	PICO/ALVIS
CLS8	Lodgepole pine/salal-California huckleberry (coastal)	PICO/GASH-VAOV2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLS811	Lodgepole pine/salal-California huckleberry/sedge (deflation plain)	PICO/GASH-VAOV/CAREX
CLS812	Lodgepole pine/rhododendron/California huckleberry (floodplain, dune)	PICO/RHODO/VAOV2
CLS821	Lodgepole pine/rhododendron/California huckleberry (stabilized dune)	PICO/RHODO/VAOV2
CLS822	Lodgepole pine/rhododendron/California huckleberry (eroding dune)	PICO/RHODO/VAOV2
CLS823	Lodgepole pine/rhododendron/California huckleberry (dune slipface)	PICO/RHODO/VAOV2
CLS831	Lodgepole pine/kinnikinnick-hairy manzanita (rolling dune, open)	PICO/ARUV-ARCO3
CLS911	Lodgepole pine/snowbrush ceanothus-greenleaf manzanita (pumice)	PICO/CEVE-ARPA6
CLSM	Lodgepole pine/shrub (mesic)	PICO/2SHRUB
CLX104	Malheur(04) 4A: slope <30%, CLG211, CKS511, CLS411	N/A
CLX120	Winema(20): CLG411, CLS212, CLG3	N/A
CLX204	Malheur(04) 4B: slope 30-70%, CLG211, CLS511, CLS411	N/A
CLX220	Winema(20): CLG311, CLM111, CLM211, CLM214	N/A
CLX320	Winema(20): CLM211, CLS211, CLS213	N/A
CLX420	Winema(20): CLG311	N/A
CLX520	Winema(20): CLG9, CLS9	N/A
CM	Mountain hemlock	TSME
CMC0	Mountain hemlock-associated important conifers	TSME-2TE
CMC1	Mountain hemlock-Alaska cedar	TSME-CHNO
CMC151	Alaska cedar/devilsclub	CHNO/OPHO
CMC2	Mountain hemlock-fir	TSME-ABIES

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMC3	Mountain hemlock-lodgepole pine	TSME-PICO
CMC311	Mountain hemlock-lodgepole pine/pinemat manzanita	TSME-PICO/ARNE
CMC312	Mountain hemlock-lodgepole pine/grouse whortleberry	TSME-PICO/VASC
CMC313	Mountain hemlock-lodgepole pine-subalpine fir	TSME-PICO-ABLA
CMF0	Mountain hemlock/forbs	TSME/2FORB
CMF1	Mountain hemlock/common beargrass	TSME/XETE
CMF111	Mountain hemlock/common beargrass (Warm Springs)	TSME/XETE
CMF121	Mountain hemlock/common beargrass-(Daubenmeir)	TSME/XETE
CMF131	Mountain hemlock/common beargrass-whortleberry	TSME/XETE-VAMY2
CMF2	Mountain hemlock/oneleaf foamflower-sweet after death	TSME/TITRU-ACTR
CMF211	Mountain hemlock/skunk-leaved polemonium	TSME/POPU
CMF250	Mountain hemlock/oneleaf foamflower-twisted stalk	TSME/TITRU-STLAR
CMF251	Mountain hemlock/Howell's marsh marigold	TSME/CALEH2
CMF3	Mountain hemlock/wintergreen	TSME/PYROL
CMFC	Mountain hemlock/forb (cool)	TSME/2FORB
CMG0	Mountain hemlock/shrub	TSME/2SHRUB
CMG1	Mountain hemlock/pinegrass	TSME/CARU
CMG2	Mountain hemlock/woodrush	TSME/LUZUL
CMG211	Mountain hemlock/woodrush	TSME/LUZUL
CMG221	Mountain hemlock/Hitchcock's smooth woodrush	TSME/LUGLH
CMG3	Mountain hemlock/sedge	TSME/CAREX

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMRR	Mountain hemlock (rocky, minimum ground vegetation)	TSME
CMRS	Mountain hemlock (steep, minimum ground vegetation)	TSME
CMRX	Mountain hemlock (rocky or steep, minimum ground vegetation)	TSME
CMS0	Mountain hemlock/shrub	TSME/2SHRUB
CMS1	Mountain hemlock/grouse whortleberry/pinemat manzanita	TSME/VASC/ARNE
CMS111	Mountain hemlock/grouse whortleberry (Deschutes)	TSME/VASC
CMS113	Mountain hemlock/grouse whortleberry (Deschutes)	TSME/VASC
CMS114	Mountain hemlock/grouse whortleberry	TSME/VASC
CMS115	Mountain hemlock/grouse whortleberry (Mt. Hood)	TSME/VASC
CMS121	Mountain hemlock/grouse whortleberry/Hitchcock's smooth woodrush	TSME/VASC/LUGLH
CMS122	Mountain hemlock/roughfruit berry	TSME/RULA2
CMS131	Mountain hemlock/grouse whortleberry (Wallowa)	TSME/VASC
CMS2	Mountain hemlock/thinleaf huckleberry-rusty menziesia	TSME/VAME-MEFE
CMS210	Mountain hemlock/thinleaf huckleberry (Gifford Pinchot)	TSME/VAME
CMS211	Mountain hemlock/blueberry (steep, pumice, Willamette)	TSME/VACCI
CMS212	Mountain hemlock/blueberry (ash, Willamette)	TSME/VACCI
CMS213	Mountain hemlock-fir/blueberry (black sand, Willamette)	TSME/VACCI
CMS214	Mountain hemlock-fir/blueberry (steep, ash, Willamette)	TSME/VACCI

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMS215	Mountain hemlock/blueberry (cinders, Willamette)	TSME/VACCI
CMS216	Mountain hemlock/thinleaf huckleberry/common beargrass	TSME/VAME/XETE
CMS218	Mountain hemlock/thinleaf huckleberry/bride's bonnet	TSME/VAME/CLUN2
CMS220	Mountain hemlock/rusy menziesia (Daubenmeir)	TSME/MEFE
CMS221	Mountain hemlock/rusty menziesia	TSME/MEFE
CMS223	Mountain hemlock/Cascade azalea	TSME/RHAL2
CMS231	Mountain hemlock/thinleaf huckleberry (Wallowa)	TSME/VAME
CMS241	Mountain hemlock/oval-leaf blueberry	TSME/VAOV
CMS242	Mountain hemlock/oval-leaf blueberry/white avalanche-lily	TSME/VAOV/ERMO8
CMS243	Mountain hemlock/oval-leaf blueberry/common beargrass	TSME/VAOV/XETE
CMS244	Mountain hemlock/thinleaf huckleberry-oval-leaf blueberry	TSME/VAME-VAOV
CMS245	Mountain hemlock/thinleaf huckleberry/common beargrass (western Washington)	TSME/VAME/XETE
CMS246	Mountain hemlock/thinleaf huckleberry (Mt. Baker-Snoqualmie)	TSME/VAME
CMS250	Mountain hemlock/thinleaf huckleberry/twistedstalk	TSME/VAME/STLAR
CMS251	Mountain hemlock/thinleaf huckleberry/Sitka valerian	TSME/VAME/VASI
CMS252	Mountain hemlock/oval-leaf blueberry/twistedstalk	TSME/VAOV/STLAR
CMS253	Mountain hemlock/oval-leaf blueberry/bride's bonnet	TSME/VAOV/CLUN2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMS254	Mountain hemlock/thinleaf huckleberry/roughfruit	TSME/VAME/RULA2
CMS255	Mountain hemlock/oval-leaf blueberry/false lily of the valley	TSME/VAOV/MADI
CMS256	Mountain hemlock/rusty menziesia-oval-leaf blueberry	TSME/MEFE-VAOV
CMS257	Mountain hemlock/rusty menziesia-thinleaf huckleberry	TSME/MEFE-VAME
CMS258	Mountain hemlock/oval-leaf blueberry (Wenatchee)	TSME/VAOV
CMS259	Mountain hemlock/thinleaf huckleberry (Wenatchee)	TSME/VAME
CMS3	Mountain hemlock/rusty menziesia-pink mountainheath-Cascade azalea	TSME/MEFE-PHEM-RHAL2
CMS311	Mountain hemlock/pink mountainheath-Cascade bilberry	TSME/PHEM-VADE
CMS312	Mountain hemlock/Cascade azalea-thinleaf huckleberry	TSME/RHAL2-VAME
CMS323	Mountain hemlock/Cascade azalea	TSME/RHAL2
CMS350	Mountain hemlock/pink mountainheath-Cascade bilberry	TSME/PHEM-VADE
CMS351	Mountain hemlock/Cascade azalea-oval-leaf blueberry	TSME/RHAL2-VAOV
CMS352	Mountain hemlock/Cascade azalea-thinleaf huckleberry	TSME/RHAL2-VAME
CMS353	Mountain hemlock/copperbush/strawberryleaf raspberry	TSME/ELPY/RUPE
CMS354	Mountain hemlock/pink mountainheath-Cascade bilberry	TSME/PHEM-VADE

CMS355	Mountain hemlock/Cascade azalea-oval-leaf blueberry	TSME/RHAL2-VAOV
CMS356	Mountain hemlock/Cascade azalea-thinleaf huckleberry	TSME/RHAL2-VAME
CMS4	Mountain hemlock/devilsclub	TSME/OPHO
CMS450	Mountain hemlock/devilsclub-oval-leaf blueberry	TSME/OPHO-VAOV
CMS5	Mountain hemlock/low shrub	TSME/2SHRUB
CMS6	Mountain hemlock/vine maple-oceanspray-Pacific rhododendron	TSME/ACCI-HODI-RHMA3
CMS611	Mountain hemlock-Douglas-fir/vine maple (lava, Willamette)	TSME-PSME/ACCI
CMS612	Mountain hemlock/Pacific rhododendron	TSME/RHMA3
CMS641	Mountain hemlock-Pacific silver fir/Pacific rhododendron	TSME-ABAM/RHMA
CMSC	Mountain hemlock/oval-leaf blueberry	TSME/VAOV
CP	Ponderosa pine-Jeffrey pine	PIPO-PIJE
CPC0	Ponderosa pine-Jeffrey pine-conifer	PIPO-PIJE-2TE
CPC1	Ponderosa pine-incense cedar	PIPO-CADE27
CPC2	Ponderosa pine-western juniper	PIPO-JUOC
CPC211	Ponderosa pine-western juniper/curl-leaf mountain mahogany-antelope bitterbrush-basin big sagebrush/Idaho fescue	PIPO-JUOC/CELE3-PUTR2-ARTRT/FEID
CPC3	Ponderosa pine-lodgepole pine	PIPO-PICO
CPC4	Jeffrey pine	PIJE
CPC411	Ponderosa pine-Douglas-fir	PIPO-PSME

CPC5	Jeffrey pine-western white pine	PIJE-PIMO3
CPC511	Jeffrey pine-western white pine	PIJE-PIMO
CPC6	Ponderosa pine-Douglas-fir	PIPO-PSME
CPC611	Ponderosa pine-Douglas-fir/old man's whiskers-mule-ears	PIPO-PSME/GETR-WYAM
CPC612	Ponderosa pine-Douglas-fir/antelope bitterbrush	PIPO-PSME/PUTR2
CPC613	Ponderosa pine-Douglas-fir/greenleaf manzanita-snowbrush ceanothus	PIPO-PSME/ARPA6-CEVE
CPC614	Ponderosa pine-Douglas-fir/snowberry	PIPO-PSME/SYMPH
CPF0	Ponderosa pine-Jeffrey pine/forb-grass	PIPO-PIJE/2FORB-2GRAM
CPF111	Ponderosa pine/woolly mule-ears	PIPO/WYMO
CPF121	Ponderosa pine/old man's whiskers-mule-ears	PIPO/GETR-WYAM
CPG0	Ponderosa pine-Jeffrey pine/grass	PIPO-PIJE/2GRAM
CPG1	Ponderosa pine/bunchgrass (non pumice)	PIPO/2GRAM
CPG111	ponderosa pine/bluebunch wheatgrass (Blue Mountains)	PIPO/PSSPS
CPG112	Ponderosa pine/Idaho fescue (Blue Mountains)	PIPO/FEID
CPG121	Ponderosa pine/bluebunch wheatgrass (Daubenmeir)	PIPO/PSSPS
CPG122	Ponderosa pine/Idaho fescue (Daubenmeir)	PIPO/FEID
CPG123	Ponderosa pine/western needlegrass (Daubenmeir)	PIPO/ACOCO
CPG124	Ponderosa pine/western needlegrass (Idaho)	PIPO/ACOCO
CPG131	Ponderosa pine/Idaho fescue (Wallowa)	PIPO/FEID

CPG132	Ponderosa pine/bluebunch wheatgrass (Wallowa)	PIPO/PSSPS
CPG133	Ponderosa pine/Idaho fescue (Idaho)	PIPO/FEID
CPG134	Ponderosa pine/bluebunch wheatgrass (Idaho)	PIPO/PSSPS
CPG141	Ponderosa pine/bluebunch wheatgrass (Wenatchee)	PIPO/PSSPS
CPG142	Ponderosa pine/bluebunch wheatgrass-Indian's dream	PIPO/PSSPS-ASDE6
CPG2	Ponderosa pine/grass-sedge	PIPO/2GRAM-CAREX
CPG212	Ponderosa pine/long-stolon sedge-Idaho fescue-Nevada pea	PIPO/CAIN9-FEID-LALA3
CPG221	Ponderosa pine/pinegrass	PIPO/CARU
CPG222	Ponderosa pine/Geyer's sedge	PIPO/CAGE2
CPG231	Ponderosa pine/pinegrass-bluebunch wheatgrass	PIPO/CARU-PSSPS
CPG3	Ponderosa pine/bluebunch wheatgrass (pumice soil)	PIPO/PSSP6
CPG311	Ponderosa pine/antelope bitterbrush-Idaho fescue (underburn)	PIPO/PUTR2-FEID
CPG6	Jeffrey pine/bunchgrass (serpentine)	PIJE/2GRAM
CPH0	Ponderosa pine-Jeffrey pine-hardwoods	PIPO-PIJE-2TD
CPH1	Ponderosa pine-Jeffrey pine-madrone-manzanita	PIPO-PIJE-ARBUT-ARCTO3
CPH2	Ponderosa pine-Jeffrey pine-white oak-black oak	PIPO-PIJE-QUGA4-QUKE
CPH211	Ponderosa pine-Oregon white oak/arrowleaf balsamroot	PIPO-QUGA4/BASA3

CPH212	Ponderosa pine-Oregon white oak/antelope bitterbrush	PIPO-QUGA4/PUTR2
CPH3	Ponderosa pine-Jeffrey pine-quaking aspen	PIPO-PIJE-POTR5
CPH311	Ponderosa pine-quaking aspen/Wheeler bluegrass	PIPO-POTR5/PONE2
CPH4	Jeffrey pine-oak	PIJE-QUERC
CPH411	Jeffrey pine/huckleberry oak	PIJE/QUVA
CPM0	Ponderosa pine-Jeffrey pine (wetlands, moist to wet soil)	PIPO-PIJE
CPM1	Ponderosa pine-Jeffrey pine/blue wildrye-Kentucky bluegrass	PIPO-PIJE/ELGL-POPR
CPM111	Ponderosa pine/blue wildrye	PIPO/ELGL
CPM112	Ponderosa pine/Kentucky bluegrass	PIPO/POPR
CPRR	Ponderosa pine (rocky, little ground vegetation)	PIPO
CPRS	Ponderosa pine (steep, little ground vegetation)	PIPO
CPRX	Ponderosa pine (rocky or steep, little ground vegetation)	PIPO
CPS0	Ponderosa pine-Jeffrey pine/shrub	PIPO-PIJE/2SHRUB
CPS1	Ponderosa pine-Jeffrey pine/big sagebrush	PIPO-PIJE/ARTR2
CPS111	Ponderosa pine/antelope bitterbrush-big sagebrush/Idaho fescue	PIPO/PUTR2-ARTR2/FEID
CPS112	Ponderosa pine/antelope bitterbrush-big sagebrush/squirreltail (rhyolite)	PIPO/PUTR2-ARTR2/ELELE
CPS121	Ponderosa pine/mountain big sagebrush/Wheeler bluegrass	PIPO/ARTRV/PONE2

CPS131	Ponderosa pine/mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	PIPO/ARTRV/FEID-PSSPS
CPS2	Ponderosa pine-Jeffrey pine/antelope bitterbrush-mountain mahogany	PIPO-PIJE/PUTR2-CERCO
CPS211	Ponderosa pine/antelope bitterbrush/Idaho fescue (pumice)	PIPO/PUTR2/FEID
CPS212	Ponderosa pine/antelope bitterbrush/western needlegrass (pumice)	PIPO/PUTR2/ACOCO
CPS213	Ponderosa pine/antelope bitterbrush-greenleaf manzanita/western needlegrass (pumice)	PIPO/PUTR2-ARPA6/ACOCO
CPS214	Ponderosa pine/antelope bitterbrush-greenleaf manzanita/long-stolon sedge (pumice)	PIPO/PUTR2-ARPA6/CAIN9
CPS215	Ponderosa pine/antelope bitterbrush/long-stolon sedge (pumice)	PIPO/PUTR2/CAIN9
CPS216	Ponderosa pine/antelope bitterbrush/Idaho fescue-bluebunch wheatgrass (pumice)	PIPO/PUTR2/FEID-PSSPS
CPS217	Ponderosa pine/antelope bitterbrush-greenleaf manzanita/Idaho fescue (pumice)	PIPO/PUTR2-ARPA6/FEID
CPS218	Ponderosa pine/antelope bitterbrush/squirreltail (rhyolite)	PIPO/PUTR2/ELELE
CPS221	Ponderosa pine/antelope bitterbrush/Ross' sedge	PIPO/PUTR2/CARO5
CPS222	Ponderosa pine/antelope bitterbrush/Geyer's sedge	PIPO/PUTR2/CAGE2
CPS223	Ponderosa pine/antelope bitterbrush/Idaho fescue (pumice)	PIPO/PUTR2/FEID
CPS224	Ponderosa pine/antelope bitterbrush-greenleaf manzanita/Idaho fescue (pumice)	PIPO/PUTR2-ARPA6/FEID
CPS226	Ponderosa pine/antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	PIPO/PUTR2/FEID-PSSPS

CPS227	Ponderosa pine/antelope bitterbrush (Idaho)	PIPO/PUTR2
CPS228	Ponderosa pine/antelope bitterbrush-greenleaf manzanita	PIPO/PUTR2-ARPA6
CPS231	Ponderosa pine/antelope bitterbrush/bluebunch wheatgrass	PIPO/PUTR2/PSSPS
CPS232	Ponderosa pine/curl-leaf mountain mahogany/Geyer's sedge	PIPO/CELE3/CAGE2
CPS233	Ponderosa pine/curl-leaf mountain mahogany/Wheeler bluegrass	PIPO/CELE3/PONE2
CPS234	Ponderosa pine/curl-leaf mountain mahogany/Idaho fescue-bluebunch wheatgrass	PIPO/CELE3/FEID-PSSPS
CPS241	Ponderosa pine/antelope bitterbrush/bluebunch wheatgrass	PIPO/PUTR2/PSSPS
CPS3	Ponderosa pine/snowbrush ceanothus/Idaho fescue	PIPO/CEVE/FEID
CPS311	Ponderosa pine/antelope bitterbrush-snowbrush ceanothus/western needlegrass (pumice)	PIPO/PUTR2-CEVE/ACOCO
CPS312	Ponderosa pine/antelope bitterbrush-snowbrush ceanothus/long-stolon sedge (pumice)	PIPO/PUTR2-CEVE/CAIN9
CPS314	Ponderosa pine/antelope bitterbrush-snowbrush ceanothus/Idaho fescue	PIPO/PUTR2-CEVE/FEID
CPS321	Jeffrey pine/dwarf ceanothus	PIJE/CEPU
CPS4	Ponderosa pine/oceanspray-common snowberry-cherry	PIPO/HODI-SYAL-PRUNU
CPS5	Ponderosa pine/common snowberry-rose spiraea	PIPO/SYAL-SPDO
CPS511	Ponderosa pine/common snowberry (floodplain)	PIPO/SYAL

CPS512	Ponderosa pine-mixed conifer/rose spirea-common snowberry	PIPO-2TE/SPDO-SYAL
CPS521	Ponderosa pine/common snowberry (Daubenmeir)	PIPO/SYAL
CPS522	Ponderosa pine/common snowberry (Wallowa)	PIPO/SYAL
CPS523	Ponderosa pine/white spirea	PIPO/SPBE2
CPS524	Ponderosa pine/common snowberry	PIPO/SYAL
CPS525	Ponderosa pine/mountain snowberry	PIPO/SYOR2
CPS526	Ponderosa pine/mountain snowberry (Idaho)	PIPO/SYOR2
CPS527	Ponderosa pine/common snowberry (Idaho)	PIPO/SYAL
CPS6	Ponderosa pine/manzanita-deerbrush	PIPO/ARCTO3-CEIN3
CPS611	Jeffrey pine/grass	PIJE/GRASS
CPS7	Ponderosa pine/mallow ninebark	PIPO/PHMA5
CPS721	Ponderosa pine/mallow ninebark (Daubenmeir)	PIPO/PHMA5
CPX104	Malheur(04) 6A: slope-30%, CPG1 12, CPS2 21, CPM1 11, CDG1 11	n/a
CPX120	Winema(20): CPS2 11, CPG3 11	n/a
CPX204	Malheur(04) 6B: 30-70%, CPG1 12, CPS2 21, CPM1 11, CDG1 11	n/a
CPX220	Winema(20): CPS2 12, CPS2 13, CPS3 11	n/a
CPX304	Malheur(04) 6C: 30-70%, tuff, CPG1 11, CPS2 21, CPM1 11, CDG1 11	n/a
CPX320	Winema(20): CPS2 13, CPS2 15, CPS3 12, CPS2 13, CWS1 12	n/a

CPX404	Malheur(04) 6D: less 30%, SERP, CPG1 11, CPS2 21, CPM1 11, CDG1 11	n/a
CPX420	Winema(20) CPS3, CPS6	n/a
CPX504	Malheur(04) 6E: 30-70%, serp, CPG1 11, CPS2 21, CPM1 11, CDG1 11	n/a
CPX520	Winema(20): CPC2	n/a
CPY104	Malheur(04):6f:slope less than 30%	n/a
CQ	Western white pine-sugar pine	PIMO3-PILA
CQF111	Western white pine/common beargrass	PIMO/XETE
CR	Shasta red fir	ABSH
CRC0	Shasta red fir with associated conifers	ABSH-2TE
CRC1	Shasta red fir-incense cedar	ABSH-CADE27
CRC2	Shasta red fir-Alaska cedar	ABSH-CHNO
CRC3	Shasta red fir-white fir	ABSH-ABCO
CRF0	Shasta red fir/forb	ABSH/2FORB
CRF1	Shasta red fir/wintergreen-prince's pine	ABSH/PYROL-CHIMA
CRF2	Shasta red fir/grass-forb	ABSH/2GRAM-2FORB
CRF211	Shasta red fir/skunk-leaved polemonium	ABMAS/POPU
CRG0	Shasta red fir/grass-sedge	ABSH/2GRAM-CAREX
CRG111	Shasta red fir/long-stolon sedge	ABSH/CAIN9
CRH0	Shasta red fir with important associated hardwoods	ABSH-2TD
CRH1	Shasta red fir/deer oak	ABSH/QUSA2

CRH111	Shasta red fir/Sadler oak	ABMAS/QUSA
CRS0	Shasta red fir/shrub	ABSH/2SHRUB
CRS1	Shasta red fir/grouse whortleberry/pinemat manzanita	ABSH/VASC/ARNE
CRS111	Shasta red fir/pinemat manzanita	ABSH/ARNE
CRS112	Shasta red fir-mountain hemlock/pinemat manzanita/long-stolon sedge	ABSH-TSME/ARNE/CAIN9
CRS2	Shasta red fir/blackberry-common snowberry	ABSH/RUBUS-SYAL
CRS211	Shasta red fir/creeping snowberry	ABMAS/SYMO
CRS3	Shasta red fir/giant chinquapin	ABSH/CHCHC4
CRS311	Shasta red fir/giant chinquapin/pipsissewa-long-stolon sedge	ABSH/CHCHC4/CHUM-CAIN9
CRS313	Shasta red fir/giant chinquapin/pipsissewa-long-stolon sedge	ABSH/CHCHC4/CHUM-CAIN9
CRS4	Shasta red fir/blueberry-buffaloberry-rusty menziesia	ABSH/VACCI-SHEPH-MEFE
CRS411	Shasta red fir/thin-leaved huckleberry	ABMAS/VAME
CS	Sitka spruce	PISI
CSC0	Sitka spruce with associated conifers	PISI-2TE
CSF0	Sitka spruce/forb	PISI/2FORB
CSF1	Sitka spruce/western swordfern	PISI/POMU
CSF111	Sitka spruce/western swordfern-redwood-sorrel	PISI/POMU-OXOR
CSF121	Sitka spruce/western swordfern	PISI/POMU
CSF2	Sitka spruce/ladyfern-twistedstalk	PISI/ATHYR-STREP3

CSF3	Sitka spruce/redwood-sorrel	PISI/OXOR
CSF321	Sitka spruce/redwood-sorrel	PISI/OXOR
CSH0	Sitka spruce with important associated hardwoods	PISI-2TD
CSH1	Sitka spruce/California laurel	PISI/UMCA
CSH2	Sitka spruce/elderberry	PISI/SAMBU
CSH3	Sitka spruce/bigleaf maple	PISI/ACMA3
CSM0	Sitka spruce (wetland, moist to wet soil)	PISI
CSM1	Sitka spruce/willow-California wax myrtle	PISI/SALIX-MOCA6
CSS0	Sitka spruce/shrub	PISI/2SHRUB
CSS1	Sitka spruce/California huckleberry	PISI/VAOV2
CSS2	Sitka spruce/red huckleberry	PISI/VAPA
CSS221	Sitka spruce/rusty menziesia-red huckleberry	PISI/MEFE-VAPA
CSS3	Sitka spruce/salal	PISI/GASH
CSS321	Sitka spruce/salal	PISI/GASH
CSS4	Sitka spruce/rhododendron	PISI/RHODO
CSS411	Sitka spruce-Douglas-fir/rhododendron-California huckleberry (stabilized dune)	PISI-PSME/RHODO-VAOV2
CSS412	Sitka spruce-lodgepole pine-western hemlock/rhododendron (flood plain)	PISI-PICO-TSHE/RHODO
CSS421	Sitka spruce-Douglas-fir/rhododendron-California huckleberry (sandy, steep)	PISI-PSME/RHODO-VAOV2
CSS422	Sitka spruce-Douglas-fir/rhododendron-California huckleberry (sandy, gentle)	PISI-PSME/RHODO-VAOV2

CSS5	Sitka spruce/thimbleberry-salmonberry	PISI/RUPA-RUSP
CSS521	Sitka spruce/salmonberry	PISI/RUSP
CSS522	Sitka spruce/salmonberry-salal	PISI/RUSP-GASH
CSS6	Sitka spruce/devilsclub	PISI/OPHO
CSS621	Sitka spruce/devilsclub	PISI/OPHO
CSS7	Sitka spruce/vine maple	PISI/ACCI
CT	Port Orford cedar	CHLA
CTH0	Port Orford cedar-hardwoods	CHLA-2TD
CTH1	Port Orford cedar/oak	CHLA/QUERC
CTH2	Port Orford cedar/bigleaf maple	CHLA/ACMA3
CTH211	Port Orford cedar-bigleaf maple	CHLA-ACMA
CTS0	Port Orford cedar-shrub	CHLA-2SHRUB
CTS1	Port Orford cedar/Cascade barberry	CHLA/MANE2
CTS112	Port Orford cedar/dwarf Oregon grape/western twinflower	CHLA/BENE/LIBOL
CTS2	Port Orford cedar/salal	CHLA/GASH
CTS211	Port Orford cedar/salal	CHLA/GASH
CTS3	Port Orford cedar/silktassel	CHLA/GARRY
CTS311	Port Orford cedar/box-leaved silk-tassel	CHLA/GABU
CW	White fir-grand fir	ABCO-ABGR
CWC0	White fir-grand fir-associated conifers	ABCO-ABGR-2TE
CWC1	White fir-incense cedar-ponderosa pine	ABCO-CADE27-PIPO

CWC111	White fir-ponderosa pine-incense cedar/Saskatoon serviceberry	ABCO-PIPO-CADE27/AMAL2
CWC135	White fir-incense cedar/dwarf Oregon grape	ABCO-CADE3/BENE
CWC2	White fir-Douglas-fir-ponderosa pine (southwest Oregon, hot)	ABCO-PSME-PIPO
CWC211	White fir-Douglas-fir/snowbrush ceanothus-giant chinquapin/western brackenfern	ABCO-PSME/CEVE-CHCHC4/PTAQ
CWC212	White fir-Douglas-fir/snowbrush ceanothus-giant chinquapin/pinegrass	ABCO-PSME/CEVE-CHCHC4/CARU
CWC213	White fir/snowbrush ceanothus/long-stolon sedge-hairy brackenfern	ABCO/CEVE/CAIN9-PTAQP2
CWC214	White fir-Douglas-fir/snowbush ceanothus/kinnikinnick	ABCO-PSME/CEVE/ARUV
CWC215	White fir-Douglas-fir/snowbush ceanothus/kinnikinnick	ABCO-PSME/CEVE/ARUV
CWC231	White fir-Douglas-fir/dwarf Oregon grape	ABCO-PSME/BENE
CWC232	White fir-Douglas-fir/creambush oceanspray	ABCO-PSME/HODI
CWC233	White fir-Douglas-fir/Depauperate	ABCO-PSME/DEPAUPERATE
CWC234	White fir-Douglas-fir/Piper's Oregon grape	ABCO-PSME/BEPI
CWC241	White fir-ponderosa pine	ABCO-PIPO
CWC3	White fir-lodgepole pine (lodgepole reproducing)	ABCO-PICO
CWC311	White fir-lodgepole pine/long-stolon sedge-western needlegrass	ABCO-PICO/CAIN9-ACOCO
CWC321	White fir-lodgepole pine/western serviceberry	ABCO-PICO/AMAL
CWC4	White fir-ponderosa pine-western white pine-sugar pine (no Douglas-fir)	ABCO-PIPO-PIMO3-PILA

CWC411	White fir-ponderosa pine-sugar pine/sticky currant	ABCO-PIPO-PILA/RIVI3
CWC412	White fir-ponderosa pine-sugar pine/greenleaf manzanita	ABCO-PIPO-PILA/ARPA6
CWC5	White fir-grand fir/Engelmann spruce-Brewer spruce	ABCO-ABGR/PIEN-PIBR
CWC511	White fir-Engelmann spruce/starry false lily of the valley	ABGR-PIEN/MAST4
CWC522	White fir-Brewer spruce/slender salal	ABCO-PIBR/GAOV
CWC523	White fir-Brewer spruce/common prince's-pine	ABCO-PIBR/CHUM
CWC6	White fir-Port-Orford-cedar (southwest Oregon, mesic)	ABCO-CHLA
CWC7	White fir-grand fir-Shasta red fir-Pacific silver fir	ABCO-ABGR-ABSH-ABAM
CWC725	White fir-Shasta red fir/common prince's-pine	ABCO-ABMAS/CHUM
CWC731	White fir-mountain hemlock/western twinflower	ABCO-TSME/LIBOL
CWC741	White fir-Pacific silver fir/dwarf Oregon grape	ABCO-ABAM/BENE
CWC8	White fir-grand fir/Pacific yew	ABCO-ABGR/TABR2
CWC811	Grand fir/Pacific yew/bride's bonnet	ABGR/TABR2/CLUN2
CWC812	Grand fir/Pacific yew/twinflower	ABGR/TABR2/LIBO3
CWC9	White fir-grand fir-Engelmann spruce	ABCO-ABGR-PIEN
CWC911	Engelmann spruce (bottoms)	PIEN
CWC921	White fir-western hemlock/vine maple	ABCO-TSHE/ACCI
CWF0	White fir-grand fir/forb	ABCO-ABGR/2FORB
CWF1	White fir/sweet after death-oneleaf foamflower	ABCO/ACTR-TITRU

CWF2	White fir/wintergreen-pipsissewa	ABCO/PYROL-CHUM
CWF211	Grand fir/pipsissewa	ABGR/CHUM
CWF221	White fir/common prince's-pine/pyrola	ABCO/CHUM/PYROLA
CWF3	White fir-grand fir/twinflower	ABCO-ABGR/LIBO3
CWF311	Grand fir/twinflower-forb	ABGR/LIBO3-2FORB
CWF312	Grand fir/twinflower (Blue Mountains)	ABGR/LIBO3
CWF313	Grand fir/twinflower (Idaho)	ABGR/LIBO3
CWF321	Grand fir/twinflower	ABGR/LIBO3
CWF4	White fir-grand fir/bride's bonnet/low forb	ABCO-ABGR/CLUN2/2FORB
CWF421	Grand fir/bride's bonnet (Wallowa)	ABGR/CLUN2
CWF422	Grand fir/Pacific yew/bride's bonnet	ABGR/TABR2/CLUN2
CWF423	Grand fir/bride's bonnet (Idaho)	ABGR/CLUN2
CWF431	White fir/bride's bonnet	ABCO/CLUN2
CWF444	Grand fir/heartleaf arnica	ABGR/ARCO9
CWF5	White fir-grand fir/mid-forbs	ABCO-ABGR/2FORB
CWF511	Grand fir/Idaho goldthread	ABGR/COOC
CWF512	Grand fir/Carolina bugbane	ABGR/TRCA
CWF521	Grand fir/broadleaf starflower	ABGR/TRBOL
CWF522	Grand fir/sweet after death	ABGR/ACTR
CWF523	Grand fir/Jacob's-ladder	ABGR/POPU3
CWF524	Grand fir/sweet after death (Wenatchee)	ABGR/ACTR

CWF531	Grand fir/common beargrass	ABGR/XETE
CWF532	Grand fir/Oregon goldthread (Idaho)	ABGR/COLA3
CWF6	Grand fir-white fir/fern	ABGR-ABCO/2FERN
CWF611	Grand fir/western oakfern	ABGR/GYDR
CWF612	Grand fir/western swordfern-British Columbia wildginger	ABGR/POMU-ASCA2
CWF613	Grand fir/common ladyfern	ABGR/ATFI
CWF911	White fir/herb	ABCO/HERB
CWFC	White fir/forb (cool)	ABCO/2FORB
CWFM	White fir/forb (mesic)	ABCO/2FORB
CWG0	White fir-grand fir/grass	ABCO-ABGR/2GRAM
CWG1	Grand fir/pinegrass-Geyer's sedge	ABGR/CARU-CAGE2
CWG111	Grand fir/Geyer's sedge (Blue Mountains)	ABGR/CAGE2
CWG112	Grand fir/pinegrass (ash)	ABGR/CARU
CWG113	Grand fir/pinegrass (Blue Mountains)	ABGR/CARU
CWG114	Grand fir/pinegrass (Idaho)	ABGR/CARU
CWG121	Grand fir/Geyer's sedge	ABGR/CAGE2
CWG122	Grand fir/Geyer's sedge (Gifford Pinchot)	ABGR/CAGE2
CWG123	Grand fir/pinegrass	ABGR/CARU
CWG124	Grand fir/pinegrass (Wenatchee)	ABGR/CARU
CWG125	Grand fir/pinegrass-lupine	ABGR/CARU-LUPIN
CWG2	White fir-grand fir/Columbia brome	ABCO-ABGR/BRVU

CWG211	Grand fir/Columbia brome	ABGR/BRVU
CWH0	White fir-grand fir-hardwoods	ABCO-ABGR-2TD
CWH1	White fir-grand fir/giant chinquapin	ABCO-ABGR/CHCHC4
CWH111	White fir/snowbrush ceanothus-giant chinquapin	ABCO/CEVE-CHCHC4
CWH112	White fir/giant chinquapin-Oregon boxleaf/pipsissewa	ABCO/CHCHC4-PAMY/CHUM
CWH2	White fir-grand fir-quaking aspen	ABCO-ABGR-POTR5
CWH211	White fir-ponderosa pine-quaking aspen/long-stolon sedge	ABCO-PIPO-POTR5/CAIN9
CWH3	White fir/tanoak-canyon live oak	ABCO/LIDE3-QUCH2
CWH312	White fir-tanoak	ABCO-LIDE3
CWH4	White fir-grand fir/vine maple-Rocky Mountain maple-dogwood	ABCO-ABGR/ACCI-ACGLD4-CORNU
CWH411	White fir/vine maple/vanillaleaf	ABCO/ACCI/ACTR
CWH413	White fir/Douglas maple	ABCO/ACGL
CWH421	White fir/Douglas maple/dwarf Oregon grape	ABCO/ACGL/BENE
CWH5	White fir/deer oak	ABCO/QUSA2
CWH511	White fir-Sadler oak/common prince's-pine	ABCO-QUSA/CHUM
CWH521	White fir-Sadler oak/dwarf Oregon grape-Oregon boxwood	ABCO-QUSA/BENE-PAMY
CWH522	White fir-Sadler oak/dwarf Oregon grape	ABCO-QUSA/BENE
CWH531	White fir-Sadler oak-golden chinquapin	ABCO-QUSA-CACH
CWM0	White fir-grand fir (bottomlands)	ABCO-ABGR

CWM1	White fir/thinleaf alder/snowberry (bottomlands)	ABCO/ALINT/GAULT
CWM111	White fir/thinleaf alder (meadow)	ABCO/ALINT
CWM2	Grand fir-white fir/forb (bottomlands)	ABGR-ABCO/2FORB
CWM210	Grand fir-western red cedar/American skunkcabbage	ABGR-THPL/LYAM3
CWS0	White fir-grand fir/shrub	ABCO-ABGR/2SHRUB
CWS1	White fir-grand fir/snowbrush ceanothus-greenleaf manzanita	ABCO-ABGR/CEVE-ARPA6
CWS112	White fir/snowbrush ceanothus-greenleaf manzanita (pumice)	ABCO/CEVE-ARPA6
CWS113	White fir/snowbrush ceanothus-greenleaf manzanita/long-stolon sedge-glaucus beardtongue	ABCO/CEVE-ARPA6/CAIN9-PEEU
CWS114	White fir/snowbrush ceanothus (pumice)	ABCO/CEVE
CWS115	White fir/snowbrush ceanothus/long-stolon sedge	ABCO/CEVE/CAIN9
CWS116	White fir/snowbrush ceanothus-squawcarpet/Virginia strawberry	ABCO/CEVE-CEPR/FRVI
CWS117	White fir-ponderosa pine/greenleaf manzanita-creeping barberry	ABCO-PIPO/ARPA6-MARE11
CWS121	Grand fir/snowbrush ceanothus (Warm Springs)	ABGR/CEVE
CWS2	White fir-grand fir/thinleaf huckleberry-creeping barberry	ABCO-ABGR/VAME-MARE11
CWS211	Grand fir/thinleaf huckleberry	ABGR/VAME
CWS212	Grand fir/thinleaf huckleberry (Blue Mountains)	ABGR/VAME
CWS213	Grand fir/thinleaf huckleberry (Warm Springs)	ABGR/VAME

CWS214	Grand fir/thinleaf huckleberry/bride's bonnet (Colville)	ABGR/VAME/CLUN2
CWS221	Grand fir/thinleaf huckleberry/twinflower	ABGR/VAME/LIBO3
CWS222	Grand fir/thinleaf huckleberry/bride's bonnet	ABGR/VAME/CLUN2
CWS223	Grand fir/thimbleberry/drops of gold	ABGR/RUPA/DIHO3
CWS224	Grand fir/Cascade barberry/sweet after death	ABGR/MANE2/ACTR
CWS225	Grand fir/Cascade barberry	ABGR/MANE2
CWS226	Grand fir/Cascade barberry/pinegrass	ABGR/MANE2/CARU
CWS231	Grand fir/thinleaf huckleberry	ABGR/VAME
CWS232	White fir/thin-leaved huckleberry/western twinflower	ABCO/VAME/LIBOL
CWS3	White fir-grand fir/white spirea-common snowberry (mesic)	ABCO-ABGR/SPBE2-SYAL
CWS311	White fir-grand fir/giant chinquapin	ABCO-ABGR/CHCHC4
CWS312	White fir/common snowberry/Virginia strawberry	ABCO/SYAL/FRVI
CWS313	White fir-ponderosa pine/common snowberry/tuber starwort	ABCO-PIPO/SYAL/PSJA2
CWS314	Grand fir/common snowberry (floodplain)	ABGR/SYAL
CWS321	Grand fir/white spirea	ABGR/SPBE2
CWS322	Grand fir/white spirea (Blue Mountains)	ABGR/SPBE2
CWS323	Grand fir/white spirea (Idaho)	ABGR/SPBE2
CWS331	Grand fir/snowberry	ABGR/SYMPH
CWS332	Grand fir/creeping snowberry/sweet after death	ABGR/SYMO/ACTR

CWS333	Grand fir/snowberry (Warm Springs)	ABGR/SYMPH
CWS334	Grand fir/snowberry/Geyer's sedge	ABGR/SYMPH/CAGE2
CWS335	Grand fir/shinyleaf spirea/western brackenfern	ABGR/SPBEL/PTAQ
CWS336	Grand fir/common snowberry/pinegrass	ABGR/SYAL/CARU
CWS337	Grand fir/mountain snowberry	ABGR/SYOR2
CWS338	Grand fir/pinemat manzanita	ABGR/ARNE
CWS4	White fir-grand fir/mallow ninebark	ABCO-ABGR/PHMA5
CWS412	Grand fir/Rocky Mountain maple-mallow ninebark	ABGR/ACGL-PHMA5
CWS421	Grand fir/mallow ninebark	ABGR/PHMA5
CWS422	Grand fir/Douglas maple/bride's bonnet	ABGR/ACGLD4/CLUN2
CWS5	White fir-grand fir/oceanspray-Cascade barberry-vine maple-salal	ABCO-ABGR/HODI-MANE2-ACCI-GASH
CWS511	White fir/oceanspray/desertparsley (steep shallow soil)	ABCO/HODI/LOMAT
CWS521	Grand fir/kinnikinnick	ABGR/ARUV
CWS522	Grand fir/Cascade barberry	ABGR/MANE2
CWS531	Grand fir/oceanspray	ABGR/HODI
CWS532	Grand fir/vine maple/sweet after death	ABGR/ACCI/ACTR
CWS533	Grand fir/giant chinquapin	ABGR/CHCHC4
CWS534	Grand fir/oceanspray (Gifford Pinchot)	ABGR/HODI
CWS535	Grand fir/vine maple-hollyleaved barberry/broadleaf starflower	ABGR/ACCI-MAAQ2/TRBOL
CWS536	Grand fir/beaked hazelnut/sweet after death	ABGR/COCO6/ACTR

CWS537	Grand fir/Pacific dogwood/sweet after death	ABGR/CONU4/ACTR
CWS538	Grand fir/vine maple	ABGR/ACCI
CWS541	Grand fir/Rocky Mountain maple	ABGR/ACGL
CWS542	Grand fir/Rocky Mountain maple (Idaho)	ABGR/ACGL
CWS543	Grand fir/Rocky Mountain maple (floodplain)	ABGR/ACGL
CWS551	Grand fir/vine maple (Wenatchee)	ABGR/ACCI
CWS552	Grand fir/vine maple-pipsissewa	ABGR/ACCI-CHUM
CWS553	Grand fir/vine maple/bride's bonnet	ABGR/ACCI/CLUN2
CWS554	Grand fir/oceanspray/pinegrass	ABGR/HODI/CARU
CWS6	White fir-grand fir/whipplea-roughfruit berry-poison oak	ABCO-ABGR/WHMO-RULA2-TOXIC
CWS7	White fir-grand fir/Oregon boxleaf-serviceberry	ABCO-ABGR/PAMY-AMELA
CWS711	Grand fir/Oregon boxleaf (Warm Springs)	ABGR/PAMY
CWS712	Grand fir/Oregon boxleaf/pinegrass	ABGR/PAMY/CARU
CWS722	Grand fir/Oregon boxleaf	ABGR/PAMY
CWS731	White fir/western serviceberry/threeleaf anemone	ABCO/AMAL/ANDE
CWS8	White fir-grand fir/grouse whortleberry	ABCO-ABGR/VASC
CWS811	Grand fir/grouse whortleberry	ABGR/VASC
CWS812	Grand fir/grouse whortleberry/twinflower	ABGR/VASC/LIBO3
CWS821	Grand fir/dwarf bilberry	ABGR/VACA13
CWS822	Grand fir/dwarf bilberry (Idaho)	ABGR/VACA13

CWS911	Engelmann spruce-white fir (bottoms)	PIEN-ABCO
CWS912	Grand fir/Rocky Mountain maple	ABGR/ACGL
CWS931	White fir/poison oak	ABCO/RHDI
CWSC	White fir/shrub (tall, cool)	ABCO/2SHRUB
CWSM	White fir/shrub (southwest Oregon, mesic)	ABCO/2SHRUB
CWX104	Malheur(04) 3A: slope <30%, CWF311, CWS211, CWS811	n/a
CWX120	Winema(20): CWS112, CWS114	n/a
CWX204	Malheur (04) 3B: slope 30-70%, CWF311, CWS211, CWS811	n/a
CWX220	Winema(20): CWH111	n/a
CWX320	Winema(20): CLS311, CMS111, CRS111	n/a
CWX420	Winema(20): CWC1, CWC2, CWC9, CWH1, CWS1	n/a
CWY104	Malheur(04) 5A: slope less 30%, CWG111, CWG112, CDS711	n/a
CWY204	Malheur(04) 5B: slope 30-70%, CWG111, CWG112, CDS711	n/a
CWY304	Malheur(04) 5C: <30%, serpen., CWG111, CWG112, CDS711	n/a
CWY404	Malheur(04) 5D: 30-70%, serpen, CWG111, CWG112, CDS711	n/a
CX	Coniferous forest	2TE
D	Desert	n/a
DC	Cold desert (freezing winters)	n/a

DC10	Greasewood	SAVE4
DC1121	Greasewood/inland saltgrass	SAVE4/DISP
DC20	Shadscale saltbrush	ATCO
DC30	Winterfat	KRLA2
DC40	Spiny hopsage	GRSP
DC4121	Spiny hopsage/Sandberg bluegrass	GRSP/POSE
DCC512	Ponderosa pine-Douglas-fir/snowberry	PIPO-PSME/SYMPH
DE3121	Winterfat/Sandberg bluegrass	KRLA2/POSE
DW	Warm desert	
DX	Desert	
F	Forbland	2FORB
FM	Forb (moist, mesic, in forest zone)	2FORB
FM10	Western brackenfern-blackberry	PTAQ-RUBUS
FM20	Common beargrass	XETE
FM2911	Common beargrass-red fescue	XETE-FERU2
FM30	Forb-grass	2FORB-2GRAM
FM3011	Garden vetch-subalpine fleabane-blue wildrye	VISA-ERPE3-ELGL
FM80	Forb (coastal)	2FORB
FM88	Lupine (coastal)	LUPIN
FM90	Buckwheat (scabland)	ERIOG
FM9111	Douglas' buckwheat/Sandberg bluegrass	ERDO/POSE

FM9112	Blue Mountain buckwheat/Sandberg bluegrass	ERST4/POSE
FM9113	Sulphur-flower buckwheat (ridgetops)	ERUMM
FM9122	Rock buckwheat/Sandberg bluegrass	ERSP7/POSE
FM9123	Douglas' buckwheat/Sandberg bluegrass	ERDO/POSE
FM9124	Cutleaf daisy/Sandberg bluegrass	ERCO4/POSE
FM9125	Thymeleaf buckwheat/Sandberg bluegrass	ERTH4/POSE
FM9911	Common woolly sunflower-varileaf phacelia	ERLA6/PHHE2
FS	Forb (subalpine and alpine)	2FORB
FS10	Valerian (subalpine)	VALER
FS20	Lupine-Indian paintbrush-buttercup (subalpine, moist)	LUPIN-CAST12-RANUN
FS30	Saw-wort-seep monkeyflower-marsh marigold (subalpine-wet)	SAUSS-MIGU-CALTH
FS40	Luetkea (subalpine)	LUETK
FS50	Poke knotweed (subalpine)	POPH
FS5911	Poke knotweed (alpine)	POPH
FS60	Lupine-giant mountain aster-grass (subalpine)	LUPIN-CAMO32-2GRAM
FS70	Pincushion plant (subalpine)	DILA
FW	Forb (wet meadows)	2FORB
FW10	Common cowparsnip (wetlands)	HEMA80
FW20	Thinleaf cottonsedge/sphagnum-sedge (wetlands)	ERV19/SPHAG2-CAREX
FW2911	Common beargrass-red fescue	XETE-FERU2

FW30	Cusick's camas (wetlands)	CACU2
FW3911	Cusick's camas (seepage)	CACU2
FW40	Arrowleaf ragwort-bride's bonnet (wetlands)	SETR-CLUN2
FW4111	Bride's bonnet-gray alder (wetland)	CLUN2/ALIN2
FW4211	Arrowleaf ragwort (wetland)	SETR
FW4212	Field horsetail	EQAR
FW4213	Northern maidenhair	ADPE
FW4221	Northern maidenhair (Mt. Hood and Gifford Pinchot)	ADPE
FW4222	Field horsetail (Mt. Hood and Gifford Pinchot)	EQAR
FW4223	American skunkcabbage	LYAM3
FW4224	Seep monkeyflower	MIGU
FW4225	Woodsorrel	OXALI
FW4226	Arctic sweet coltsfoot	PEFR5
FW4227	Brook saxifrage-arrowleaf ragwort	SAOD2-SETR
FW4228	Arrowleaf ragwort-giant mountain aster	SETR-CAMO32
FW4229	Coastal hedgenettle-common ladyfern	STCHC3-ATFI
FW4230	Coastal hedgenettle-seep monkeyflower	STCHC3-MIGU
FW4231	Coldwater fumewort	COCAA
FW50	False hellebore (wetlands)	VERAT
FW5111	False hellebore-common cowparsnip	VERAT-HEMA80
FW5121	California false hellebore	VECA2

FX	Forb	2FORB
FX4111	Wallowa lewisia (rims)	LECOW
GA	Grass (annual vegetation)	2GRAM
GA10	Cheatgrass	BRTE
GA20	Medusahead	TACA8
GA30	Dogtail	n/a
GA40	Soft chess	BROMU
GB	Bluebunch wheatgrass	PSSP6
GB11	Fendler threeawn-sand dropseed	ARPUL/SPCR
GB1121	Sand dropseed-Sandberg bluegrass	SPCR/POSE
GB1122	Fendler threeawn-Sandberg bluegrass	ARPUL/POSE
GB1211	Sand dropseed (river terrace)	SPCR
GB1911	Bluebunch wheatgrass-sand dropseed-Fendler threeawn	PSSPS-SPCR-ARPUL
GB20	Needle and thread	HECOC8
GB2121	Needle and thread-Sandberg bluegrass	HECOC8/POSE
GB2122	Needle and thread-Sandberg bluegrass-snow buckwheat	HECOC8/POSE/ERNI2
GB30	Squirreltail	ELELE
GB40	Bluebunch wheatgrass	PSSP6
GB41	Bluebunch wheatgrass	PSSPS
GB4111	Bluebunch wheatgrass-parsnipflower buckwheat	PSSPS-ERHE2

GB4112	Bluebunch wheatgrass-Sandberg bluegrass-narrowleaf skullcap	PSSPS-POSE-SCAN3
GB4113	Bluebunch wheatgrass-Sandberg bluegrass (basalt)	PSSPS-POSE
GB4114	Bluebunch wheatgrass-Sandberg bluegrass-Cusick's milkvetch	PSSPS-POSE-ASCU5
GB4115	Bluebunch wheatgrass-Sandberg bluegrass-shaggy fleabane	PSSPS-POSE-ERPU2
GB4116	Bluebunch wheatgrass-Sandberg bluegrass (granite)	PSSPS-POSE
GB4117	Bluebunch wheatgrass-Sandberg bluegrass-Snake River phlox	PSSPS-POSE-PHCO10
GB4118	Bluebunch wheatgrass-Sandberg bluegrass-plains pricklypear	PSSPS-POSE-OPPO
GB4121	Bluebunch wheatgrass-Sandberg bluegrass	PSSP6-POSE
GB4122	Bluebunch wheatgrass-Idaho fescue	PSSP6-FEID
GB42	Bluebunch wheatgrass (seeded or native)	PSSP6
GB43	Crested wheatgrass (seeded)	AGCR
GB4911	Bluebunch wheatgrass-Sandberg bluegrass-onespike danthonia (shallow soil, scabland)	PSSPS-POSE-DAUN
GB4912	Bluebunch wheatgrass-Idaho fescue (deep soil, gentle slopes)	PSSPS-FEID
GB4913	Bluebunch wheatgrass-Sandberg bluegrass (shallow soil, steep slopes)	PSSPS-POSE
GB4914	Bluebunch wheatgrass-Idaho fescue (deep soil, steep slopes)	PSSPS-FEID
GB50	Fescue	FESTU
GB5121	Common snowberry/Idaho fescue/silky lupine	SYAL/FEID/LUSE4

GB5122	Idaho fescue-Nootka rose	FEID-RONU
GB5123	Idaho fescue-houndstongue hawkweed	FEID-HICY
GB59	Idaho fescue-bluebunch wheatgrass	FEID-PSSPS
GB5911	Idaho fescue-prairie Junegrass (ridge)	FEID-KOMA
GB5912	Idaho fescue-prairie Junegrass (mounds)	FEID-KOMA
GB5913	Idaho fescue-prairie Junegrass (high elevation)	FEID-KOMA
GB5914	Idaho fescue-prairie Junegrass (low elevation)	FEID-KOMA
GB5915	Idaho fescue-bluebunch wheatgrass (ridge)	FEID-PSSPS
GB5916	Idaho fescue-bluebunch wheatgrass-silky lupine	FEID-PSSPS-LUSE4
GB5917	Idaho fescue-bluebunch wheatgrass-arrowleaf balsamroot	FEID-PSSPS-BASA3
GB5918	Idaho fescue-bluebunch wheatgrass-Snake River phlox	FEID-PSSPS-PHCO10
GB5919	Common snowberry/Idaho fescue-prairie Junegrass	SYAL/FEID-KOMA
GB5920	Idaho fescue-timber oatgrass-sedge	FEID-DAIN-CAREX
GB5921	Idaho fescue-Hood's sedge	FEID-CAHO5
GB5922	Idaho fescue-Geyer's sedge	FEID-CAGE2
GB60	Rough fescue	FECA4
GB70	Giant wildrye	LECI4
GB7111	Basin wildrye	LECI4
GB7121	Basin wildrye/inland saltgrass	LECI4/DISP
GB90	Bluebunch wheatgrass (scabland)	PSSP6

GB9111	Sandberg bluegrass-onespike danthonia	POSE-DAUN
GB99	Sandberg bluegrass-onespike danthonia (scabland)	POSE-DAUN
GBB0	Bluebunch wheatgrass (biscuit swale)	PSSP6
GBB911	Biscuit-scabland complex	n/a
GBB921	Idaho fescue-prairie Junegrass/Sandberg bluegrass-onespike danthonia (mounds)	FEID-KOMA/POSE-DAUN
GBC0	Bluebunch wheatgrass-scattered conifers	PSSP6-2TE
GBFX	Grass-forb (Snake River)	2GRAM-2FORB
GBRR	Bluebunch wheatgrass (very rocky, little vegetation)	PSSP6
GBRS	Bluebunch wheatgrass (steep, stony, little vegetation)	PSSP6
GBRX	bluebunch wheatgrass (rocky or steep, little vegetation)	PSSP6
GBS0	bluebunch wheatgrass-shrub	PSSP6-2SHRUB
GBX104	Malheur(04) 7A: slope less 30%, GB4911, GB4912	n/a
GBX204	Malheur(04) 7B: slope 30-70%, GB4913, GB4914	n/a
GBX304	Malheur(04) 7C: slope less 30%, serpentine, GB4911, GB4912	n/a
GBX404	Malheur(04) 7D: slope 30-70%, serpentine, GB4913, GB4914	n/a
GM	Grass (moist, mesic, within forest zone)	2GRAM
GM10	Needlegrass (interior valley, Willamette, Puget Sound)	ACHNA

GM20	Red fescue (interior valley, Willamette, Puget Sound; coastal)	FERU2
GM30	Oatgrass-needlegrass (interior valley)	ARRHE-ACHNA
GM40	Grass (floodplain)	2GRAM
GM4111	Bluejoint	CACA4
GM4112	Blue wildrye	ELGL
GM4121	Blue wildrye-bromegrass	ELGL-BROMU
GM80	Grass (coastal)	2GRAM
GMB9	Puget mima mounds	n/a
GMC9	Grass/scattered conifers (moist, mesic)	2GRAM/2TE
GMFX	Grass-forb (mesic)	2GRAM/2FORB
GR	Grass-sedge	2GRAM/CAREX
GR10	Sedge (low)	CAREX
GR20	Blue grama	BOGR2
GR30	Inland saltgrass	DISP
GR3121	Inland saltgrass	DISP
GR80	Beachgrass	AMMOP
GR81	Beachgrass (foredune, sandy dune geology)	AMMOP
GR8111	Beachgrass (foredune)	AMMOP
GR82	Beachgrass (hummocks, sand dune geology)	AMMOP
GR8211	Beachgrass/lupine/bluegrass (hummocks, occasionally wet, dense)	AMMOP/LUPIN/POA

GR8212	beachgrass/lupine (hummocks, occasionally wet, unstable, open)	AMMOP/LUPIN
GR8213	Beachgrass/lupine/bluegrass (hummocks, dry, eroding)	AMMOP/LUPIN/POA
GR83	Beachgrass (dune slip face)	AMMOP
GR8311	Beachgrass (dune slip face, stabilized)	AMMOP
GS	Grass (subalpine or alpine)	2GRAM
GS10	Western needlegrass (alpine)	ACOCO
GS11	Greenleaf fescue	FEVI
GS1111	Greenleaf fescue-Hood's sedge	FEVI-CAHO5
GS1112	Greenleaf fescue-silvery lupine	FEVI-LUARL5
GS12	Idaho fescue (alpine)	FEID
GS1211	Idaho fescue (subalpine)	FEID
GS13	Rough fescue (alpine)	FECA4
GS20	Sedge (alpine, tall)	CAREX
GS30	Sedge (alpine, short, dense)	CAREX
GS3911	Geyer's sedge (subalpine)	CAGE2
GS40	Sedge (alpine, short, thin)	CAREX
GS50	Needlegrass/squirreldtail (alpine)	ACHNA/ELEL5
GSC0	Grasslands-scattered conifers (subalpine to alpine)	2GRAM-2TE
GSXX	Grasslands (alpine xeric)	2GRAM
GSY104	Malheur(04) 9C: slope-30%, serpent, SD91 11, CJS8 11, GS91 11	n/a

GSY204	Malheur(04) 9D: 30-70%, serpentine, SD91 11, CJS8 11, GS91 11	n/a
GX	Grass	2GRAM
HA	Red alder	ALRU2
HAC0	Red alder/conifers	ALRU2/2TE
HAF0	Red alder/forb	ALRU2/2FORB
HAF1	Red alder/western swordfern	ALRU2/POMU
HAF2	Red alder/short forbs	ALRU2/2FORB
HAF211	Red alder/arctic sweet coltsfoot	ALRU2/PEFRP
HAF221	Red alder/blue wildrye	ALRU2/ELGL
HAF222	Red alder/woodsorrel	ALRU2/OXALI
HAF223	Red alder/arctic sweet coltsfoot	ALRU2/PEFR5
HAF224	Red alder/coastal hedgenettle	ALRU2/STCHC3
HAF225	Red alder/youth on age-Siberian springbeauty	ALRU2/TOME-CLISIS
HAH0	Red alder/hardwoods	ALRU2/2TD
HAM0	Red alder (wetlands, moist to wet soil)	ALRU2
HAM1	Red alder (overflow bottomland)	ALRU2
HAM2	White alder (overflow bottomland)	ALRH2
HAS0	Red alder/shrub	ALRU2/2SHRUB
HAS1	Red alder/salmonberry-thimbleberry	ALRU2/RUSP-RUPA
HAS111	Red alder/thimbleberry	ALRU2/RUPA
HAS112	Red alder/salmonberry/woodsorrel	ALRU2/RUSP/OXALI

HAS113	Red alder/salmonberry/youth on age	ALRU2/RUSP/TOME
HAS2	Red alder/Pacific ninebark-common snowberry	ALRU2/PHCA11-SYAL
HAS211	Red alder/Pacific ninebark	ALRU2/PHCA11
HAS3	Red alder/vine maple	ALRU2/ACCI
HAS311	Red alder/vine maple	ALRU2/ACCI
HAS4	Red alder/devilsclub	ALRU2/OPHO
HAS411	Red alder/devilsclub	ALRU2/OPHO
HAZ212	Red alder (TM type map, temporary, Siusilaw)	ALRU2
HAZ312	Red alder-conifer (TM type map, temporary, Siusilaw)	ALRU2/2TE
HB	Bigleaf maple	ACMA3
HBM0	Bigleaf maple (wetlands, moist to wet soil)	ACMA3
HBM1	Bigleaf maple (overflow bottomlands, moist)	ACMA3
HBS0	Bigleaf maple/shrub	ACMA3/2SHRUB
HBS1	Bigleaf maple/vine maple (talus slopes)	ACMA3/ACCI
HBS2	Bigleaf maple/hazelnut/western swordfern	ACMA3/CORYL/POMU
HC	Black cottonwood-ash (bottom land, overflow bottom)	POBAT-FRAXI
HCC0	Cottonwood-ash-scattered conifers (bottomland)	POPUL-FRAXI-2TE
HCC111	Black cottonwood-Engelmann spruce/alder-dogwood	POBAT-PIEN/ALNUS-CORNU
HCG0	Black cottonwood-ash/grass-sedge	POBAT-FRAXI/2GRAM-CAREX

HCG111	Black cottonwood/widefruit sedge (wetlands)	POBAT/CAAN15
HCS0	Cottonwood-willow/shrub	POPUL-SALIX/2SHRUB
HCS1	Cottonwood-willow	POBAT-SALIX
HCS111	Black cottonwood/thinleaf alder/woolly sedge	POBAT/ALINT/CAPE42
HCS112	Black cottonwood/Pacific willow	POBAT/SALUL
HCS113	Black cottonwood/thinleaf alder-redosier dogwood	POBAT/ALINT-COSES
HCS114	Black cottonwood/Rocky Mountain maple	POBAT/ACGL
HCS121	Black cottonwood/western water hemlock (wetlands)	POBAT/CIDO
HCS2	Ash-willow	FRAXI-SALIX
HCS3	Black cottonwood/common snowberry-spirea	POBAT/SYAL-SPIRA
HCS311	Black cottonwood/common snowberry/bluegrass (wetlands)	POBAT/SYAL/POA
HCXX	Black cottonwood	POBAT
HL	Canyon live oak (canyon over 16 ft tall)	QUCH2
HLRR	Canyon live oak (rocky with little ground vegetation)	QUCH2
HLRS	Canyon live oak (steep, stony with little ground vegetation)	QUCH2
HLRX	Canyon live oak (rocky or steep sites with little ground vegetation)	QUCH2
HM	Pacific madrone	ARME
HMRR	Pacific madrone (rocky sites with little ground vegetation)	ARME

HMRS	Pacific madrone (steep sites with little ground vegetation)	ARME
HMRX	Pacific madrone (rocky or steep sites with little ground vegetation)	ARME
HMS0	Pacific madrone/shrub	ARME/2SHRUB
HMS1	Pacific madrone/canyon live oak	ARME/QUCH2
HO	Oregon white oak-California black oak	QUGA4-QUKE
HOF0	Oregon white oak-California black oak/forb	QUGA4-QUKE/2FORB
HOF1	Oregon white oak-California black oak/strawberry-yarrow	QUGA4-QUKE/FRAGA-ACHIL
HOF111	Oregon white oak/woods strawberry/hedgehog dogtail	QUGA/FRVEB/CYEC
HOG0	Oregon white oak-California black oak/grass	QUGA4-QUKE/2GRAM
HOG1	Oregon white oak-California black oak/bunchgrass	QUGA4-QUKE/2GRAM
HOG111	Oregon white oak/bluebunch wheatgrass	QUGA4/PSSPS
HOG2	Oregon white oak-California black oak/rhizomatous grass	QUGA4-QUKE/2GRAM
HOG211	Oregon white oak/pinegrass-Geyer's sedge	QUGA4/CARU-CAGE2
HOG3	Oregon white oak-California black oak/annual grass	QUGA4-QUKE/2GRAM
HOS0	Oregon white oak-California black oak/shrub	QUGA4-QUKE/2SHRUB
HOS1	Oregon white oak-California black oak/Pacific poison oak	QUGA4-QUKE/TODI
HOS2	Oregon white oak-California black oak/cherry-common snowberry	QUGA4-QUKE/PRUNU-SYAL

HOS3	Oregon white oak-California black oak/serviceberry-common snowberry	QUGA4-QUKE/AMELA-SYAL
HOS311	Oregon white oak/beaked hazelnut-common snowberry	QUGA4/COCO6-SYAL
HOS4	Oregon white oak-California black oak/beaked hazelnut	QUGA4-QUKE/COCO6
HOS5	Oregon white oak-California black oakdeerbrush	QUGA4-QUKE/CEIN3
HOS6	Oregon white oak-California black oak/bitterbrush	QUGA4-QUKE/PURSH
HQ	Quaking aspen	POTR5
HQC0	Quaking aspen-conifers	POTR5-2TE
HQC111	Quaking aspen-lodgepole pine/rose spirea/forb	POTR5-PICO/SPDO/2FORB
HQC112	Quaking aspen-lodgepole pine/kinnikinnick	POTR5-PICO/ARUV
HQG0	Quaking aspen/grass (dryland)	POTR5/2GRAM
HQG1	Quaking aspen/pinegrass	POTR5/CARU
HQG111	Quaking aspen/pinegrass	POTR5/CARU
HQM0	Quaking aspen (wetlands, moist to wet soils)	POTR5
HQM1	Quaking aspen/grass (wetland)	POTR5/2GRAM
HQM121	Quaking aspen/blue wildrye	POTR5/ELGL
HQM122	Quaking aspen/Kentucky bluegrass	POTR5/POPR
HQM123	Quaking aspen/bluejoint	POTR5/CACA4
HQM2	Quaking aspen/Nebraska sedge (wetland)	POTR5/CANE2
HQM211	Quaking aspen/woolly sedge	POTR5/CAPE42

HQM3	Quaking aspen/short sedge (wetland)	POTR5/CAREX
HQM4	Quaking aspen/shrub (wetland)	POTR5/2SHRUB
HQM411	Quaking aspen-lodgepole pine/rose spirea/widefruit sedge	POTR5-PICO/SPDO/CAAN15
HQS0	Quaking aspen/shrub	POTR5/2SHRUB
HQS1	Quaking aspen/hawthorn	POTR5/CRATA
HQS2	Quaking aspen/common snowberry	POTR5/SYAL
HQS211	Quaking aspen/common snowberry	POTR5/SYAL
HQS221	Quaking aspen/common snowberry/ blue wildrye	POTR5/SYAL/ELGL
HQS3	Quaking aspen/sagebrush	POTR5/ARTEM
HT	Tanoak (over 16 feet tall)	LIDE3
HTC0	Tanoak-conifers	LIDE3-2TE
HTC1	Tanoak-redwood	LIDE3-SESE3
HTC111	Tanoak-coast redwood	LIDE3-SESE2
HTC2	Tanoak-western hemlock	LIDE3-TSHE
HTC211	Tanoak-western hemlock	LIDE3-TSHE
HTC3	Tanoak-Port Orford cedar	LIDE3-CHLA
HTC311	Tanoak-Port Orford cedar	LIDE3-CHLA
HTC4	Tanoak-white fir	LIDE3-ABCO
HTC411	Tanoak-white fir-vine maple	LIDE3-ABCO-ACCI
HTC412	Tanoak-white fir	LIDE3-ABCO

HTH0	Tanoak-hardwoods	LIDE3-2TD
HTH1	Tanoak-canyon live oak	LIDE3-QUCH2
HTH111	Tanoak-canyon live oak	LIDE3-QUCH
HTH112	Tanoak-canyon live oak/dwarf Oregon grape	LIDE3-QUCH/BENE
HTH2	Tanoak-California laurel	LIDE3-UMCA
HTH211	Tanoak-California laurel	LIDE3-UMCA
HTH3	Tanoak-vine maple	LIDE3-ACCI
HTH311	Tanoak/vine maple	LIDE3/ACCI
HTRR	Tanoak (rocky, little ground vegetation)	LIDE3
HTRS	Tanoak (steep slopes, little ground vegetation)	LIDE3
HTRX	Tanoak (rocky or steep sites, little ground vegetation)	LIDE3
HTS0	Tanoak/shrub	LIDE3/2SHRUB
HTS1	Tanoak/California huckleberry	LIDE3/VAOV2
HTS111	Tanoak/evergreen huckleberry-salal	LIDE3/VAOV2-GASH
HTS112	Tanoak/evergreen huckleberry	LIDE3/VAOV2
HTS2	Tanoak/Pacific rhododendron	LIDE3/RHODO
HTS221	Tanoak/Pacific rhododendron	LIDE3/RHMA
HTS222	Tanoak/Pacific rhododendron-evergreen huckleberry	LIDE3/RHMA-VAOV2
HTS223	Tanoak/Pacific rhododendron-salal	LIDE3/RHMA-GASH
HTS3	Tanoak/creeping barberry-common snowberry	LIDE3/MARE11-SYAL

HTS311	Tanoak/dwarf Oregon grape	LIDE3/BENE
HTS312	Tanoak/dwarf Oregon grape-poison oak	LIDE3/BENE-RHDI
HTS321	Tanok/salal	LIDE3/GASH
HTS331	Tanoak/salal-Pacific rhododendron	LIDE3/GASH-RHMA
HTS341	Tanoak/salal-dwarf Oregon grape	LIDE3/GASH-BENE
HTS4	Tanoak/Pacific poison oak	LIDE3/TODI
HTS411	Tanoak/poison oak-hairy honeysuckle	LIDE3/RHDI-LOHI
HTS5	Tanoak/California buckthorn	LIDE3/FRCA12
HTS511	Tanoak/California coffeeberry	LIDE3/RHCA
HX	Hardwood	2TD
MD	Meadow, dry (water table available part of the growing season)	
MD10	Cusick's bluegrass (dry meadow)	POCU3
MD1911	Cusick's bluegrass (dry meadow)	POCU3
MD20	Tufted hairgrass (dry meadow)	DECA18
MD30	Kentucky bluegrass (dry meadow)	POPR
MD3111	Kentucky bluegrass (dry meadow)	POPR
MD3112	Kentucky bluegrass (meadows on ridges)	POPR
MDC0	Scattered conifers (dry meadow)	2TE
MDMW	Grass-sedge (dry, moist and wet meadows)	2GRAM/CAREX
MM	Meadow, moist (water table available all growing season)	n/a

MM10	Tufted hairgrass (moist meadow)	DECA18
MM19	Tufted hairgrass (moist meadow)	DECA18
MM1911	Tufted hairgrass-Nebraska sedge	DECA18-CANE2
MM1912	Tufted hairgrass (moist meadow)	DECA18
MM1921	Tufted hairgrass-sedge (moist meadow)	DECA18-CAREX
MM1922	Tufted hairgrass-sedge (wet meadow)	DECA18-CAREX
MM20	Sedge (tall, moist meadow)	CAREX
MM2911	Woolly sedge (moist meadow)	CAPE42
MM2912	Nebraska sedge (moist meadow)	CANE2
MM2913	Widefruit sedge (moist meadow)	CAAN15
MM2914	water sedge (aquatic moist meadow)	CAAQ
MM2915	analogue sedge (moist meadow)	CASI2
MM2916	woodrush sedge (moist meadow)	CALU7
MM2917	Northwest Territory sedge (moist meadow)	CAUT
MM2918	Cusick's sedge (moist meadow)	CACU5
MM2919	Lakeshore sedge (moist meadow)	CALEL
MM2920	Woollyfruit sedge (moist meadow)	CALA11
MM2921	Bigleaf sedge (moist meadow)	CAAM10
MM2922	Naked sedge (moist meadow)	CANU5
MM2924	Panicled bulrush (moist meadow)	SCMI2
MM2925	Fowl mannagrass (moist meadow)	GLST

MM2931	Lakeshore sedge	CALE8
MM30	Sedge (short, moist meadow)	CAREX
MM3911	Sedge-Howell's marsh marigold	CAREX/CALEH2
MM40	Redtop (moist meadow)	AGGI2
MM50	Sedge (moist meadow)	CAREX
MM80	Grass-forb (moist meadow, coastal)	2GRAM-2FORB
MM90	Kentucky bluegrass (moist meadow)	POPR
MMB0	Meadow complex/wet-moist-dry pothole	n/a
MMB8	Slough sedge-rush-red fescue (deflation plain potholes/slough)	CAOB3-JUNCU-FERU2
MMC0	Conifer (moist meadow)	2TE
MMX104	Malheur(04) 10A: slope less 15%, MD, MM, MW (meadows)	n/a
MS	Meadow (subalpine/alpine moist)	n/a
MS10	Grass-sedge-forb (subalpine dry meadows)	2GRAM-CAREX-2FORB
MS1111	Brewer's sedge (dry subalpine meadow)	CABR12
MS20	Grass-sedge (subalpine moist meadows)	2GRAM-CAREX
MS2111	Black alpine sedge (moist subalpine meadow)	CANI2
MS2112	Broom sedge-black alpine sedge-tufted hairgrass (subalpine meadow)	CASC11-CANI2-DECA18
MS25	Forb (subalpine moist meadows)	2FORB
MS30	Grass-sedge-forb (subalpine wet meadows)	2GRAM-CAREX-2FORB
MS3111	Mountain sedge (subalpine wet meadow)	CASC12

MSC0	Conifer (subalpine to alpine meadows)	2TE
MSXX	Grass-sedge (subalpine to alpine meadow)	2GRAM-CAREX
MT	Tule meadow (standing water most or all of growing season)	SCACO2
MT19	Bulrush	SCIRP
MT1911	Sedge-panicked bulrush (hydric)	CAREX-SCMI2
MT1921	Panicked bulrush	SCMI2
MT80	Cattail-bulrush	TYPHA/SCIRP
MT8111	Cattail-bulrush/waterlily-waterweed	TYPHA-SCIRP/NYMPH- ELODE
MT99	Water (coastal saline)	n/a
MW	Meadow, wet (surface moist or wet all growing season)	n/a
MW10	Sedge (tall, wet meadow)	CAREX
MW1911	Nebraska sedge-Baltic rush (wet meadow)	CANE2-JUBA
MW1921	Panicked bulrush-bigleaf sedge	SCMI2-CAAM10
MW1922	Sitka sedge	CAAQD
MW1923	Blister sedge	CAVE6
MW1924	Beaked sedge	CARO6
MW1925	Greenfruit sedge	CAIN17
MW20	Sedge (short, wet meadow)	CAREX
MW2911	Woollyfruit sedge	CALA11
MW30	Rush (wet meadow)	n/a

MW3911	Sierra rush	JUNE
MW3912	Baltic rush	JUBA
MW40	Spike sedge (wet meadow)	CANA2
MW4911	Fewflower spikerush	ELQU2
MW4912	Common spikerush	ELPA3
MW80	Wet meadow-coastal, fresh water	n/a
MW8111	Slough sedge/American skunk cabbage-red currant (valley fill)	CAOB3/LYAM3-RITR
MW8112	Slough sedge/waterlily-pondweed-cattail	CAOB3/NYMPH-POTAM-TYPHA
MW90	Wet meadow-coastal, salt spray influence	n/a
MWC0	Scattered conifers (wet meadow, surface moisture)	2TE
MX	Grass-sedge (meadow)	2GRAM/CAREX
NA	Avalanche paths, sparsely to non-vegetated	n/a
NAC0	Scattered conifers (avalanche path)	2TE
NAS0	Shrub (scattered, avalanche path)	2SHRUB
NC	Cinders, lava flow, mud flow, glacial wash (less than 10% vegetation)	n/a
NCA0	Alpine-subalpine cinders, lava flow, mud flow, glacial wash	n/a
NCA1	Whitebark pine-subalpine fir-mountain hemlock (alpine)	PIAL-ABLA-TSME
NCA111	Whitebark pine-mountain hemlock/Pacific hulsea (steep cinders)	PIAL-TSME/HUAL

NCA2	Grass-sedge (alpine, cinders, lava, pumice)	2GRAM/CAREX
NCA3	Common juniper (alpine, cinders, lava, pumice)	JUCO6
NCA4	Pacific hulsea-pincushionplant (cinders, lava flow, glacial wash)	HUAL-NAVAR
NCA411	Pacific hulsea (alpine, steep cinders)	HUAL
NCC0	Conifer (cinders, lavas, outwash)	2TE
NCC1	Mountain hemlock-subalpine fir-whitebark pine-lodgepole pine (cinders, lava, pumice)	TSME-ABLA-PIAL-PICO
NCC111	Whitebark pine/beardtongue (alpine, pumice-lava)	PIAL/PENST
NCC2	Western hemlock (cinders, lava, pumice)	TSHE
NCC3	Douglas-fir (cinders, lava)	PSME-ABIES
NCC4	Douglas-fir-oak (cinders, lava)	PSME-QUERC
NCC5	Lodgepole pine (cinders, lava)	PICO
NCC6	Ponderosa pine (cinders, lava)	PIPO
NCH0	Hardwood (cinders, lavas, outwash)	2TD
NCH1	Red alder-quaking aspen (mud-glacial flows)	ALRU2-POTR5
NCS0	Shrub (scattered, cinders, lavas, outwash)	2SHRUB
NCS1	Vine maple (cinders, lavas, outwash)	ACCI
NCS111	Shrub (lava flows)	2SHRUB
NCS2	Sitka alder-willow (cinders, lavas, outwash)	ALVIS-SALIX
NF	Flood plain periodically denuded of vegetation	n/a
NFC0	Conifer (non-vegetated flood plain)	2TE

NFS0	Willow-shrubs (non-vegetated flood plain)	SALIX-2SHRUB
NI	Ice fields, glaciers, ice caves, ice dominated land	n/a
NIT1	Ice tunnel or cave, twilight zone	n/a
NIT2	Ice tunnel or cave, zero light zone	n/a
NL	Landform failure (natural slumps, avalanches)	n/a
NM	Mine tailings, dredgings, man-caused minimal vegetation potential	n/a
NMC0	Conifer (mine tailings, dredgings)	2TE
NMC1	Lodgepole pine (mine tailings, dredgings)	PICO
NMH0	Hardwood (mine tailings, dredgings)	2TD
NMH1	Cottonwood (mine tailings, dredgings)	POPUL
NMH2	Quaking aspen (mine tailings, dredgings)	POTR5
NMS0	Shrub (mine tailings dredgings)	2SHRUB
NMS1	Willow (mine tailings, dredgings)	SALIX
NR	Rocky land with minimal vegetation potential	n/a
NRA0	Rocky land in alpine or subalpine locations	n/a
NRA1	Conifer (rocky land, alpine)	2TE
NRA2	Grass-sedge (alpine, rocky)	2GRAM/CAREX
NRA311	Common juniper (subalpine steep scoria)	JUCO6
NRA4	Forb (alpine, rocky)	2FORB
NRC0	Conifer (rock)	2TE

NRL0	Ledge or cliff, steeper than 200% (60 degrees)	n/a
NRL1	Ledge or cliff, smooth face, verticle distance less than 20 ft	n/a
NRL2	Ledge or cliff, smooth face, verticle distance more than 20 ft	n/a
NRL5	Ledge or cliff, broken face/ledges, verticle distance less than 20 feet	n/a
NRL6	Ledge or cliff, broken face/ledges, verticle distance more than 20 feet	n/a
NRL911	Rock garden (steep, zeric)	n/a
NRL912	Rock garden (steep, moist)	n/a
NRNO	Rock, no vegetation	n/a
NRQ0	Quarry, rock pit	n/a
NRR0	Rock, flat with scattered plants (less than 200% slope)	n/a
NRR911	Rock graden (flat, xeric) scattered plants on rock	n/a
NRS0	Shrub (rocky land)	2SHRUB
NRT1	Tunnel or cave, twilight zone	n/a
NRT2	Tunnel or cave, zero light zone	n/a
NS	Sand with minimal vegetation, shoreline or interior	n/a
NSG0	Grass (scattered with sand dunes)	2GRAM
NSG1	Wildrye-wheatgrass (sand dune)	ELYMU/AGROP2
NSG8	Beachgrass (coastal sand dune, rolling, partial beachgrass stability)	AMMOP

NSN0	Open sand of any dunal character, no vegetation	n/a
NSN111	Pacific coast beach	n/a
NSN2	Transverse ridge, sand dune system, no vegetation	n/a
NSN211	Transverse ridge, occasionally wet, winter stable	n/a
NSN212	Transverse ridge, dry, moving sand	n/a
NSN3	Oblique ridge, sand dune system, no vegetation	n/a
NSN311	Oblique ridge, fore slope, moving sand	n/a
NSN312	Oblique ridge, precipitation ridge, active sand	n/a
NSN313	Oblique ridge, precipitation ridge, active, threat, veget	n/a
NSN4	Parabola ridge, sand dune system, no vegetation	n/a
NT	Talus land with minimal vegetation potential	n/a
NTA0	Talus slopes in alpine or subalpine locations	n/a
NTA1	Pine-mountain hemlock-subalpine fir (talus)	PINUS-TSME-ABLA
NTA2	Grass-sedge (alpine, talus)	2GRAM-CAREX
NTA3	Juniper (talus land, alpine)	JUNIP
NTA4	Forb (alpine, talus)	2FORB
NTC0	Conifer (talus)	2TE
NTH0	Hardwood (talus slopes)	2TD
NTH1	Bigleaf maple (talus)	ACMA3

NTH2	White oak (talus)	QUAL
NTS0	Shrub (talus slopes)	2SHRUB
NTS1	Cherry-snowberry-Lewis' mock orange (talus)	PRUNU-GAULT-PHLE4
NTS111	Lewis' mock orange (talus strips)	PHLE4
NTS2	Vine maple (talus)	ACCI
NTS211	Vine maple (talus slopes)	ACCI
NTS3	Klamath plum (talus)	PRSU2
NTS911	Talus slopes with little vegetation	n/a
NX	Non-vegetated land, less than 10% vegetation cover	n/a
SC	Chaparral, evergreen shrubland, forest zone and nonforest	n/a
SC10	Snowbrush ceanothus-chaparral	CEVE
SC20	Manzanita	ARCTO3
SC30	Oak-tanoak-canyon live oak (less than 16 ft. tall)	QUERC-LIDE3-QUCH2
SC40	Mountain mahogany	CERCO
SC50	Yerba santa-silktassel	ERIOD/GARRY
SC60	Shrub (short)	2SHRUB
SD	Sagebrush (dry shrubland, nonforest zone shrubland not desert)	ARTEM
SD10	Little sagebrush-black sagebrush	ARAR8-ARNO4
SD1911	Little sagebrush/Idaho fescue-bluebunch wheatgrass	ARAR8/FEID-PSSPS

SD1912	Little sagebrush/Idaho fescue	ARAR8/FEID
SD1913	Little sagebrush/Idaho fescue-squirreldtail	ARAR8/FEID-ELELE
SD1921	Black sagebrush/bluebunch wheatgrass	ARNO4/PSSP6
SD1922	Black sagebrush/Idaho fescue	ARNO4/FEID
SD1924	Little sagebrush/bluebunch wheatgrass	ARAR8/PSSP6
SD1925	Little sagebrush/Idaho fescue	ARAR8/FEID
SD1926	Little sagebrush/Idaho fescue	ARART/FEID
SD20	Big sagebrush	ARTR2
SD21	Big sagebrush	ARTR2
SD2121	Big sagebrush/bluebunch wheatgrass	ARTR2/PSSPS
SD2122	Big sagebrush/Idaho fescue	ARTR2/FEID
SD2123	Big sagebrush/needle and thread	ARTR2/HECOC8
SD2124	Big sagebrush/Sandberg bluegrass	ARTR2/POSE
SD2131	Little sagebrush/Idaho fescue	ARARL/FEID
SD2133	Wyoming big sagebrush/Sandberg bluegrass	ARTRW8/POSE
SD2134	Wyoming big sagebrush/squirreldtail	ARTRW8/ELELE
SD2135	Wyoming big sagebrush/Thurber's needlegrass	ARTRW8/ACTH7
SD2136	Wyoming big sagebrush/bluebunch wheatgrass	ARTRW8/PSSP6
SD2137	Wyoming big sagebrush/Dore's needlegrass	ARTRW8/ACNED
SD2138	Basin big sagebrush/bluebunch wheatgrass	ARTRT/PSSP6
SD2139	Basin big sagebrush/Idaho fescue	ARTRT/FEID

SD2140	Basin big sagebrush/Dore's needlegrass	ARTRT/ACNED
SD22	Threetip sagebrush	ARTR4
SD2221	Threetip sagebrush/Idaho fescue	ARTR4/FEID
SD2222	Threetip sagebrush/needle and thread	ARTR4/HECOC8
SD2223	Threetip sagebrush/bluebunch wheatgrass	ARTR4/PSSPS
SD2231	Threetip sagebrush/bluebunch wheatgrass (Idaho)	ARTR4/PSSP6
SD2232	Threetip sagebrush/Idaho fescue (Idaho)	ARTR4/FEID
SD23	Silver sagebrush	ARCA13
SD2311	Big sagebrush/Cusick's bluegrass	ARTR2/POCU3
SD2321	Silver sagebrush/Idaho fescue	ARCA13/FEID
SD2911	Mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	ARTRV/FEID-PSSPS
SD2912	Basin big sagebrush/bluebunch wheatgrass	ARTRT/PSSPS
SD2913	Big sagebrush-antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	ARTR2-PUTR2/FEID-PSSPS
SD2914	Big sagebrush/western needlegrass (rhyolite pumice)	ARTR2/ACOCO
SD2915	Mountain big sagebrush/Geyer's sedge	ARTRV/CAGE2
SD2916	Mountain big sagebrush-antelope bitterbrush/Idaho fescue	ARTRV-PUTR2/FEID
SD2917	Mountain big sagebrush-mountain snowberry	ARTRV-SYOR2
SD2921	Mountain big sagebrush/bluebunch wheatgrass	ARTRV/PSSP6
SD2922	Mountain big sagebrush/Idaho fescue	ARTRV/FEID

SD2923	Mountain big sagebrush/Dore's needlegrass	ARTRV/ACNED
SD2924	Mountain big sagebrush-mountain snowberry/bluebunch wheatgrass	ARTRV-SYOR2/PSSP6
SD2925	Mountain big sagebrush-mountain snowberry/Idaho fescue	ARTRV-SYOR2/FEID
SD2926	Mountain big sagebrush-mountain snowberry/Geyer's sedge	ARTRV-SYOR2/CAGE2
SD2927	Mountain big sagebrush/bluebunch wheatgrass (xeric)	ARTRV/PSSP6
SD2928	Mountain big sagebrush/Idaho fescue (xeric)	ARTRV/FEID
SD30	Antelope bitterbrush-squaw apple-mountain snowberry	PUTR2-PERA4-SYOR2
SD31	Antelope bitterbrush	PUTR2
SD3111	Antelope bitterbrush/Idaho fescue-bluebunch wheatgrass	PUTR2/FEID-PSSPS
SD3112	Antelope bitterbrush/bluebunch wheatgrass	PUTR2/PSSPS
SD3121	Antelope bitterbrush/needle and thread (Daubenmier)	PUTR2/HECOC8
SD3122	Antelope bitterbrush/bluebunch wheatgrass (Daubenmier)	PUTR2/PSSPS
SD3123	Antelope bitterbrush/Idaho fescue (Daubenmier)	PUTR2/FEID
SD3131	Antelope bitterbrush/bluebunch wheatgrass (Idaho)	PUTR2/PSSP6
SD3132	Antelope bitterbrush/Dore's needlegrass (Idaho)	PUTR2/ACNED
SD3311	Antelope bitterbrush/western needlegrass-long-stolen sedge	PUTR2/ACOCO-CAIN9

SD40	Curl-leaf mountain mahogany	CELE3
SD41	Curl-leaf mountain mahogany/bunchgrass	CELE3/2GRAM
SD4111	Curl-leaf mountain mahogany/Idaho fescue-bluebunch wheatgrass	CELE3/FEID-PSSPS
SD4112	Curl-leaf mountain mahogany/bluebunch wheatgrass	CELE3/PSSP6
SD42	Curl-leaf mountain mahogany/rhizomatous grass	CELE3/2GRAM
SD43	Curl-leaf mountain mahogany/sagebrush	CELE3/ARTEM
SD44	Curl-leaf mountain mahogany/mountain snowberry	CELE3/SYOR2
SD49	Curl-leaf mountain mahogany	CELE3
SD50	Netleaf hackberry-black hawthorn	CELAR-CRDO2
SD5121	Black hawthorn/common snowberry	CRDO2/SYAL
SD5611	Netleaf hackberry/bluebunch wheatgrass	CELAR/PSSPS
SD5621	Netleaf hackberry/cheatgrass	CELAR/BRTE
SD60	Smooth sumac	RHGL
SD6121	Smooth sumac/bluebunch wheatgrass	RHGL/PSSPS
SD6122	Smooth sumac/sand dropseed	RHGL/SPCR
SD6123	Smooth sumac/Fendler threeawn	RHGL/ARPUL
SD65	Spiny greasbush/bluebunch wheatgrass	GLSPA/PSSPS
SD70	Rabbitbrush	CHRY9
SD80	Common snowberry-cherry-rose	SYAL-PRUNU-ROSA5
SD90	Shrub (scabland)	2SHRUB

SD91	Scabland sagebrush	ARR12
SD9111	Scabland sagebrush/Sandberg bluegrass (scabland)	ARR12/POSE
SD9112	Scabland sagebrush/Sandberg bluegrass (Idaho)	ARR12/POSE
SD9121	Scabland sagebrush/Sandberg bluegrass (Daubenmier)	ARR12/POSE
SD9131	Scabland sagebrush/Sandberg bluegrass-bigseed biscuitroot (scabland)	ARR12/POSE-LOMA3
SD92	Little sagebrush (scabland)	ARAR8
SD9211	Little sagebrush-narrowleaf mock goldenweed/Sandberg bluegrass	ARAR8-STST5/POSE
SD9212	Little sagebrush/Sandberg bluegrass-onespike danthonia	ARAR8/POSE-DAUN
SD9221	Little sagebrush/Sandberg bluegrass (scabland)	ARAR8/POSE
SD9222	Little sagebrush/Sandberg bluegrass (Idaho)	ARAR8/POSE
SD93	Buckwheat (scablands)	ERIOG
SD9321	Snow buckwheat/Sandberg bluegrass	ERNI2/POSE
SD9322	Slender buckwheat/Oregon twinpod	ERMI4/PHOR2
SD9323	Sulphur-flower buckwheat/stipa (flats, rhyolite pumice)	ERUM/STIPA
SDB9	Biscuit-scabland (complex)	n/a
SDC0	Sagebrush-conifer-shrub (dry)	ARTEM-2TE-2SHRUB
SDX104	Malheur(04) 8A: less 30%/SD19 11, SD29 11, SD39, SD49, CPS1 11, CJS1 11, CJS2 11	n/a

SDX204	Malheur(04) 8B: 30-70%/SD19 11, SD29 11, SD39, SD49, CPS1 11, CJS1 11, CJS2 11	n/a
SDXX	Shrub (xeric)	2SHRUB
SDY104	Malheur(04) 9A: less 30% slope/SD91 11, CJS8 11, GB91 11. SCAB	n/a
SDY204	Malheur(04) 9B: slope 30-70%/SD91 11, CJ38 11, GB91 11. SCAB	n/a
SM	Shrub (moist, mesic, forest zone)	2SHRUB
SM10	Mallow ninebark	PHMA5
SM1111	Mallow ninebark-common snowberry	PHMA5-SYAL
SM19	Mallow ninebark	PHMA5
SM20	Sitka alder (snow slides)	ALVIS
SM30	Cherry-mock orange-snowberry-serviceberry-rose-oceanspray-ceanothus	PRUNUS-PHILA-GAULT-AMELA-ROSA5-HOLOD-CEANO
SM31	Common snowberry (shrubland)	SYAL
SM3111	Common snowberry-rose	SYAL/ROSA5
SM32	Mountain snowberry	SYOR2
SM3911	Shrub (bottoms)	2SHRUB
SM40	Blueberry	VACCI
SM50	Salmonberry-blackberry	RUSP-RUBUS
SM5911	Thimbleberry-poke knotweed	RUPA-POPH
SM80	Shrub (coastal, west-side)	2SHRUB
SM81	Shrub (tall)	2SHRUB

SM8111	Sitka alder (rocky soil)	ALVIS
SM8112	Vine maple (rocky soil)	ACCI
SM82	Shrub (mid)	2SHRUB
SM83	Shrub (short)	2SHRUB
SM84	Gorse	ULEX
SM90	Shrub (scabland dominated by mesic shrubs)	2SHRUB
SMB0	Shrub-buckwheat (biscuit-scabland complex, moist)	2SHRUB-ERIOG
SMC0	Shrub-scattered conifers (moist, mesic, in forest zone)	2SHRUB/2TE
SMXX	Shrub (mesic)	2SHRUB
SS	Shrub (subalpine and alpine)	2SHRUB
SS10	Heath-mountain heather (alpine)	ERICA/CASSI3
SS1911	Pink mountainheath (meadow)	PHEM
SS20	Juniper (alpine mountain)	JUNIP
SS30	Shrub (alpine deciduous)	2SHRUB
SS40	Mountain big sagebrush	ARTRV
SS4911	Mountain big sagebrush/Geyer's sedge	ARTRV/CAGE2
SS4912	Mountain big sagebrush/Geyer's sedge (Idaho)	ARTRV/CAGE2
SS4913	Mountain big sagebrush/California brome	ARTRV/BRCA5
SS4921	Little sagebrush/red fescue (alpine)	ARAR8/FERU2
SS50	Alpine low blueberry	VAAN

SSC0	Shrub-conifer (subalpine)	2SHRUB-2TE
SSX104	Malheur(04) 1A: SS49 11, GS39 11, GS12 11, CAG1 11, FS59 11	n/a
SSXX	Shrub (subalpine)	2SHRUB
SW	Shrub (wetlands, shrubs less than 16 ft. tall)	2SHRUB
SW10	Willow (wetlands)	SALIX
SW1111	Willow/Kentucky bluegrass	SALIX/POPR
SW1112	Willow/woolly sedge	SALIX/CAPE42
SW1113	Willow/widefruit sedge	SALIX/CAAN15
SW1114	Willow/water sedge	SALIX/CAAQ
SW1115	Willow/Sitka sedge	SALIX/CAAQD
SW1116	Willow/beaked sedge	SALIX/CARO6
SW1117	Narrowleaf willow	SAEX
SW1118	Willow/Columbian monkshood	SALIX/ACCO4
SW1119	Willow/tufted hairgrass	SALIX/DECA18
SW1120	Mountain willow-undergreen willow (bog)	SAEA-SACO2
SW1121	Mountain willow-undergreen willow/mountain sedge	SAEA-SACO2/CASC12
SW1122	Mountain willow-Booth's willow/black alpine sedge	SAEA-SABO2/CANI2
SW1123	Willow/Northwest Territory sedge	SALIX/CAUT
SW1131	Sitka willow	SASI2
SW1132	Sitka willow/arctic sweet coltsfoot	SASI2/PEFR5

SW20	Alder (wetlands)	ALNUS
SW21	White alder	ALRH2
SW2111	Sitka alder/common ladyfern	ALVIS/ATFI
SW2112	Sitka alder/drooping woodreed	ALVIS/CILA2
SW2113	Sitka alder/common cowparsnip	ALVIS/HEMA80
SW2114	Gray alder/bigleaf sedge	ALIN2/CAAM10
SW2115	Gray alder/Northwest Territory sedge	ALIN2/CAUT
SW2116	Gray alder/common ladyfern	ALIN2/ATFI
SW2117	Gray alder/field horsetail	ALIN2/EQAR
SW2118	Gray alder/Dewey sedge	ALIN2/CADE9
SW2119	Gray alder/common cowparsnip	ALIN2/HEMA80
SW2120	Gray alder/Kentucky bluegrass	ALIN2/POPR
SW2121	Gray alder/bluejoint	ALIN2/CACA4
SW2122	Gray alder/panicled bulrush	ALIN2/SCMI2
SW2123	Gray alder/woolly sedge	ALIN2/CAPE42
SW2131	Gray alder-oval-leaf blueberry	ALIN2-VAOV
SW2132	Sitka alder	ALVIS
SW2211	Gray alder/common snowberry	ALIN2/SYAL
SW2212	Gray alder/rose spirea	ALIN2/SPDO
SW2213	Gray alder (spring)	ALIN2
SW2214	Gray alder (bank)	ALIN2

SW2215	Gray alder/fowl mannagrass	ALIN2/GLST
SW2216	Gray alder-redosier dogwood/mesic forb	ALIN2-COSES/2FORB
SW2217	Gray alder-currant/mesic forb	ALIN2-RIBES/2FORB
SW25	Red alder (shrubby lifeform)	ALRU2
SW2511	Red alder (shrubby lifeform)	ALRU2
SW2512	Red alder (shrubby)/Carolina bugbane	ALRU2/TRCA
SW2911	Gray alder (shrubfield)	ALIN2
SW30	Black hawthorn (wetlands)	CRDO2
SW3111	Black hawthorn	CRDO2
SW3120	Black hawthorn/common snowberry	CRDO2/SYAL
SW3121	Quaking aspen/black hawthorn/common snowberry	POTR5/CRDO2/SYAL
SW3122	Black hawthorn/common cowparsnip	CRDO2/HEMA80
SW3123	Quaking aspen/black hawthorn/common cowparsnip	POTR5/CRDO2/HEMA80
SW40	Rose spirea-bog blueberry (wetlands)	SPDO/VAUL
SW4111	Bog blueberry/Sitka sedge	VAUL/CAAQD
SW4112	Bog blueberry/fewflower spikerush	VAUL/ELQU2
SW4113	Rose spirea	SPDO
SW4121	Blueberry-rose meadowsweet/grass (wetland)	VACCI-SPSPS/2GRAM
SW4122	Rose spirea-bog blueberry/sedge (wetland)	SPDO-VAUL/CAREX
SW4123	Spirea-willow/sedge (wetland)	SPIRA-SALIX/CAREX

SW4131	Redosier dogwood	COSES
SW4132	Oval-leaf blueberry	VAOV
SW50	Currant-shrubby cinquefoil	RIBES/DAFL3
SW5111	Currant/drooping woodreed	RIBES/CILA2
SW5112	Redosier dogwood	COSES
SW5113	Shrubby cinquefoil/tufted hairgrass	DAFL3/DECA18
SW5114	Shrubby cinquefoil/Kentucky bluegrass	DAFL3/POPR
SW5121	Stink currant-salmonberry/woodsorrel	RIBR-RUSP/OXALI
SW5122	Stink currant-salmonberry/arctic sweet coltsfoot	RIBR-RUSP/PEFR5
SW5123	Stink currant-salmonberry/youth on age	RIBR-RUSP/TOME
SW60	Silver sagebrush-mountain big sagebrush (meadow)	ARCA13/ARTRV
SW6111	Silver sagebrush/tufted hairgrass	ARCA13/DECA18
SW6112	Silver sagebrush/Kentucky bluegrass	ARCA13/POPR
SW6113	Mountain big sagebrush/Cusick's bluegrass	ARTRV/POCU3
SW70	Vine maple	ACCI
SW7111	Vine maple-gray alder	ACCI-ALIN2
SW7112	Vine maple/coastal hedgenettle	ACCI/STCHC3
SW7113	Devilsclub	OPHO
SW80	Willow (coastal shrub wetlands)	SALIX/MYRIC
SW81	Shrub (coastal in a deflation plain)	2SHRUB

SW8111	Shrub (deflation plain, high water)	2SHRUB
SW8112	Salal-blueberry-willow (deflation plain, high water)	GASH-VACCI-SALIX
SWC0	Shrub-conifer (wet)	2SHRUB/2TE
SWXX	Shrub (wet)	2SHRUB
SX	Shrub	2SHRUB
TX	Tundra	n/a
WC0	White fir and grand fir with associated conifers	ABCO-ABGR-2TE
WC1	White fir-incense cedar-pine	ABCO-CADE27-PINUS
WE	Estuary systems - interface between fresh and saline water	n/a
WE10	Bar built, geology - sand dune estuarian system	n/a
WE11	Bar built, fresh-saline water highly stratified	n/a
WE12	Bar built, fresh-saline water moderately mixed	n/a
WE13	Bar built, fresh-saline water well mixed	n/a
WE1311	Bar built, well mixed saline, active flood plain	n/a
WE1319	Bar built, well mixed saline, tidal exposed sandy bottom	n/a
WE1329	Bar built, well mixed saline, tidal exposed clay bottom	n/a
WE1339	Bar built, well mixed saline, tidal exposed stony bottom	n/a
WE1359	Bar built, well mix saline, tidal salt marsh (eelgrass)	n/a

WE20	Drowned river estuarian system	n/a
WE21	Drowned river/fresh-saline water highly stratified	n/a
WE22	Drowned river/fresh-saline water moderate mixed	n/a
WE23	Drowned river/fresh-saline water well mixed	n/a
WE30	Fjord type of estuarian system	n/a
WE31	Fjord/fresh-saline water highly stratified	n/a
WE32	Fjord/fresh-saline water moderately mixed	n/a
WE33	Fjord/fresh-saline water well mixed	n/a
WE40	Tectonic (faulted) estuarian system	n/a
WE41	Tectonic/fresh-saline water highly stratified	n/a
WE42	Tectonic/fresh-saline water moderately mixed	n/a
WE43	Tectonic/fresh-saline water well mixed	n/a
WL10	Perennial water, no ice cover during average year	n/a
WL11	Perennial, no ice cover, less 5 acres	n/a
WL12	Perennial, no ice cover, 5-25 acres	n/a
WL13	Perennial, no ice cover, 25-100 acres	n/a
WL14	Perennial, no ice cover, 100-500 acres	n/a
WL15	Perennial, no ice cover, over 500 acres	n/a
WL20	Perennial, ice cover less than 30 days, average year	n/a
WL21	Perennial, ice less 30 days, less 5 acres	n/a

WL22	Perennial, ice less 30 days, 5-25 acres	n/a
WL23	Perennial, ice less 30 days, 25-100 acres	n/a
WL24	Perennial, ice less 30 days, 100-500 acres	n/a
WL25	Perennial, ice less 30 days, over 500 acres	n/a
WL30	Perennial, ice cover 30-90 days during average year	n/a
WL31	Perennial, ice 30-90 days, less 5 acres	n/a
WL32	Perennial, ice 30-90 days, 5-25 acres	n/a
WL33	Perennial, ice 30-90 days, 25-100 acres	n/a
WL34	Perennial, ice 30-90 days, 100-500 acres	n/a
WL35	Perennial, ice 30-90 days, over 500 acres	n/a
WL40	Perennial, ice cover 90-150 days, during average year	n/a
WL41	Perennial, ice 90-150 days, less 5 acres	n/a
WL42	Perennial, ice 90-150 days, 5-25 acres	n/a
WL43	Perennial, ice 90-150 days, 25-100 acres	n/a
WL44	Perennial, ice 90-150 days, 100-500 acres	n/a
WL45	Perennial, ice 90-150 days, over 500 acres	n/a
WL50	Perennial, ice cover 150-210 days during average year	n/a
WL51	Perennial, ice cover 150-210 days, less 5 acres	n/a
WL52	Perennial, ice cover 150-210 days, 5-25 acres	n/a
WL53	Perennial, ice cover 150-210 days, 25-100 acres	n/a

WL54	Perennial, ice cover 150-210 days, 100-500 acres	n/a
WL55	Perennial, ice cover 150-210 days, over 500 acres	n/a
WL60	Perennial, ice cover longer than 210 days, average year	n/a
WL61	Perennial, ice longer 210 days, less 5 acres	n/a
WL62	Perennial, ice longer 210 days, 5-25 acres	n/a
WL63	Perennial, ice longer 210 days, 25-100 acres	n/a
WL64	Perennial, ice longer 210 days, 100-500 acres	n/a
WL65	Perennial, ice longer 210 days, over 500 acres	n/a
WL90	Intermittent lake, pond, impoundment	n/a
WO	Oceans, seas, saline water bodies	n/a
WO10	Water, deep, abyss	n/a
WO20	Ocean intertidal beach	n/a
WO30	Oceanic continental shelf	n/a
WR	Running water-stream, river, creek, ditch	n/a
WR10	Perennial, max mo. mean temperature less 45F(7C)	n/a
WR11	Perennial, max mo. mean temp less 45F, less 1% grade	n/a
WR12	Perennial, max mo. mean temp less 45F, 1-3% grade	n/a
WR13	Perennial, max mo. mean temp less 45F, 3-6% grade	n/a

WR14	Perennial, max mo. mean temp less 45F, 6-12% grade	n/a
WR15	Perennial, max mo. mean temp less 45F, more 12% grade	n/a
WR20	Perennial, max mo. mean temperature 45F-55F(7C-13C)	n/a
WR21	Perennial, max mo. temp 45F-55F, less 1% grade	n/a
WR22	Perennial, max mo. temp 45F-55F, 1-3% grade	n/a
WR23	Perennial, max mo. temp 45F-55F, 3-6% grade	n/a
WR24	Perennial, max mo. temp 45F-55F, 6-12% grade	n/a
WR25	Perennial, max mo. temp 45F-55F, greater 12% grade	n/a
WR30	Perennial, max mo. mean temperature 55F-65F (13C-18C)	n/a
WR31	Perennial, max mo. temp 55F-65F, less 1% grade	n/a
WR32	Perennial, max mo. temp 55F-65F, 1-3% grade	n/a
WR33	Perennial, max mo. temp 55F-65F, 3-6% grade	n/a
WR34	Perennial, max mo. temp 55F-65F, 6-12% grade	n/a
WR35	Perennial, max mo. temp 55F-65F, greater 12% grade	n/a
WR40	Perennial, max mo. mean temperature 65F-75F (18C-24C)	n/a
WR41	Perennial, max mo. temp 65F-75F, less 1% grade	n/a

WR42	Perennial, max mo. temp 65F-75F, 1-3% grade	n/a
WR43	Perennial, max mo. temp 65F-75F, 3-6% grade	n/a
WR44	Perennial, max mo. temp 65F-75F, 6-12% grade	n/a
WR45	Perennial, max mo. temp 65F-75F, greater 12% grade	n/a
WR50	Perennial, max mo. mean temperature greater 75F (24C)	n/a
WR51	Perennial, max mo. temp greater 75F, less 1% grade	n/a
WR52	Perennial, max mo. temp greater 75F, 1-3% grade	n/a
WR53	Perennial, max mo. temp greater 75F, 3-6% grade	n/a
WR54	Perennial, max mo. temp greater 75F, 6-12% grade	n/a
WR55	Perennial, max mo. temp greater 75F, 12% grade	n/a
WR90	Intermittent streams, rivers	n/a
WS115	White fir/snowbrush ceanothus-longstalk sedge	ABCO/CEVE-CAPE4
WS116	White fir/snowbrush ceanothus-squawcarpet-Virginia strawberry	ABCO/CEVE-CEPR-FRVI
WX	Water (no association specified)	2W

Table 46: Reference Code 640

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAF0	Subalpine fir-whitebark pine/Jacob's ladder	ABLA-PIAL/POPU3

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAF2	Subalpine fir-whitebark pine/fleeceflower	ABLA-PIAL/POPH
CAF322	Whitebark pine/prickly sandwort	PIAL/ARAC2
CAF323	Whitebark pine/silvery lupine	PIAL/LUAR3
CAF324	Subalpine fir-whitebark pine/prickly sandwort	ABLA-PIAL/ARAC2
CAG111	Subalpine fir/elk sedge	ABLA/CAGE2
CAG131	Whitebark pine/elk sedge	PIAL/CAGE2
CAG132	Subalpine fir-whitebark pine/Parry's rush-Lemmon's needlegrass	ABLA-PIAL/JUPA-STLE2
CAG133	Subalpine fir-whitebark pine/elk sedge	ABLA-PIAL/CAGE2
CAG221	Whitebark pine/green fescue	PIAL/FEVI
CAG222	Subalpine fir-whitebark pine/green fescue	ABLA-PIAL/FEVI
CAG3	Subalpine fir-whitebark pine/Drummond's rush	ABLA-PIAL/JUDR
CAS311	Whitebark pine/grouse huckleberry/smooth woodrush	PIAL/VASC/LUHI4
CAS312	Whitebark pine/grouse huckleberry/heartleaf arnica	PIAL/VASC/ARCO9
CAS313	Whitebark pine/grouse huckleberry/prickly sandwort	PIAL/VASC/ARAC2
CAS422	Whitebark pine/mountain juniper/pinemat manzanita	PIAL/JUCO6/ARNE
CAS423	Subalpine fir-whitebark pine/mountain juniper-pinemat manzanita	ABLA-PIAL/JUCO6-ARNE
CAS424	Subalpine fir-whitebark pine/mountain juniper	ABLA-PIAL/JUCO6
CAS511	Limber pine/mountain juniper	PIFL2/JUCO6

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAS512	Whitebark pine/mountain gooseberry/Jacob's ladder	PIAL/RIMO2/POPU3
CAS611	Subalpine fir-whitebark pine/mountain gooseberry/Jacob's ladder	ABLA-PIAL/RIMO2/POPU3
CAS621	Subalpine fir-whitebark pine/grouse huckleberry/heartleaf arnica	ABLA-PIAL/VASC/ARCO9
CAS622	Subalpine fir-whitebark pine/grouse huckleberry/Ross' sedge	ABLA-PIAL/VASC/CARO5
CAS623	Subalpine fir-whitebark pine/grouse huckleberry/prickly sandwort	ABLA-PIAL/VASC/ARAC2
CAS624	Subalpine fir-whitebark pine/grouse huckleberry-pink mountain heather	ABLA-PIAL/VASC-PHEM
CAS625	Subalpine fir-whitebark pine/grouse huckleberry/green fescue	ABLA-PIAL/VASC/FEVI
CAS626	Subalpine fir-whitebark pine/grouse huckleberry/little ricegrass	ABLA-PIAL/VASC/OREX
CAS627	Subalpine fir-whitebark pine/grouse huckleberry/Wallowa lewisia	ABLA-PIAL/VASC/LECOW2
CAS628	Subalpine fir-whitebark pine/grouse huckleberry-pink mountain heather (avalanche)	ABLA-PIAL/VASC-PHEM (AVALANCHE)
CAS629	Subalpine fir-whitebark pine/grouse huckleberry/green fescue (avalanche)	ABLA-PIAL/VASC/FEVI (AVALANCHE)
CDF313	Douglas-fir/western bugbane	PSME/TRCAO
CDG111	Douglas-fir/elk sedge	PSME/CAGE2
CDG112	Douglas-fir/pinegrass	PSME/CARU
CDG121	Douglas-fir/pinegrass	PSME/CARU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDG333	Douglas-fir-ponderosa pine-western juniper/Idaho fescue	PSME-PIPO-JUOC/FEID
CDS611	Ponderosa pine-Douglas-fir/common snowberry-oceanspray	PIPO-PSME/SYAL-HODI
CDS622	Douglas-fir/common snowberry	PSME/SYAL
CDS623	Douglas-fir/mountain snowberry	PSME/SYOR2
CDS624	Douglas-fir/common snowberry	PSME/SYAL
CDS625	Douglas-fir/mountain snowberry	PSME/SYOR2
CDS628	Douglas-fir/common snowberry (floodplain)	PSME/SYAL
CDS634	Douglas-fir/white spirea	PSME/SPBE2
CDS642	Douglas-fir/mountain snowberry/elk sedge	PSME/SYOR2/CAGE2
CDS664	Douglas-fir/pinemat manzanite/elk sedge	PSME/ARNE/CAGE2
CDS711	Douglas-fir/ninebark	PSME/PHMA5
CDS722	Douglas-fir/Rocky Mountain maple-ninebark	PSME/ACGL-PHMA5
CDS724	Douglas-fir/Rocky Mountain maple-mallow ninebark (floodplain)	PSME/ACGL-PHMA5 (FLOODPLAIN)
CDS725	Douglas-fir/Rocky Mountain maple-mountain snowberry	PSME/ACGL-SYOR2
CDS812	Douglas-fir/big huckleberry	PSME/VAME
CDS821	Douglas-fir/big huckleberry	PSME/VAME
CDS911	Douglas-fir/mountain gooseberry/Jacob's ladder	PSME/RIMO2/POPU3
CDSD	Douglas-fir/mountain mahogany/elk sedge	PSME/CELE3/CAGE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEF111	Subalpine fir/beargrass	ABLA/XETE
CEF2	Subalpine fir-Englemann spruce/twinflower	ABLA-PIEN/LIBO3
CEF221	Subalpine fir/twinflower	ABLA/LIBO3
CEF311	Subalpine fir/twisted stalk	ABLA/STAM2
CEF331	Subalpine fir/false bugbane	ABLA/TRCA
CEF332	Subalpine fir/ladyfern	ABLA/ATFI
CEF333	Subalpine fir/arrowleaf groundsel	ABLA/SETR
CEF334	Engelmann spruce/ladyfern	PIEN/ATFI
CEF335	Engelmann spruce/arrowleaf groundsel	PIEN/SETR
CEF336	Subalpine fir-Englemann spruce/arrowleaf groundsel	ABLA-PIEN/SETR
CEF411	Subalpine fir/Jacob's ladder	ABLA/POPU3
CEF412	Subalpine fir/heartleaf arnica	ABLA/ARCO9
CEF425	Subalpine fir-Englemann spruce/False bugbane	ABLA-PIEN/TRCA
CEF426	Subalpine fir-Englemann spruce/Jacob's ladder	ABLA-PIEN/POPU3
CEF435	Subalpine fir/heartleaf arnica	ABLA/ARCO9
CEF436	Subalpine fir-Englemann spruce/heartleaf arnica	ABLA-PIEN/ARCO9
CEF437	Subalpine fir-Englemann spruce/queen's cup beadleily	ABLA-PIEN/CLUN2
CEF511	Subalpine fir/alpine fleecflower	ABLA/POPH
CEG131	Subalpine fir-Englemann spruce/smooth woodrush	ABLA-PIEN/LUHI4

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CEG201	Englemann spruce-subalpine fir/Holm's Rocky Mountain sedge	PIEN-ABLA/CASC12
CEG312	Subalpine fir/pinegrass	ABLA/CARU
CEG323	Subalpine fir/western needlegrass	ABLA/STOC2
CEG411	Subalpine fir/green fescue	ABLA/FEVI
CEG412	Subalpine fir/drummond's rush	ABLA/JUDR
CEG413	Subalpine fir/slender rush	ABLA/JUTE
CEG414	Subalpine fir/Parry's rush (avalanche)	ABLA/JUPA (AVALANCHE)
CEM121	Engelmann spruce/softleaf sedge	PIEN/CADI6
CEM122	Subalpine fir/softleaf sedge	ABLA/CADI6
CEM123	Subalpine fir/water sedge	ABLA/CAAQ
CEM124	Subalpine fir/bluejoint	ABLA/CACA4
CEM125	Engelmann spruce/Columbia brome	PIEN/BRVU
CEM126	Engelmann spruce/drooping woodreed	PIEN/CILA2
CEM201	Engelmann spruce-subalpine fir/arrowleaf groundsel	PIEN-ABLA/SETR
CEM211	Engelmann spruce/common horsetail	PIEN/EQAR
CEM313	Subalpine fir/bog blueberry/broom sedge	ABLA/VAUL/CASC11
CES131	Subalpine fir/queencup beadleily	ABLA/CLUN2
CES2	Subalpine fir-Engelmann spruce/rusty menziesia	ABLA-PIEN/MEFE
CES214	Subalpine fir/Cascade azalea	ABLA/RHAL2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CES215	Subalpine fir-Englemann spruce/white rhododendron	ABLA-PIEN/RHAL2
CES221	Subalpine fir/rusty menziesia	ABLA/MEFE
CES311	Subalpine fir/big huckleberry	ABLA/VAME
CES314	Subalpine fir/queencup beadlily	ABLA/CLUN2
CES315	Subalpine fir/big huckleberry	ABLA/VAME
CES316	Subalpine fir/big huckleberry (floodplain)	ABLA/VAME (FLOODPLAIN)
CES411	Subalpine fir/grouse huckleberry	ABLA/VASC
CES414	Subalpine fir/twinflower	ABLA/LIBO3
CES415	Subalpine fir/grouse huckleberry/Jacob's ladder	ABLA/VASC/POPU3
CES427	Subalpine fir-Englemann spruce/grouse huckleberry-pink mountain heath	ABLA-PIEN/VASC-PHEM
CES428	Subalpine fir/grouse huckleberry-pink mountain heather	ABLA/VASC-PHEM
CES429	Subalpine fir/pinemat manzanita/prickly sandwort	ABLA/ARNE/ARAC2
CES511	Engelmann spruce/red osier dogwood	PIEN/COST4
CES610	Subalpine fir-Englemann spruce/Labrador tea (floodplain)	ABLA-PIEN/LEGL (FLOODPLAIN)
CES612	Subalpine fir-Englemann spruce/Labrador tea	ABLA-PIEN/LEGL
CES710	Subalpine fir-Englemann spruce/rusty menziesia (floodplain)	ABLA-PIEN/MEFE (FLOODPLAIN)
CES8	Subalpine fir-western white pine/prince's pine	ABLA-PIMO3/CHUM
CJC1	Mountain juniper	JUCO6

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CJG111	Western juniper/Idaho fescue-bluebunch wheatgrass	JUOC/FEID-AGSP
CJG113	Western juniper/bluebunch wheatgrass	JUOC/AGSP
CJS1	Western juniper/low sagebrush	JUOC/ARAR8
CJS111	Western juniper/low sagebrush	JUOC/ARAR8
CJS112	Western juniper/low sagebrush/Idaho fescue	JUOC/ARAR8/FEID
CJS2	Western juniper/mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	JUOC/ARTRV/FEID-AGSP
CJS211	Western juniper/mountain big sagebrush	JUOC/ARTRV
CJS321	Western juniper/bitterbrush/Idaho fescue-bluebunch wheatgrass	JUOC/PUTR2/FEID-AGSP
CJS41	Western juniper/curl-leaf mountain mahogany/Idaho fescue-bluebunch wheatgrass	JUOC/CELE3/FEID-PSSPS
CJS42	Western juniper/curl-leaf mountain mahogany/Geyer's sedge	JUOC/CELE3/CAGE2
CJS5	Rocky Mountain juniper-mountain mahogany	JUSC2/CELE3
CJS8	Western juniper/stiff sagebrush	JUOC/ARRI2
CJS811	Western juniper/stiff sagebrush (scabland)	JUOC/ARRI2 (SCAB)
CLF211	Lodgepole pine-grand fir/twinflower	PICO-ABGR/LIBO3
CLG11	Lodgepole pine-subalpine fir/needle and thread	PICO-ABLA/HECO26
CLG21	Lodgepole pine-grand fir/pinegrass	PICO-ABGR/CARU
CLG211	Lodgepole pine(grand fir)/grouse huckleberry/pinegrass	PICO(ABGR)/VASC/CARU
CLG322	Lodgepole pine-subalpine fir/Geyer's sedge	PICO-ABLA/CAGE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLM112	Lodgepole pine/Kentucky bluegrass	PICO/POPR
CLM114	Lodgepole pine/aquatic sedge	PICO/CAAQ
CLM115	Lodgepole pine/tufted hairgrass	PICO/DECE
CLM116	Lodgepole pine/woolly sedge	PICO/CAPE42
CLM117	Lodgepole pine/bluejoint	PICO/CACA4
CLM118	Lodgepole pine/Holm's Rocky Mountain sedge	PICO/CASC12
CLM511	Lodgepole pine/thinleaf alder/mesic forb	PICO/ALINT/2FORB
CLS411	Lodgepole pine(subalpine fir)/grouse huckleberry	PICO(ABLA)/VASC
CLS415	Lodgepole pine(subalpine fir)/grouse huckleberry/Jacob's ladder	PICO(ABLA)/VASC/POPU3
CLS416	Lodgepole pine/pinegrass	PICO/CARU
CLS417	Lodgepole pine-grand fir/grouse whortleberry/pinegrass	PICO-ABGR/VASC/CARU
CLS418	Lodgepole pine-subalpine fir/grouse whortleberry	PICO-ABLA/VASC
CLS5	Lodgepole pine(grand fir)/big huckleberry/twinflower	PICO(ABGR)/VAME-LIBO3
CLS511	Lodgepole pine/big huckleberry	PICO/VAME
CLS512	Lodgepole pine-grand fir/thinleaf huckleberry/pinegrass	PICO-ABGR/VAME/CARU
CLS513	Lodgepole pine-grand fir/thinleaf huckleberry	PICO-ABGR/VAME
CLS514	Lodgepole pine-subalpine fir/thinleaf huckleberry	PICO-ABLA/VAME

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLS515	Lodgepole pine(subalpine fir)/big huckleberry	PICO(ABLA)/VAME
CLS516	Lodgepole pine-subalpine fir/thinleaf huckleberry/pinegrass	PICO-ABLA/VAME/CARU
CLS519	Lodgepole pine-grand fir/thinleaf huckleberry/western brackenfern	PICO-ABGR/VAME/PTAQ
CLS57	Lodgepole pine-grand fir/pinemat manzanita	PICO-ABGR/ARNE
CLS58	Lodgepole pine-grand fir/Sitka alder	PICO-ABGR/ALVIS
CMS131	Mountain hemlock/grouse huckleberry	TSME/VASC
CMS231	Mountain hemlock/big huckleberry	TSME/VAME
CPC212	Ponderosa pine-western juniper/mountain mahogany-mountain snowberry	PIPO-JUOC/CELE3-SYOR2
CPG111	Ponderosa pine/bluebunch wheatgrass	PIPO/AGSP
CPG112	Ponderosa pine/Idaho fescue	PIPO/FEID
CPG131	Ponderosa pine/Idaho fescue	PIPO/FEID
CPG132	Ponderosa pine/bluebunch wheatgrass	PIPO/AGSP
CPG221	Ponderosa pine/pinegrass	PIPO/CARU
CPG222	Ponderosa pine/elk sedge	PIPO/CAGE2
CPM111	Ponderosa pine/blue wildrye	PIPO/ELGL
CPM112	Ponderosa pine/Kentucky bluegrass	PIPO/POPR
CPS131	Ponderosa pine/mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	PIPO/ARTRV/FEID-AGSP
CPS132	Ponderosa pine/big sagebrush/Geyer's sedge	PIPO/ARTR2/CAGE2
CPS221	Ponderosa pine/bitterbrush/Ross' sedge	PIPO/PUTR2/CARO5

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CPS222	Ponderosa pine/bitterbrush/elk sedge	PIPO/PUTR2/CAGE2
CPS226	Ponderosa pine/bitterbrush/Idaho fescue-bluebunch wheatgrass	PIPO/PUTR2/FEID-AGSP
CPS229	Ponderosa pine/bitterbrush/bluebunch wheatgrass-Sandberg's bluegrass	PIPO/PUTR2/AGSP-POSA12
CPS231	Ponderosa pine/bitterbrush/bluebunch wheatgrass	PIPO/PUTR2/AGSP
CPS232	Ponderosa pine/mountain mahogany/elk sedge	PIPO/CELE3/CAGE2
CPS233	Ponderosa pine/mountain mahogany/Wheeler's bluegrass	PIPO/CELE3/PONEW
CPS234	Ponderosa pine/mountain mahogany/Idaho fescue-bluebunch wheatgrass	PIPO/CELE3/FEID-AGSP
CPS511	Ponderosa pine/common snowberry (floodplain)	PIPO/SYAL (FLOODPLAIN)
CPS522	Ponderosa pine/common snowberry	PIPO/SYAL
CPS523	Ponderosa pine/birchleaf spiraea	PIPO/SPBE2
CPS524	Ponderosa pine/common snowberry	PIPO/SYAL
CPS525	Ponderosa pine/mountain snowberry	PIPO/SYOR2
CPS61	Ponderosa pine/little sagebrush	PIPO/ARAR8
CPS722	Ponderosa pine/black hawthorn	PIPO/CRDO2
CPS8	Ponderosa pine/squaw apple	PIPO/PERA4
CPS9	Ponderosa pine/smooth sumac	PIPO/RHGL
CQM111	Western white pine/tufted hairgrass	PIMO3/DECA18
CWC811	Grand fir/Pacific yew/queencup beadlelily	ABGR/TABR2/CLUN2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWC812	Grand fir/Pacific yew/twinflower	ABGR/TABR2/LIBO3
CWF311	Grand fir/twinflower	ABGR/LIBO3
CWF312	Grand fir/twinflower	ABGR/LIBO3
CWF421	Grand fir/queencup beadlelily	ABGR/CLUN2
CWF422	Grand fir/Pacific yew/queencup beadlelily	ABGR/TABR2/CLUN2
CWF424	Grand fir/Pacific yew/twinflower (floodplain)	ABGR/TABR2/LIBO3 (FLOODPLAIN)
CWF444	Grand fir/heartleaf arnica	ABGR/ARCO9
CWF511	Grand fir/goldthread	ABGR/COOC
CWF512	Grand fir/false bugbane	ABGR/TRCA
CWF611	Grand fir/oakfern	ABGR/GYDR
CWF612	Grand fir/sword fern-ginger	ABGR/POMU-ASCA2
CWF613	Grand fir/ladyfern	ABGR/ATFI
CWG111	Grand fir/elk sedge	ABGR/CAGE2
CWG112	Grand fir/pinegrass	ABGR/CARU
CWG113	Grand fir/pinegrass	ABGR/CARU
CWG211	Grand fir/Columbia brome	ABGR/BRVU
CWM311	Grand fir/woolly sedge	ABGR/CAPE42
CWS211	Grand fir/big huckleberry	ABGR/VAME
CWS212	Grand fir/big huckleberry	ABGR/VAME
CWS232	Grand fir-Alaska cedar/thinleaf huckleberry	ABGR-CHNO/VAME

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWS314	Grand fir/common snowberry (floodplain)	ABGR/SYAL (FLOODPLAIN)
CWS321	Grand fir/birchleaf spiraea	ABGR/SPBE2
CWS322	Grand fir/birchleaf spiraea	ABGR/SPBE2
CWS412	Grand fir/Rocky Mountain maple-ninebark	ABGR/ACGL-PHMA5
CWS423	Grand fir/black hawthorn/Dewey's sedge	ABGR/CRDO2/CADE9
CWS541	Grand fir/Rocky Mountain maple	ABGR/ACGL
CWS543	Grand fir/Rocky Mountain maple (floodplain)	ABGR/ACGL (FLOODPLAIN)
CWS811	Grand fir/grouse huckleberry	ABGR/VASC
CWS812	Grand fir/grouse huckleberry-twinflower	ABGR/VASC-LIBO3
CWS912	Grand fir/Rocky Mountain maple	ABGR/ACGL
FM9111	Douglas' buckwheat-Sandberg's bluegrass	ERDO-POSA12
FM9112	Strict buckwheat/Sandberg's bluegrass	ERST4-POSA12
FM9113	Sulphurflower (ridge)	ERUM (RIDGE)
FS1113	Linanthastrum-cymopterus	LINU4-CYTEF
FS5912	Alpine fleecflower-green fescue	POPH-FEVI
FS5913	Alpine fleecflower-pinegrass-elk sedge	POPH-CARU-CAGE2
FS5914	Alpine fleecflower-elk sedge-linanthastrum	POPH-CAGE2-LINU4
FS5915	Alpine fleecflower-horsemint-linanthastrum	POPH-AGUR-LINU4
FS5916	Alpine fleecflower (cornices)	POPH (CORNICES)
FS80	Linanthastrum-mountain mugwort	LINU4-ARLU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
FS81	Western coneflower-tarweed	RUOC2-MAGL2
FS8101	Western coneflower	RUOC2
FS8111	Bracken fern-Hood's sedge	PTAQ-CAHO5
FS8112	Mountain balm	MOOD
FS8113	Pygmy lewisia-tarweed	LEPY2-MAGL2
FS8115	Linanthastrum-longleaf arnica	LINU4-ARLO6
FS8116	Golden buckwheat-coiled parrot's beak	ERFL4-PECO6
FS8117	Phlox-cymopteris	PHLOX-CYTEF
FS8118	Phlox-Ivesia	PHLOX-IVGO
FS90	Scree	SCREE
FS91	Rock outcrop	ROCK OUTCROP
FS92	Grus	GRUS
FW3911	Cusick's camas (seep)	CACU2 (SEEP)
FW4211	Arrowleaf groundsel	SETR
FW4212	Common horsetail	EQAR
FW4213	Maidenhair fern	ADPE
FW4214	Arrowleaf groundsel-purple monkeyflower	SETR-MILE2
FW51	False hellebore	VERAT
FW5121	False hellebore	VERAT
FW6111	Buckbean	METR3

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
FW6112	American speedwell	VEAM2
FW6113	Brook saxifrage	SAOD2
FW7111	Pacific onion	ALMAG
FX4111	Wallowa lewisia (rim)	LECOW2 (RIM)
GB1211	Sand dropseed (terrace)	SPCR (TERRACE)
GB1911	Bluebunch wheatgrass-sand dropseed-red threeawn	AGSP-SPCR-ARLO3
GB41	Bluebunch wheatgrass-Sandberg's bluegrass	AGSP-POSA12
GB4111	Bluebunch wheatgrass-Wyeth's buckwheat	AGSP-ERHE2
GB4112	Bluebunch wheatgrass-Sandberg's bluegrass-narrowleaf skullcap	AGSP-POSA12-SCAN3
GB4113	Bluebunch wheatgrass-Sandberg's bluegrass (basalt)	AGSP-POSA12 (BASALT)
GB4114	Bluebunch wheatgrass-Sandberg's bluegrass-Cusick's milkvetch	AGSP-POSA12-ASCU5
GB4115	Bluebunch wheatgrass-Sandberg's bluegrass-shaggy fleabane	AGSP-POSA12-ERPU2
GB4116	Bluebunch wheatgrass-Sandberg's bluegrass (granite)	AGSP-POSA12 (GRANITE)
GB4117	Bluebunch wheatgrass-Sandberg's bluegrass-Snake River phlox	AGSP-POSA12-PHCO10
GB4118	Bluebunch wheatgrass-Sandberg's bluegrass-pricklypear	AGSP-POSA12-OPPO
GB4119	Bluebunch wheatgrass-Sandberg's bluegrass-lupine	AGSP-POSA12-LUPIN
GB4121	Bluebunch wheatgrass-Sandberg's bluegrass	AGSP-POSA12

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
GB4123	Bluebunch wheatgrass-Sandberg's bluegrass-arrowleaf balsamroot	AGSP-POSA12-BASA3
GB4124	Bluebunch wheatgrass-Sandberg's bluegrass-creamy buckwheat	AGSP-POSA12-ERHE2
GB4125	Bluebunch wheatgrass-Sandberg's bluegrass-Blue Mountain milkvetch	AGSP-POSA12-ASRE5
GB4126	Bluebunch wheatgrass-Sandberg's bluegrass-bighead clover	AGSP-POSA12-TRMA3
GB4127	Bluebunch wheatgrass-Sandberg's bluegrass-spreading dogbane	AGSP-POSA12-APAN2
GB4131	Bluebunch wheatgrass-mountain brome	AGSP-BRCA5
GB4132	Bluebunch wheatgrass-sulfur-flower buckwheat	AGSP-ERUM
GB4133	Bluebunch wheatgrass-turpentine cymopterus	AGSP-CYTEF
GB4411	Bulbous bluegrass-cluster tarweed	POBU-MAGL2
GB4911	Bluebunch wheatgrass-Sandberg's bluegrass-onespike oatgrass	AGSP-POSA12-DAUN
GB4915	Creeping Oregon-grape/bluebunch wheatgrass-spreading dogbane	BERE/AGSP-APAN2
GB5011	Oniongrass-western needlegrass	MEBU-STOC2
GB5121	Common snowberry/Idaho fescue-bluebunch wheatgrass-Lupine	SYAL/FEID-AGSP-LUSE4
GB59	Idaho fescue-bluebunch wheatgrass	FEID-AGSP
GB5911	Idaho fescue-prairie junegrass (ridge)	FEID-KOCR (RIDGE)
GB5912	Idaho fescue-prairie junegrass (mound)	FEID-KOCR (MOUND)
GB5913	Idaho fescue-prairie junegrass (high elevation)	FEID-KOCR (HIGH)

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
GB5914	Idaho fescue-prairie junegrass (low elevation)	FEID-KOCR (LOW)
GB5915	Idaho fescue-bluebunch wheatgrass (ridge)	FEID-AGSP (RIDGE)
GB5916	Idaho fescue-bluebunch wheatgrass-lupine	FEID-AGSP-LUPIN
GB5917	Idaho fescue-bluebunch wheatgrass-arrowleaf balsamroot	FEID-AGSP-BASA3
GB5918	Idaho fescue-bluebunch wheatgrass-Snake River phlox	FEID-AGSP-PHCO10
GB5919	Common snowberry/Idaho fescue-prairie junegrass	SYAL/FEID-KOCR
GB5920	Idaho fescue-timber oatgrass-Liddon's sedge	FEID-DAIN-CAPE7
GB5921	Idaho fescue-Hood's sedge	FEID-CAHO5
GB5922	Idaho fescue-elk sedge	FEID-CAGE2
GB5923	Idaho fescue-red avens	FEID-GETR
GB5924	Idaho fescue-Wallowa penstemon	FEID-PESP2
GB5925	Idaho fescue-bluebunch wheatgrass- cymopterus	FEID-AGSP-CYTEF
GB5926	Idaho fescue-bluebunch wheatgrass-Cusick's frasera	FEID-AGSP-FRALC2
GB5927	Idaho fescue-bluebunch wheatgrass-Wheeler's bluegrass	FEID-AGSP-PONEW
GB5931	Idaho fescue-bluebunch wheatgrass-phlox	FEID-AGSP-PHLOX
GB5932	Idaho Fescue-onespike oatgrass	FEID-DAUN
GB6011	Rough fescue-Idaho fescue	FESC-FEID
GB7111	Basin wildrye	ELCI2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
GB9111	Sandberg's bluegrass-onespike oatgrass	POSA12-DAUN
GB9112	Sandberg's bluegrass-lanceleaf stonecrop	POSA12-SELA
GB9114	Onespike oatgrass-slenderfruit lomatium	DAUN-LOLE2
GM4111	Bluejoint reedgrass	CACA4
GS10	Western needlegrass	STOC2
GS11	Green fescue	FEVI
GS1111	Green fescue-Hood's sedge	FEVI-CAHO5
GS1112	Green fescue-spurred lupine	FEVI-LULA3
GS1113	Green fescue-Parry's rush	FEVI-JUPA
GS1114	Green fescue-Ross' sedge	FEVI-CARO5
GS1115	Green fescue-penstemon	FEVI-PENST
GS1116	Green fescue-western needlegrass	FEVI-STOC2
GS1117	Green fescue-Canby's lovage	FEVI-LICA2
GS1118	Green fescue-bearded wheatgrass	FEVI-AGCA2
GS1119	Green fescue-Holm's Rocky Mountain sedge	FEVI-CASC12
GS12	Idaho fescue (alpine)	FEID (ALPINE)
GS39	Geyer's sedge (upland)	CAGE2
GS3911	Elk sedge (alpine)	CAGE2 (ALPINE)
GS3912	Hood's sedge	CAHO5
GS3913	Elk sedge-Parry's rush	CAGE2-JUPA

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
GS3914	Elk sedge-pinegrass	CAGE2-CARU
GS3915	Elk sedge-Cusick's bluegrass	CAGE2-POCU3
GS3916	Elk sedge-desert phlox	CAGE2-PHAU3
GS3917	Elk sedge-western needlegrass	CAGE2-STOC2
GS4011	Alpine sedges-western needlegrass	CAREX-STOC2
GS4012	Hood's sedge-mountain brome (meadow)	CAHO5-BRCA5 (MEADOW)
GS4013	Parry's rush-pale agoseris	JUPA-AGGL
GS50	Western needlegrass-squirreldtail (alpine)	STOC2-SIHY (ALPINE)
GS60	Fellfield	FELLFIELD
GS61	Hood's sedge-mountain brome	CAHO5-BRCA5
GS62	Hood's sedge-elk sedge	CAHO5-CAGE2
GS63	Hood's sedge-sticky cinquefoil	CAHO5-POGL9
GS64	Hood's sedge	CAHO5
GS70	Turf	TURF
HAF211	Red alder/sweet coltsfoot	ALRU2/PEFRP
HAF226	Red alder (alluvial bar)	ALRU2
HAF227	Red alder/common ladyfern	ALRU2/ATFI
HAS211	Red alder/Pacific ninebark	ALRU2/PHCA11
HAS312	Red alder/common snowberry	ALRU2/SYAL
HAS511	Red alder/redosier dogwood	ALRU2/COSES

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
HCS112	Black cottonwood/Pacific willow	POTR15/SALA5
HCS113	Black cottonwood/mountain alder-red osier dogwood	POTR15/ALIN2-COST4
HCS114	Black cottonwood/Rocky Mountain maple	POTR15/ACGL
HCS311	Black cottonwood/common snowberry	POTR15/SYAL
HCS312	Black cottonwood/common snowberry	POTR15/SYAL
HD01	Rocky Mountain maple	ACGL
HQG112	Quaking aspen/elk sedge	POTR5/CAGE2
HQM122	Quaking aspen/Kentucky bluegrass	POTR5/POPR
HQM123	Quaking aspen/bluejoint reedgrass	POTR5/CACA4
HQM211	Quaking aspen/woolly sedge	POTR5/CALA30
HQM212	Quaking aspen/water sedge	POTR5/CAAQ
HQM511	Quaking aspen/mesic forb	POTR5/2FORB
HQS221	Quaking aspen/common snowberry	POTR5/SYAL
HQS222	Quaking aspen/thinleaf alder/redosier dogwood	POTR5/ALINT/COSES
HQS223	Quaking aspen/thinleaf alder-common snowberry	POTR5/ALINT-SYAL
MD2111	Meadow foxtail	ALPR3
MD3111	Kentucky bluegrass (dry meadow)	POPR (DRY MEADOW)
MD3112	Kentucky bluegrass (degenerated bench)	POPR (DEGEN BENCH)
MD4111	Seashore bentgrass	AGPA8

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
MM1912	Tufted hairgrass	DECE
MM2911	Woolly sedge	CALA30
MM2912	Nebraska sedge	CANE2
MM2913	Widefruit sedge	CAEU2
MM2914	Aquatic sedge	CAAQ
MM2915	Shortbeaked sedge	CASI2
MM2916	Woodrush sedge	CALU7
MM2917	Bladder sedge	CAUT
MM2918	Cusick's sedge	CACU5
MM2919	Lakeshore sedge	CALE8
MM2920	Slender sedge	CALA11
MM2921	Bigleaf sedge	CAAM10
MM2922	Torrent sedge	CANU5
MM2924	Small-fruit bulrush	SCMI2
MM2925	Tall mannagrass	GLEL
MM2926	Bog alkaligrass	PUCCI
MM2927	Sierra hare sedge	CALE9
MM2928	Mud sedge	CALI7
MM2929	Smallwing sedge	CAMI7
MM2930	Brown sedge	CASU6

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
MM2932	Sheldon's sedge	CASH
MM2933	Jones' sedge	CAJO
MS2111	Black alpine sedge	CANI2
MS2113	Northern singlespike sedge-brook saxifrage (spring)	CASC10-SAAR13
MS3111	Holm's Sedge	CASC12
MS3112	Star sedge	CAECE
MS3113	Bluejoint	CACA4
MS4111	Beautiful spikerush	ELBE
MT10	Rocky Mountain pond-lily	NUPO2
MT8121	Broadleaf cattail	TYLA
MW1923	Inflated sedge	CAVE6
MW1926	Beaked sedge	CARO6
MW2912	Clustered field sedge	CAPR5
MW2913	Northern bog sedge	CAGY2
MW2927	Drooping woodreed	CILA2
MW3912	Baltic rush	JUBA
MW4911	Few-flowered spikerush	ELPA6
MW4912	Creeping spikerush	ELPA3
N	Ice fields	
NTS111	Syringa-bordered talus strips	PHLE4 (TALUS)

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SD01	White sagebrush	ARLU
SD1911	Low sagebrush/Idaho fescue-bluebunch wheatgrass	ARAR8/FEID-AGSP
SD1924	Low sagebrush/bluebunch wheatgrass	ARAR8/AGSP
SD2401	Threetip sagebrush/Sandberg's bluegrass-onespike oatgrass	ARTR4/POSA12-DAUN
SD2911	Mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	ARTRV/FEID-AGSP
SD2915	Mountain big sagebrush/elk sedge (montane)	ARTRV/CAGE2 (MONTANE)
SD2916	Mountain big sagebrush-bitterbrush/Idaho fescue	ARTRV-PUTR2/FEID
SD2917	Mountain big sagebrush-mountain snowberry/Mountain brome	ARTRV-SYOR2/BRCA5
SD2918	Mountain big sagebrush/bluebunch wheatgrass-Sandberg's bluegrass	ARTRV/AGSP-POSA12
SD2919	Mountain big sagebrush-mountain snowberry	ARTRV-SYOR2
SD2920	Mountain big sagebrush/western needlegrass	ARTRV/STOC2
SD2929	Mountain big sagebrush/Idaho fescue-prairie junegrass	ARTRV/FEID-KOCR
SD30	Squaw apple-mountain snowberry	PERA4-SYOR2
SD3010	Mountain big sagebrush-squaw apple	ARTRV-PERA4
SD3011	Mountain big sagebrush/giant wildrye	ARTRV/ELC12
SD3111	Bitterbrush/Idaho fescue-bluebunch wheatgrass	PUTR2/FEID-AGSP
SD3112	Bitterbrush/bluebunch wheatgrass	PUTR2/AGSP

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SD3124	Bitterbrush-mountain big sagebrush/Idaho fescue-bluebunch wheatgrass	PUTR2-ARTRV/FEID-AGSP
SD3125	Bitterbrush-mountain big sagebrush/Idaho fescue	PUTR2-ARTRV/FEID
SD3126	Bitterbrush/Douglas' buckwheat	PUTR2/ERDO
SD40	Mountain mahogany/elk sedge	CELE3/CAGE2
SD4111	Mountain mahogany/Idaho fescue-bluebunch wheatgrass	CELE3/FEID-AGSP
SD4112	Mountain mahogany/bluebunch wheatgrass	CELE3/AGSP
SD4113	Mountain mahogany/elk sedge	CELE3/CAGE2
SD4114	Mountain mahogany/Wheeler's bluegrass	CELE3/PONEW
SD4115	Mountain mahogany-bitterbrush/bluebunch wheatgrass	CELE3-PUTR2/AGSP
SD42	Curl-leaf mountain mahogany/Geyer's sedge	CELE3/CAGE2
SD49	Mountain mahogany	CELE3
SD5611	Netleaf hackberry/bluebunch wheatgrass	CERE2/AGSP
SD5612	Netleaf hackberry/brome	CERE2/BROMU
SD6121	Smooth sumac/bluebunch wheatgrass	RHGL/AGSP
SD65	Spiny greenbush/bluebunch wheatgrass	GLNE/AGSP
SD9111	Stiff sagebrush/Sandberg's bluegrass (scabland)	ARRI2/POSA12 (SCAB)
SD9141	Stiff sagebrush/Gairdner's penstemon	ARRI2/PEGA
SD9221	Low sagebrush/Sandberg's bluegrass	ARAR8/POSA12

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SD9322	Buckwheat/Oregon bladderpod	ERIOG-PHOR2
SM1111	Mallow ninebark-common snowberry	PHMA5-SYAL
SM19	Ninebark-common snowberry	PHMA5-SYAL
SM1901	Pacific ninebark	PHCA11
SM20	Alder snow slides	ALSI3
SM3001	Lewis' mock orange/mesic forb	PHLE4/MESIC FORB
SM31	Common snowberry	SYAL
SM3110	Common snowberry (floodplain)	SYAL (FLOODPLAIN)
SM3111	Common snowberry-rose	SYAL-ROSA5
SM32	Mountain snowberry	SYOR2
SM33	Snowbrush ceanothus	CEVE
SM34	Bitter cherry	PREM
SM41	Water birch/reed canarygrass	BEOC2/PHAR3
SM5001	Barton's raspberry	RUBA
SM5002	Himalayan blackberry	RUDI2
SM5912	Thimbleberry	RUPA
SS1912	Pink mountainheath mounds	PHEM (MOUNDS)
SS4911	Mountain big sagebrush/elk sedge	ARTRV/CAGE2
SS4914	Mountain big sagebrush/California brome	ARTRV/BRCA5
SS4915	Mountain big sagebrush/needle and thread	ARTRV/HECO26

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SS4916	Mountain big sagebrush/Hood's sedge	ARTRV/CAHO5
SS4917	Mountain big sagebrush/linanthastrum	ARTRV/LINU4
SS4918	Mountain big sagebrush/golden buckwheat-phlox	ARTRV/ERFL4-PHLOX
SS4919	Shrubby cinquefoil/Idaho fescue	POFR4/FEID
SS60	Shrubby cinquefoil	POFR4
SS6001	Shrubby cinquefoil-bog birch	POFR4-BEGL
SW0101	Labrador tea/Holm's Rocky Mountain sedge	LEGL/CASC12
SW0102	Twinberry honeysuckle/ladyfern	LOIN5/ATFI
SW1111	Willow/Kentucky bluegrass	SALIX/POPR
SW1112	Willow/woolly sedge	SALIX/CALA30
SW1114	Willow/aquatic sedge	SALIX/CAAQ
SW1117	Coyote willow	SAEX
SW1121	Undergreen willow/Holm's Rocky Mountain sedge	SACO2/CASC12
SW1123	Willow/bladder sedge	SALIX/CAUT
SW1124	Willow/bluejoint	SALIX/CACA4
SW1125	Willow/mesic forb	SALIX/2FORB
SW1126	Strapleaf willow	SALI
SW1127	Undergreen willow/Northwest Territory sedge	SACO2/CAUT
SW1128	Undergreen willow/Clustered field sedge	SACO2/CAPR5

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SW1129	Eastwood willow-Tweedy willow/aquatic sedge	SAEA-SATW/CAAQ
SW1130	Scouler willow/blue wildrye	SASC/ELGL
SW1133	Arctic willow	SAAR27
SW1134	Farr's willow/Pacific onion	SAFA/ALVA
SW1135	Lemmon's willow/mesic forb	SALE/MESIC FORB
SW1136	Sitka willow/common horsetail	SASI2/EQAR
SW1137	Drummond's willow/arrowleaf groundsel	SADR/SETR
SW1138	Booth's willow/Holm's Rocky Mountain sedge	SABO2/CASC12
SW1139	Booth's willow/inflated sedge	SABO2/CAVE6
SW2101	White alder/blackberry	ALRH2/RUBUS
SW2102	White alder/mesic shrub	ALRH2/MESIC SHRUB
SW2111	Sitka alder/ladyfern	ALSI3/ATFI
SW2112	Sitka alder/drooping woodreed	ALSI3/CILA2
SW2113	Sitka alder/mesic forb	ALSI3/MESIC FORB
SW2114	Mountain alder/bigleaf sedge	ALIN2/CAAM10
SW2115	Mountain alder/bladder sedge	ALIN2/CAUT
SW2116	Mountain alder/ladyfern	ALIN2/ATFI
SW2117	Mountain alder/common horsetail	ALIN2/EQAR
SW2118	Mountain alder/Dewey's sedge	ALIN2/CADE9
SW2120	Mountain alder/Kentucky bluegrass	ALIN2/POPR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SW2121	Mountain alder/bluejoint reedgrass	ALIN2/CACA4
SW2122	Mountain alder/smallfruit bulrush	ALIN2/SCMI2
SW2123	Mountain alder/woolly sedge	ALIN2/CALA30
SW2124	Thinleaf alder/common cowparsnip	ALINT/HEMA80
SW2125	Thinleaf alder/western oakfern	ALINT/GYDR
SW2126	Mountain alder/aquatic sedge	ALIN2/CAAQ
SW2127	Mountain alder/densely tufted sedge	ALIN2/CALEL
SW2128	Mountain alder/woodrush sedge	ALIN2/CALU7
SW2211	Mountain alder-common snowberry	ALIN2-SYAL
SW2215	Mountain alder/tall mannagrass	ALIN2/GLEL
SW2216	Mountain alder-red osier dogwood/mesic forb	ALIN2-COST4/MESIC FORB
SW2217	Mountain alder-currants/mesic forb	ALIN2-RIBES/MESIC FORB
SW3111	Black hawthorn/mesic forb	CRDO2/MESIC FORB
SW3112	Water birch/mesic forb	BEOC2/2FORB
SW3113	Water birch/sedge (wet)	BEOC2/CAREX
SW3114	Saskatoon serviceberry	AMAL2
SW3124	Cow parsnip/blue wildrye	HELA4-ELGL
SW4133	Red osier dogwood/ladyfern	COST4/ATFI
SW5111	Currants/drooping woodreed	RIBES/CILA2
SW5112	Red osier dogwood	COST4

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
SW5113	Shrubby cinquefoil/Tufted hairgrass	POFR4/DECE
SW5114	Shrubby cinquefoil/Kentucky bluegrass	POFR4/POPR
SW5115	Currant/mesic forb	RIBES/2FORB
SW5116	Currant/fowl mannagrass	RIBES/GLST
SW5117	Alderleaf buckthorn/forb (mesic)	RHAL/2FORB
SW5118	Redosier dogwood/brook saxifrage	COSE16/SAOD2
SW6111	Silver sagebrush/Tufted hairgrass	ARCA13/DECE
SW6112	Silver sagebrush/Kentucky bluegrass	ARCA13/POPR
SW6113	Mountain big sagebrush/Cusick's bluegrass	ARTRV/POCU3
SW6114	Silver sagebrush/Cusick's bluegrass	ARCA13/POCU3
SW901	Alpine laurel/black alpine sedge	KAMI/CANI2
WL	Lakes and ponds	n/a
WL0108	Narrowleaf bur-reed	SPAN2

Table 47: Reference Code 641

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CCS521	Western red cedar/Cascade barberry/western swordfern	THPL/MANE2/POMU
CDC321	Douglas-fir-incense cedar	PSME-CADE27
CDC322	Douglas-fir-incense cedar-Jeffery pine	PSME-CADE27-PIJE
CDC323	Douglas-fir-incense cedar/hollyleaved barberry	PSME-CADE27/MAAQ2
CDC421	Douglas-fir-white fir	PSME-ABCO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDC422	Douglas-fir-white fir/creeping snowberry	PSME-ABCO/SYMO
CDC521	Douglas-fir-ponderosa pine/poison oak	PSME-PIPO/RHDI6
CDH321	Douglas-fir/California black oak/Pacific poison oak	PSME/QUKE/TODI
CDH521	Douglas-fir-golden chinquapin/dwarf Oregon grape	PSME-CACH6/BENE2
CDH522	Douglas-fir-canyon live oak-tanoak	PSME-QUCH2-LIDE3
CDH523	Douglas-fir-canyon live oak/dwarf Oregon grape	PSME-QUCH2/BENE2
CDH524	Douglas-fir-canyon live oak/poison oak	PSME-QUCH2/RHDI6
CDS121	Douglas-fir/dry shrub	PSME/DRY SHRUB
CDS122	Douglas-fir/huckleberry oak	PSME/QUVA
CDS123	Douglas-fir/huckleberry oak-pinemat manzanita/common beargrass	PSME/QUVA-ARNE/XETE
CDS214	Douglas-fir/vine maple-dwarf Oregon grape	PSME/ACCI-BENE2
CDS215	Douglas-fir/oceanspray/common whipplea	PSME/HODI/WHMO
CDS521	Douglas-fir/dwarf Oregon grape/western sword-fern	PSME/BENE2/POMU
CDS522	Douglas-fir/salal-dwarf Oregon grape	PSME/GASH-BENE2
CDS523	Douglas-fir/salal-Pacific rhododendron	PSME/GASH-RHMA3
CDS524	Douglas-fir/salmonberry/western swordfern	PSME/RUSP/POMU
CDS663	Douglas-fir/pinemat manzanita-SWO	PSME/ARNE-SWO
CFC121	Pacific silver fir-mountain hemlock/thinleaf huckleberry/sweet after death	ABAM-TSME/VAME/ACTR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFC221	Pacific silver fir-western hemlock/thinleaf huckleberry/sweet after death	ABAM-TSHE/VAME/ACTR
CFF221	Pacific silver fir/dwarf rose/sweet after death	ABAM/ROGY/ACTR
CHC221	Western hemlock-Douglas-fir/salal-SWO	TSHE-PSME/GASH-SWO
CHC321	Western hemlock-white fir/Cascade barberry	TSHE-ABCO/MANE2
CHC322	Western hemlock-white fir/vine maple-Cascade barberry	TSHE-ABCO/ACCI-MANE2
CHC421	Western hemlock-western red cedar/Pacific rhododendron	TSHE-THPL/RHMA3
CHC521	Western hemlock-Pacific silver fir	TSHE-ABAM
CHC621	Western hemlock-incense cedar/salal	TSHE-CADE27/GASH
CHF120	Western hemlock/western swordfern	TSHE/POMU
CHH121	Western hemlock-tanoak-California laurel	TSHE-LIDE3-UMCA
CHH122	Western hemlock-tanoak/Pacific rhododendron	TSHE-LIDE3/RHMA3
CHH123	Western hemlock-tanoak/evergreen huckleberry-Pacific rhododendron	TSHE-LIDE3/VAOV2-RHMA3
CHH321	Western hemlock-giant chinquapin/salal-Pacific rhododendron	TSHE-CHCHC4/GASH-RHMA3
CHS117	Western hemlock/salal-dwarf Oregon grape-SWO	TSHE/GASH-BENE2-SWO
CHS118	Western hemlock/salal-Pacific rhododendron-SWO	TSHE/GASH-BENE2-SWO
CHS119	Western hemlock/salal/western swordfern	TSHE/GASH/POMU
CHS219	Western hemlock/vine maple-salal-SWO	TSHE/ACCI-GASH-SWO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS220	Western hemlock/vine maple-Pacific rhododendron	TSHE/ACCI-RHMA3
CHS319	Western hemlock/Pacific rhododendron-salal	TSHE/RHMA3-GASH
CHS320	Western hemlock/Pacific rhododendron-dwarf Oregon grape-SWO	TSHE/RHMA3-BENE2-SWO
CHS420	Western hemlock/salmonberry	TSHE/RUSP
CHS609	Western hemlock/evergreen huckleberry-western sword-fern	TSHE/VAOV2/POMU
CHS821	Western hemlock/deer oak-salal-Pacific rhododendron	TSHE/QUSA2-GASH-RHMA3
CLC521	Lodgepole pine-mountain hemlock (depauperate)	PICO-TSME
CLC721	Lodgepole pine-white fir-Douglas-fir	PICO-ABCO-PSME
CLS531	Lodgepole pine/thin-leaved huckleberry-grouseberry	PICO/VAME-VASC
CMC221	Mountain hemlock-Shasta red fir/roughfruit berry/sidebells wintergreen	TSME-ABSH/RULA2/ORSE
CMC222	Mountain hemlock-Shasta red fir/thinleaf huckleberry/pipsissewa	TSME-ABSH/VAME/CHUM
CMF021	Mountain hemlock/forbs	TSME/2FORB
CMS116	Mountain hemlock/grouse whortleberry/pipsissewa	TSME/VASC/CHUM
CMS141	Mountain hemlock/pinemat manzanita/pipsissewa	TSME/ARNE/CHUM
CMS219	Mountain hemlock/thinleaf huckleberry/sidebells wintergreen	TSME/VAME/ORSE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMS621	Mountain hemlock/Pacific rhododendron/common beargrass	TSME/RHMA3/XETE
CPC121	Jeffrey pine-incense cedar-Douglas-fir	PIJE-CADE27-PSME
CPC122	Jeffrey pine-incense cedar/whiteleaf manzanita	PIJE-CADE27/ARVI4
CPC123	Jeffrey pine-incense cedar/huckleberry oak	PIJE-CADE27/QUVA
CPC421	Jeffrey pine/hoary manzanita/Idaho fescue	PIJE/ARCA5/FEID
CPC422	Jeffrey pine/buckbrush/Idaho fescue	PIJE/CECU/FEID
CPC423	Jeffrey pine/Idaho fescue	PIJE/FEID
CPC424	Jeffrey pine/huckleberry oak-pinemat manzanita	PIJE/QUVA-ARNE
CPC425	Jeffrey pine/huckleberry oak-pinemat manzanita/dwarf silktassel	PIJE/QUVA-ARNE/GABU2
CPC621	Ponderosa pine-Douglas-fir	PIPO-PSME
CPH221	Ponderosa pine-California black oak	PIPO-QUKE
CQC121	Western white pine-Jeffrey pine/huckleberry oak/common beargrass	PIMO3-PIJE/QUVA/XETE
CQF021	Western white pine/common beargrass	PIMO3/XETE
CQH121	Western white pine-tanoak/huckleberry oak/common beargrass	PIMO3-LIDE3/QUVA/XETE
CRC321	Shasta red fir-white fir/Sadler oak/common prince's-pine	ABMAS-ABCO/QUSA2/CHUM
CRC322	Shasta red fir-white fir/Sadler oak/one-sided pyrola	ABMAS-ABCO/QUSA2/PYSE
CRC323	Shasta red fir-white fir/baldhip rose/one-sided pyrola	ABMAS-ABCO/ROGY/PYSE

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CRC324	Shasta red fir-white fir/creeping snowberry/pipsissewa	ABSH-ABCO/SYMO/CHUM
CRC421	Shasta red fir-lodgepole pine/pinemat manzanita/pipsissewa	ABSH-PICO/ARNE/CHUM
CRC521	Shasta red fir-mountain hemlock/pinemat manzanita/pipsissewa	ABSH-TSME/ARNE/CHUM
CRF021	Shasta red fir/sweetcicely	ABSH/OSBE
CRS421	Shasta red fir/thin-leaved huckleberry/common prince's-pine	ABSH/VAME/CHUM
CRS521	Shasta red fir/Oregon boxleaf/sidebells wintergreen	ABSH/PAMY/ORSE
CSC121	Sitka spruce-white fir/salmonberry	PISI-ABCO/RUSP
CSS323	Sitka spruce/salal-California huckleberry	PISI/GASH-VAOV2
CTC121	Port Orford cedar-white fir/Cascade barberry	CHLA-ABCO/MANE2
CTC221	Port Orford cedar-western hemlock/Sierra laurel	CHLA-TSHE/LEDA
CTC222	Port-Orford cedar-western hemlock/western sword-fern	CHLA-TSHE/POMU
CTH121	Port Orford cedar-tanoak/salal	CHLA-LIDE3/GASH
CTS121	Port-Orford cedar/evergreen huckleberry/western sword-fern	CHLA/VAOV2/POMUM
CTS221	Port-Orford cedar/Pacific madrone-salal	CHLA/RHMA3-GASH
CTS321	Port Orford cedar/pink honeysuckle/fescue	CHLA/LOHI2/FESTU
CTS521	Port Orford cedar/huckleberry oak/common beargrass	CHLA/QUVA/XETE
CWC221	White fir-Douglas-fir/baldhip rose	ABCO-PSME/ROGY

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWC521	White fir-Brewer spruce/common prince's-pine-whitevein pyrola	ABCO-PIBR/CHUM-PYPI2
CWC621	White fir-incense cedar/western starflower	ABCO-CADE27/TRLA6
CWC622	White fir-western hemlock/Cascade barberry/longtube twinflower	ABCO-TSHE/MANE2/LIBOL2
CWC721	White fir-Shasta red fir/vanillaleaf	ABCO-ABMAS/ACTR
CWC722	White fir-Shasta red fir/common prince's-pine-threeleaf anemone	ABCO-ABMAS/CHUM-ANDE3
CWC723	White fir-Shasta red fir/Sadler oak	ABCO-ABMAS/QUSA2
CWF541	White fir/common beargrass	ABCO/XETE
CWH321	White fir-tanoak/common prince's-pine	ABCO-LIDE3/CHUM
CWS227	White fir/dwarf Oregon grape	ABCO/BENE2
CWS228	White fir/dwarf Oregon grape/vanillaleaf	ABCO/BENE2/ACTR
CWS229	White fir/Cascade barberry/longtube twinflower	ABCO/MANE2/LIBOL2
CWS341	White fir/pinemat manzanita	ABCO/ARNE
CWS342	White fir/creeping snowberry	ABCO/SYMO
CWS523	White fir/vine maple/Oregon oxalis	ABCO/ACCI/OXOR
CWS524	White fir/salal-Cascade barberry	ABCO/GASH-MANE2
CWS525	White fir/Pacific rhododendron-Cascade barberry	ABCO/RHMA3-MANE2
CWS526	White fir/Pacific rhododendron-deer oak	ABCO/RHMA3-QUSA2
CWS621	White fir/huckleberry oak	ABCO/QUVA
HOC121	Oregon white oak-Douglas-fir/poison oak	QUGA4-PSME/RHDI6

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
HOG321	Oregon white oak/hedgehog dogtail	QUGA4/CYEC
HTC221	Tanoak-western hemlock/evergreen huckleberry-poison oak	LIDE3-TSHE/VAOV2-RHDI6
HTC222	Tanoak-western hemlock/evergreen huckleberry/western sword-fern	LIDE3-TSHE/VAOV2/POMU
HTC223	Tanoak-western hemlock/evergreen huckleberry/western sword-fern-RIP	LIDE3-TSHE/VAOV2/POMU-RIP
HTC321	Tanoak-Port Orford cedar/salal	LIDE3-CHLA/GASH
HTC421	Tanoak-white fir/dwarf Oregon grape	LIDE3-ABCO/BENE2
HTC521	Tanoak-sugar pine/huckleberry oak/common beargrass	LIDE3-PIMO3/QUVA/XETE
HTC621	Tanoak-Douglas-fir-canyon live oak/dwarf Oregon grape	LIDE3-PSME-QUCH2/BENE2
HTC622	Tanoak-Dougals-fir-canyon live oak/poison oak	LIDE3-PSME-QUCH2/RHDI6
HTC623	Tanoak-Douglas-fir/salal-dwarf Oregon grape	LIDE3-PSME/GASH-BENE2
HTC624	Tanoak-Douglas-fir/salal-Pacific rhododendron	LIDE3-PSME/GASH-RHMA3
HTC625	Tanoak-Douglas-fir/salal-huckleberry oak	LIDE3-PSME/GASH-VAOV2
HTC626	Tanoak-Douglas-fir/Sadler oak-dwarf Oregon grape	LIDE3-PSME/QUSA2-BENE2
HTH321	Tanoak-bigleaf maple-canyon live oak/western sword-fern	LIDE3-ACMA3-QUCH2/POMU
HTH421	Tanoak-golden chinquapin-sugar pine	LIDE3-CACH6-PILA
HTH422	Tanoak-golden chinquapin/salal-Sadler oak	LIDE3-CACH6/GASH-QUSA2
HTS121	Tanoak-evergreen huckleberry-Pacific rhododendron-salal	LIDE3/VAOV2-RHMA3-GASH

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
HTS621	Tanoak/manzanita/common beargrass	LIDE3/ARCTO3/XETE

Table 48: Reference Code 642

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS301	Douglas-fir/Western rhododendron-Evergreen huckleberry	PSME/RHMA3-VAOV2
CLC201	Shore pine-Douglas-fir/Wax myrtle-Evergreen huckleberry	PICOC-PSME/MYCA-VAOV2
CLC601	Shore pine-Sitka spruce/Evergreen huckleberry	PICOC-PISI/VAOV2
CLM101	Shore pine/Slough sedge seasonally flooded	PICOC/CAOB3
CLS301	Shore pine/Bearberry	PICOC/ARUV
CLS832	Shore pine/Scots broom/European beachgrass	PICOC/CYSC4/AMAR4
CSH401	Sitka spruce-Red alder/Slough sedge-Skunk cabbage saturated	PISI-ALRU/CAOB3-LYAM3
CSS101	Sitka spruce/Evergreen huckleberry	PISI/VAOV2
CSS322	Sitka spruce/Salal-Salmonberry	PISI/GASH-RUSP
CTS404	Port Orford cedar/Evergreen huckleberry	CHLA/VAOV2
GM2001	Red fescue	FERU2
GM2002	Red fescue-Bracken fern	FERU2-PTAQ
GM2003	Red fescue-Salt rush	FERU2-JULE
GM8001	Seashore bluegrass	POMA26
HAM101	Red alder/Salmonberry/Slough sedge-Skunk cabbage saturated	ALRU/RUSP/CAOB3-LYAM3

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
MMB801	Salt rush	JULE
MMB802	Sickle-leaved rush-Salt rush	JUFA-JULE
MT8101	Hardstem bulrush	SCACA
MW8101	Slough sedge seasonally flooded	CAOB3
MW8102	Slough sedge-Pacific silverweed	CAOB3-AREGE
MW8103	Inflated sedge	CAEX5
MW9102	Creeping spikerush-Nevada rush	ELPA3-JUNE
SW1101	Hooker willow/Slough sedge-Pacific silverweed	SAHO/CAOB3-AREGE
SW1102	Hooker willow-Crabapple/Slough sedge-Skunk cabbage saturated	SAHO-MAFU/CAOB3-LYAM3
SW4101	Bog blueberry/Tufted hairgrass	VAUL/DECEC
SW4102	Bog blueberry/Slough sedge	VAUL-CAOB3
SW4114	Douglas spiraea saturated	SPDO
SW8101	Tree lupine/European beachgrass	LUAR/AMAR4
WE0101	Three-square bulrush tidal	SCAM6
WE0102	Baltic rush-Pacific silverweed tidal	JUBA-AREGE
WE0104	Tufted hairgrass-Pacific silverweed tidal	DECEC-AREGE
WE0105	Lyngby sedge-Pacific silverweed tidal	CALY3-AREGE
WE0106	Creeping bentgrass-Pacific silverweed tidal	AGSTS-AREGE
WE0107	Saltgrass-Pacific silverweed tidal	DISP-AREGE
WL0101	Pond lily	NULUP

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
WL0102	Floating water-pennywort	HYRA
WL0103	Floating-leaved pondweed	PONA4
WL0104	Simplestem bur-reed	SPAN2
WL0105	Parrot-feather	MYAQ2
WL0106	South American waterweed	EGDE
WL0107	Common bladderwort	UTMA
WL9001	Waterpepper-Water purslane	POHY2-LUPA
WL9002	Water smartweed	POAM8
WL9003	Threeway sedge	DUAR3
WL9004	Knotgrass	PADI6

Table 49: Reference Code 647

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAF312	Mountain hemlock-subalpine fir/Cascades aster	TSME-ABLA/EULE14
CAG313	Mountain hemlock-whitebark pine/Hitchcock's smooth woodrush	TSME-PIAL/LUGLH
CAG314	Mountain hemlock/Hitchcock's smooth woodrush	TSME/LUGLH
CAS212	Mountain hemlock/pink mountainheath-Cascade bilberry	TSME/PHEM-VADE
CAS412	Mountain hemlock-subalpine fir/common juniper	TSME-ABLA/JUCO6
CDC710	Douglas-fir/Cascade barberry	PSME/MANE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDC715	Douglas-fir-western hemlock/Pacific rhododendron	PSME-TSHE/RHMA3
CDS124	Douglas-fir/Pacific poison oak	PSME/TODI
CDS212	Douglas-fir/pceanspray/grass	PSME/HODI/grass
CDS213	Douglas-fir/oceanspray-common whipplea	PSME/HODI-WHMO
CDS216	Douglas-fir/oceanspray-Cascade barberry	PSME/HODI-MANE2
CDS217	Douglas-fir/oceanspray-snowberry	PSME/HODI-SYMPH
CDS312	Douglas-fir/beaked hazelnut-creeping snowberry/western swordfern	PSME/COCO6-SYMO/POMU
CDS512	Douglas-fir/Cascade barberry-salal	PSME/MANE2-GASH
CFC251	Pacific silver fir-western hemlock/Pacific rhododendron-salal	ABAM-TSHE/RHMA3-GASH
CFC311	Pacific silver fir-grand fir/starry false lily of the valley	ABAM-ABGR/MAST4
CFF152	Pacific silver fir/threeleaf foamflower	ABAM/TITR
CFF153	Pacific silver fir/redwood-sorrel	ABAM/OXOR
CFS151	Pacific silver fir/Cascade barberry	ABAM/MANE2
CFS251	Pacific silver fir/thinleaf huckleberry/common beargrass	ABAM/VAME/XETE
CFS253	Pacific silver fir/Alaska blueberry/bunchberry dogwood	ABAM/VAAL3/COCA13
CFS254	Pacific silver fir/rusty menziesia	ABAM/MEFE
CFS255	Pacific silver fir/Alaska blueberry-salal	ABAM/VAAL3-GASH

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFS256	Pacific silver fir/thinleaf huckleberry/bride's bonnet	ABAM/VAME/CLUN2
CFS351	Pacific silver fir/devilsclub	ABAM/OPHO
CFS551	Pacific silver fir/Cascade azalea/common beargrass	ABAM/RHAL2/XETE
CFS552	Pacific silver fir/Cascade azalea/bride's bonnet	ABAM/RHAL2/CLUN2
CFS651	Pacific silver fir/vine maple/threeleaf foamflower	ABAM/ACCI/TITR
CFS652	Pacific silver fir/Pacific rhododendron/Cascade barberry	ABAM/RHMA3/MANE2
CFS653	Pacific silver fir/Pacific rhododendron/common beargrass	ABAM/RHMA3/XETE
CFS654	Pacific silver fir/Pacific rhododendron-Alaska blueberry/bunchberry dogwood	ABAM/RHMA3-VAAL3/COCA13
CHF110	Western hemlock/redwood sorrel-NWO Cascades	TSHE/OXOR-NWO Cascades
CHF150	Western hemlock/Pacific swordfern-NWO Cascades	TSHE/POMU-NWO Cascades
CHF220	Western hemlock/sweet after death-dry-NWO Cascades	TSHE-ACCI-dry-NWO Cascades
CHF221	Western hemlock/sweet after death	TSHE/ACTR
CHF321	Western hemlock/twinflower	TSHE/LIBO3
CHM121	Western hemlock/American skunkcabbage	TSHE/LYAM3
CHS110	Western hemlock/salal-NWO Cascades	TSHE-GASH-NWO Cascades
CHS158	Western hemlock/Cascade barberry-dry-NWO Cascades	TSHE/MANE2-dry-NWO Cascades

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS159	Western hemlock/Cascade barberry-salal-dry-NWO Cascades	TSHE/MANE2-GASH-dry-NWO Cascades
CHS160	Western hemlock/Cascade barberry-salal-NWO Cascades	TSHE/MANE2-GASH-NWO Cascades
CHS161	Western hemlock/Cascade barberry-NWO Cascades	TSHE/MANE2-NWO Cascades
CHS162	Western hemlock/Cascade barberry/sweet after death	TSHE/MANE2/ACTR
CHS163	Western hemlock/Cascade barberry/redwood-sorrel-NWO Cascades	TSHE/MANE2/OXOR-NWO Cascades
CHS164	Western hemlock/Cascade barberry/western swordfern-NWO Cascades	TSHE/MANE2/POMU-NWO Cascades
CHS228	Western hemlock/vine maple/western swordfern NWO Cascades	TSHE/ACCI/POMU-NWO Cascades
CHS232	Western hemlock/vine maple-salal/western swordfern NWO Cascades	TSHE/ACCI-GASH/POMU-NWO Cascades
CHS326	Western hemlock/Pacific rhododendron-Alaska blueberry/bunchberry dogwood	TSHE/RHMA3-VAAL3/COCA13
CHS350	Western hemlock/Pacific rhododendron-salal-NWO Cascades	TSHE/RHMA3-GASH-NWO Cascades
CHS354	Western hemlock/Pacific rhododendron/redwood sorrel	TSHE/RHMA3/OXOR
CHS355	Western hemlock/Pacific rhododendron-twinflower	TSHE/RHMA3-LIBO3
CHS356	Western hemlock/Pacific rhododendron-Cascade barberry-NWO Cascades	TSHE/RHMA3-MANE2-NWO Cascades
CHS357	Western hemlock/Pacific rhododendron/common beargrass	TSHE/RHMA3/XETE
CHS522	Western hemlock/devilsclub/redwood sorrel	TSHE/OPHO/OXOR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS525	Western hemlock/devilsclub/starry false lily of the valley	TSHE/OPHO/MAST4
CHS611	Western hemlock/Alaska blueberry-devilsclub	THSE/VAAL3-OPHO
CHS613	Western hemlock/Alaska blueberry/redwood sorrel-NWO Cascades	THSE/VAAL3/OXOR-NWO Cascades
CHS614	Western hemlock/Alaska blueberry-salal	TSHE/VAAL3-GASH
CHS615	Western hemlock/Alaska blueberry/bunchberry dogwood NWO Cascades	TSHE/VAAL3/COCO13-NWO Cascades
CMG212	Mountain hemlock/forked woodrush	TSME/LUDI
CMS117	Mountain hemlock/pinemat manzanita	TSME/ARNE
CMS118	Mountain hemlock/grouse whortlberry	TSME/VASC
CMS224	Mountain hemlock/thinleaf huckleberry/common beargrass	TSME/VAME/XETE
CMS225	Mountain hemlock/rusty menziesia	TSME/MEFE
CMS226	Mountain hemlock/Cascade azalea/bride's bonnet	TSME/RHAL2/CLUN2
CMS227	Mountain hemlock/Cascade azalea/common beargrass	TSME/RHAL2/XETE
CMS228	Mountain hemlock/thinleaf huckleberry-western mountain ash	TSME/VAME-SOSI2
CMS229	Mountain hemlock/thinleaf huckleberry/bride's bonnet	TSME/VAME/CLUN2
CMS613	Mountain hemlock/Pacific rhododendron	TSME/RHMA3
CWF211	Grand fir/pipsissewa	ABGR/CHUM
CWS521	Grand fir/kinnikinnick	ABGR/ARUV

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWS522	Grand fir/Cascade barberry	ABGR/MANE2
CWS527	Grand fir/vine maple/western swordfern	ABGR/ACCI/POMU
CWS528	Grand fir/Cascade barberry-salal	ABGR/MANE2-GASH
CWS529	Grand fir/oceanspray/western swordfern	ABGR/HODI/POMU
CWS555	Grand fir/beaked hazelnut/white insideout flower	ABGR/COCO6/VAHE
CWS622	Grand fir/Pacific poison oak	ABGR/TODI

Table 50: Reference Code 648

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAF312	Mountain hemlock-subalpine fir/Cascade aster	TSME-ABLA2/EULE14
CAG313	Mountain hemlock-whitebark pine/lupine	TSME-PIAL/LUGL
CAG314	Mountain hemlock/lupine	TSME/LUGL
CAS212	Mountain hemlock/red heather-blueleaf huckleberry, NW Oregon	TSME/PHEM-VADE
CAS412	Mountain hemlock-subalpine fir/common juniper	TSME-ABLA2/JUCO6
CDC710	Douglas-fir/dwarf Oregon grape	PSME/MANE2
CDC712	Douglas-fir-w. hemlock/rhododendron	PSME-TSHE/RHMA
CDC714	Douglas-fir/dwarf Oregon grape/salal	PSME/MANE2-GASH
CDS124	Douglas-fir/poison oak	PSME/TODI
CDS212	Douglas-fir/oceanspray/grass	PSME/HODI/GRASS
CDS213	Douglas-fir/oceanspray/whipple vine	PSME/HODI/WHMO

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS216	Douglas-fir/oceanspray-dwarf Oregon grape	PSME/HODE-MANE2
CDS217	Douglas-fir/oceanspray-snowberry	PSME/HODI-SYMPH
CDS312	Douglas-fir/California hazel-creeping snowberry/swordfern	PSME/COCO6-SYMO/POMU
CDS512	Douglas-fir/dwarf Oregon grape/salal	PSME/MANE2-GASH
CFC311	Silver fir-grand fir/false solomonseal	ABAM-ABGR/SMST
CFF152	Silver fir/coolwort foamflower	ABAM/TIUN
CFF155	Pacific silver fir/Oregon oxalis-NWO coast	ABAM/OXOR
CFF613	Pacific silver fir/Oregon oxalis-swordfern	ABAM/OXOR-POMU
CFS151	Silver fir/dwarf Oregon grape	ABAM/BENE
CFS251	Silver fir/big huckleberry/beargrass	ABAM/VAME/XETE
CFS254	Silver fir/fools huckleberry	ABAM/MEFE
CFS255	Silver fir/Alaska huckleberry-salal	ABAM/VAAL-GASH
CFS256	Silver fir/big huckleberry/beadily	ABAM/VAME/CLUN
CFS351	Silver fir/devils club	ABAM/OPHO
CHF110	Western hemlock/Oregon oxalis-NWO Cascades	TSHE/OXOR-NWO Cascades
CHF141	Western hemlock/Oregon oxalis-NWO coast	TSHE/OXOR-NWO Coast
CHF142	Western hemlock/swordfern-NWO coast	TSHE/POMU/NWO Coast
CHF150	Western hemlock/swordfern-NWO Cascades	TSHE/POMU-NWO Cascades
CHF220	Western hemlock/vanilla leaf-DRY-NWO Cascades	TSHE/ACTR-DRY-NWO Cascades

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHF221	Western hemlock/vanilla leaf	TSHE/ACTR
CHF231	Western hemlock/Oregon oxalis-vanilla leaf	TSHE/OXOR-ACTR
CHF232	Western hemlock/vanilla leaf-DRY-NWO coast	TSHE/ACTR-DRY-NWO Coast
CHF321	Western hemlock/twinflower	TSHE/LIBO3
CHS110	Western hemlock/salal-NWO Cascades	TSHE/GASH-NWO Cascades
CHS151	Western hemlock/dwarf Oregon grape-NWO coast	TSHE/MANE2-NWO Coast
CHS152	Western hemlock/dwarf Oregon grape-DRY-NWO coast	TSHE/MANE2-DRY-NWO Coast
CHS153	Western hemlock/dwarf Oregon grape-salal-NWO coast	TSHE/MANE2-GASH-NWO Coast
CHS154	Western hemlock/dwarf Oregon grape-salal-DRY-NWO coast	TSHE/MANE2-GASH-DRY-NWO Coast
CHS155	Western hemlock/dwarf Oregon grape/Oregon oxalis-NWO coast	TSHE/MANE2/OXOR-NWO Coast
CHS156	Western hemlock/dwarf Oregon grape/swordfern-NWO coast	TSHE/MANE2/POMU-NWO Coast
CHS157	Western hemlock/salal-NWO coast	TSHE/GASH-NWO Coast
CHS158	Western hemlock/dwarf Oregon grape-DRY-NWO Cascades	TSHE/MANE2-DRY-NWO Cascades
CHS159	Western hemlock/dwarf Oregon grape-salal-DRY-NWO Cascades	TSHE/MANE2-GASH-DRY-NWO Cascades
CHS160	Western hemlock/dwarf Oregon grape-salal-NWO Cascades	TSHE/MANE2-GASH-NWO Cascades
CHS161	Western hemlock/dwarf Oregon grape-NWO Cascades	TSHE/MANE2-NWO Cascades

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS162	Western hemlock/dwarf Oregon grape/vanilla leaf-NWO Cascades	TSHE/MANE2/ACTR-NWO Cascades
CHS163	Western hemlock/dwarf Oregon grape/Oregon oxalis-NWO Cascades	TSHE/MANE2/OXOR-NWO Cascades
CHS164	Western hemlock/dwarf Oregon grape/swordfern-NWO Cascades	TSHE/MANE2/POMU-NWO Cascades
CHS222	Western hemlock/vine maple/swordfern, coast	TSHE/ACCI/POMU-COAST
CHS230	Western hemlock/vine maple-salal/swordfern-NWO coast	TSHE/ACCI-GASH/POMU-NWO Coast
CHS231	Western hemlock/vine maple-California hazel	TSHE/ACCI-COCO6
CHS314	Western hemlock/rhododendron-dwarf Oregon grape-NWO coast	TSHE/RHMA3-MANE2-NWO Coast
CHS322	Western hemlock/rhododendron-salal, coast	TSHE/RHMA-GASH-COAST
CHS323	Western hemlock/rhododendron/swordfern, coast	TSHE/RHMA/POMU-COAST
CHS324	Western hemlock/rhododendron-evergreen huckleberry, coast	TSHE/RHMA-VAOV2-COAST
CHS350	Western hemlock/rhododendron-salal-NWO Cascades	TSHE/RHMA3-GASH-NWO Cascades
CHS356	Western hemlock/rhododendron-dwarf Oregon grape-NWO Cascades	TSHE/RHMA3-MANE2-NWO Cascades
CHS357	Western hemlock/rhododendron/beargrass-NWO Cascades	TSHE/RHMA3/XETE-NWO Cascades
CHS421	Western hemlock/salmonberry, coastal	TSHE/RUSP-COAST
CHS422	Western hemlock/salmonberry/vine maple, coast	TSHE/RUSP-ACCI-COAST
CHS423	Western hemlock/salmonberry/salal, coastal	TSHE/RUSP-GASH-COAST

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS521	Western hemlock/devils club, coastal	TSHE/OPHO-COAST
CHS610	Western hemlock/evergreen huckleberry, coastal	TSHE/VAOV2-COAST
CHS616	Western hemlock/Alaska huckleberry/Oregon oxalis-NWO coast	TSHE/VAAL/OXOR-NWO Coast
CMG211	Mountain hemlock/woodrush	TSME/LUZULA
CMG212	Mountain hemlock/lupine	TSME/LUDI
CMS117	Mountain hemlock/	TSME/ARNE
CMS118	Mountain hemlock/	TSME/VASC-NWO
CMS224	Mountain hemlock/big huckleberry/beargrass, NW Oregon	TSME/VAME/XETE-NWO
CMS225	Mountain hemlock/rusty menziesia, NW Oregon	TSME/MEFE-NWO
CMS226	Mountain hemlock/white beaksedge/bead lily	TSME/RHAL/CLUN
CMS227	Mountain hemlock/white beaksedge/beargrass	TSME/RHAL/XETE
CMS228	Mountain hemlock/big huckleberry-Mt. Albert goldenrod	TSME/VAME-SOSI
CMS229	Mountain hemlock/big huckleberry-beadlily	TSME/VAME/CLUN-NWO
CMS613	Mountain hemlock/rhododendron, NW Oregon	TSME/RHMA-NWO
CSF121	Sitka spruce/swordfern	PISI/POMU
CSF321	Sitka spruce/oxalis	PISI/OXOR
CSS321	Sitka spruce/salal	PISI/GASH
CSS521	Sitka spruce/salmonberry	PISI/RUSP
CSS522	Sitka spruce/salmonberry-salal	PISI/RUSP-GASH

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWS522	Grand fir/dwarf Oregon grape	ABGR/BENE
CWS527	Grand fir/vine maple/swordfern	ABGR/ACCI/POMU
CWS528	Grand fir/dwarf Oregon grape-salal	ABGR/MANE2-GASH
CWS529	Grand fir/oceanspray/sword fern	ABGR/HODI/POMU
CWS555	Grand fir/California hazel/inside out flower	ABGR/COCO6/VAHE
CWS622	Grand fir/poison oak	ABGR/TODI

Table 51: Reference Code 650

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CAF312	Mountain hemlock-subalpine fir/Cascade aster	TSME-ABLA2/EULE14
CAG313	Mountain hemlock-whitebark pine/lupine	TSME-PIAL/LUGL
CAG314	Mountain hemlock/lupine	TSME/LUGL
CAS212	Mountain hemlock/red heather-blueleaf huckleberry, NW Oregon	TSME/PHEM-VADE-NWO
CAS412	Mountain hemlock-subalpine fir/common juniper	TSME-ABLA2/JUCO6
CDC710	Douglas-fir/dwarf Oregon grape	PSME/MANE2
CDC714	Douglas-fir/dwarf Oregon grape/salal	PSME/MANE2-GASH
CDS124	Douglas-fir/poison oak	PSME/TODI
CDS216	Douglas-fir/oceanspray-dwarf Oregon grape	PSME/HODI-MANE2
CDS217	Douglas-fir/oceanspray-snowberry	PSME/HODI-SYMPH
CDS312	Douglas-fir/California hazel-creeping snowberry/swordfern	PSME/COCO6-SYMO/POMU

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS512	Douglas-fir/dwarf Oregon grape/salal	PSME/MANE2-GASH
CFF155	Pacific silver fir/Oregon oxalis-NWO coast	ABAM/OXOR-NWO Coast
CFF613	Pacific silver fir/Oregon oxalis-swordfern	ABAM/OXOR-POMU
CHF110	Western hemlock/Oregon oxalis-NWO Cascades	TSHE/OXOR-NWO Cascades
CHF141	Western hemlock/Oregon oxalis-NWO coast	TSHE/OXOR-NWO Coast
CHF142	Western hemlock/swordfern-NWO coast	TSHE/POMU/NWO Coast
CHF150	Western hemlock/swordfern-NWO Cascades	TSHE/POMU-NWO Cascades
CHF220	Western hemlock/vanilla leaf-DRY-NWO Cascades	TSHE/ACTR-DRY-NWO Cascades
CHF231	Western hemlock/Oregon oxalis-vanilla leaf	TSHE/OXOR-ACTR
CHF232	Western hemlock/vanilla leaf-DRY-NWO Coast	TSHE/ACTR-DRY-NWO Coast
CHS110	Western hemlock/salal-NWO Cascades	TSHE/GASH-NWO Cascades
CHS151	Western hemlock/dwarf Oregon grape-NWO coast	TSHE/MANE2-NWO Coast
CHS152	Western hemlock/dwarf Oregon grape-DRY-NWO coast	TSHE/MANE2-DRY-NWO Coast
CHS153	Western hemlock/dwarf Oregon grape-salal-NWO coast	TSHE/MANE2-GASH-NWO Coast
CHS154	Western hemlock/dwarf Oregon grape-salal-DRY-NWO coast	TSHE/MANE2-GASH-DRY-NWO Coast
CHS155	Western hemlock/dwarf Oregon grape/Oregon oxalis-NWO coast	TSHE/MANE2/OXOR-NWO Coast
CHS156	Western hemlock/dwarf Oregon grape/swordfern-NWO coast	TSHE/MANE2/POMU-NWO Coast

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS157	Western hemlock/salal-NWO coast	TSHE/GASH-NWO Coast
CHS158	Western hemlock/dwarf Oregon grape-DRY-NWO Cascades	TSHE/MANE2-DRY-NWO Cascades
CHS159	Western hemlock/dwarf Oregon grape-salal-DRY-NWO Cascades	TSHE/MANE2-GASH-DRY-NWO Cascades
CHS160	Western hemlock/dwarf Oregon grape-salal-NWO Cascades	TSHE/MANE2-GASH-NWO Cascades
CHS161	Western hemlock/dwarf Oregon grape-NWO Cascades	TSHE/MANE2-NWO Cascades
CHS162	Western hemlock/dwarf Oregon grape/vanilla leaf-NWO Cascades	TSHE/MANE2/ACTR-NWO Cascades
CHS163	Western hemlock/dwarf Oregon grape/Oregon oxalis-NWO Cascades	TSHE/MANE2/OXOR-NWO Cascades
CHS164	Western hemlock/dwarf Oregon grape/swordfern-NWO Cascades	TSHE/MANE2/POMU-NWO Cascades
CHS228	Western hemlock/vine maple/swordfern-NWO Cascades	TSHE/ACCI/POMU-NWO Cascades
CHS230	Western hemlock/vine maple-salal/swordfern-NWO coast	TSHE/ACCI-GASH/POMU-NWO Coast, TSHE/ACCI-GASH/POMU-NWO
CHS231	Western hemlock/vine maple-California hazel	TSHE/ACCI-COCO6
CHS314	Western hemlock/rhododendron-dwarf Oregon grape-NWO coast	TSHE/RHMA3-MANE2-NWO Coast
CHS350	Western hemlock/rhododendron-salal-NWO Cascades	TSHE/RHMA3-GASH-NWO Cascades
CHS356	Western hemlock/rhododendron-dwarf Oregon grape-NWO Cascades	TSHE/RHMA3-MANE2-NWO Cascades
CHS357	Western hemlock/rhododendron/beargrass-NWO Cascades	TSHE/RHMA3/XETE-NWO Cascades

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CHS616	Western hemlock/Alaska huckleberry/Oregon oxalis-NWO coast	TSHE/VAAL/OXOR-NWO Coast
CMG212	Mountain hemlock/lupine	TSME/LUDI
CMS117	Mountain hemlock/pinemat manzanita	TSME/ARNE
CMS118	Mountain hemlock/grouse whortleberry-NW Oregon	TSME/VASC-NWO
CMS224	Mountain hemlock/big huckleberry/beargrass, NW Oregon	TSME/VAME/XETE-NWO
CMS225	Mountain hemlock/rusty menziesia, NW Oregon	TSME/MEFE-NWO
CMS226	Mountain hemlock/white beaksedge/bead lily	TSME/RHAL/CLUN
CMS227	Mountain hemlock/white beaksedge/beargrass	TSME/RHAL/XETE
CMS228	Mountain hemlock/big huckleberry-Mt. Albert goldenrod	TSME/VAME-SOSI
CMS229	Mountain hemlock/big huckleberry-beadlily	TSME/VAME/CLUN-NWO
CMS613	Mountain hemlock/rhododendron, NW Oregon	TSME/RHMA-NWO
CWS527	Grand fir/vine maple/swordfern	ABGR/ACCI/POMU
CWS528	Grand fir/dwarf Oregon grape-salal	ABGR/MANE2-GASH
CWS529	Grand fir/oceanspray/sword fern	ABGR/HODI/POMU
CWS555	Grand fir/California hazel/inside out flower	ABGR/COCO6/VAHE
CWS622	Grand fir/poison oak	ABGR/TODI

Table 52: Reference Code 653

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CMF311	Mountain hemlock/wild ginger	TSME/ASCA2
CMF211	Mountain hemlock/queencup beadlelily	TSME/CLUN2
CMF221	Mountain hemlock/vanilla leaf	TSME/ACTR
CMF231	Mountain hemlock/twinflower	TSME/LIBO3
CMF241	Mountain hemlock/bride's bonnet	TSME/CLUN2
CMS313	Mountain hemlock/pink mountain heath-Cascade bilberry	TSME/PHEM-VADE
CMG221	Mountain hemlock/smooth woodrush	TSME/LUHI
CMS232	Mountain hemlock/thinleaf huckleberry	TSME/VAME
CMS216	Mountain hemlock/thinleaf huckleberry/common beargrass	TSME/VAME/XETE
CMS841	Mountain hemlock/golden chinquapin	TSME/CHCH7
CMF141	Mountain hemlock/common beargrass	TSME/XETE
CMF331	Mountain hemlock/common prince's pine	TSME/CHUM
CMS111	Mountain hemlock/grouse whortleberry	TSME/VASC
CMS117	Mountain hemlock/pinemat manzanita	TSME/ARNE
CMG341	Mountain hemlock/long-stolon sedge	TSME/CAIN4
CFM112	Pacific silver fir/American skunkcabbage	ABAM/LYAM
CFF121	Pacific silver fir/wild ginger	ABAM/ASCA2
CFF142	Pacific silver fir/queencup beadlelily	ABAM/CLUN2
CFF252	Pacific silver fir/vanilla leaf	ABAM/ACTR

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CFF511	Pacific silver fir/twinflower	ABAM/LIBO3
CFS251	Pacific silver fir/thinleaf huckleberry/common beargrass	ABAM/VAME/XETE
CFS270	Pacific silver fir/thinleaf huckleberry	ABAM/VAME
CFS410	Pacific silver fir/grouse whortleberry	ABAM/VASC
CHF313	Western hemlock/wild ginger	TSHE/ASCA2
CHF311	Western hemlock/queencup beadlily	TSHE/CLUN2
CHF221	Western hemlock/vanilla leaf	TSHE/ACTR
CHF321	Western hemlock/twinflower	TSHE/LIBO3
CCF221	Western redcedar/queedcup beadlily	THPL/CLUN2
CCF211	Western redcedar/twinflower	THPL/LIBO3
CWF551	White fir-grand fir/wild ginger	ABCO-ABGR/ASCA2
CWF431	White fir-grand fir/queencup beadlily	ABCO-ABGR/CLUN2
CWF522	White fir-grand fir/vanilla leaf	ABCO-ABGR/ACTR
CWF341	White fir-grand fir/twinflower	ABCO-ABGR/LIBO3
CWF521	White fir-grand fir/western starflower	ABCO-ABGR/TRBOL
CWS533	White fir-grand fir/golden chinquapin	ABCO-ABGR/CHCH7
CWF562	White fir-grand fir/starry false-solomonseal	ABCO-ABGR/MAST4
CWS361	White fir-grand fir/creeping snowberry	ABCO-ABGR/SYMO
CWF241	White fir-grand fir/common prince's pine	ABCO-ABGR/CHUM
CWS531	White fir-grand fir/oceanspray	ABCO-ABGR/HODI

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CWS362	White fir-grand fir/common snowberry	ABCO-ABGR/SYAL
CWG141	White fir-grand fir/pinegrass	ABCO-ABGR/CARU
CWS363	White fir-grand fir/pinemant manzanita	ABCO-ABGR/ARNE
CWG142	White fir-grand fir/long-stolen sedge	ABCO-ABGR/CAIN9
CWS364	White fir-grand fir/mahala mat	ABCO-ABGR/CEPR
CWF741	White fir-grand fir/woolly mule-ears	ABCO-ABGR/WYMO
CWS141	White fir-grand fir/greenleaf manzanita	ABCO-ABGR/ARPA6
CWF362	White fir-grand fir/sticky starwort	ABCO-ABGR/PSJA2
CRS314	Shasta red fir/golden chinquapin	ABSH/CHCH7
CRF301	Shasta red fir/common prince's pine	ABSH/CHUM
CRS111	Shasta red fir/pinemat manzanita	ABSH/ARNE
CRG112	Shasta red fir/long-stolen sedge	ABSH/CAIN9
CDF341	Douglas-fir/starflower	PSME/TRBOL
CDH525	Douglas-fir/chinquapin	PSME/CHCH7
CDS643	Douglas-fir/creeping snowberry	PSME/SYMO
CDF342	Douglas-fir/prince's pine	PSME/CHUM
CDS210	Douglas-fir/oceanspray	PSME/HODI
CDS633	Douglas-fir/common snowberry	PSME/SYAL
CDS645	Douglas-fir/mahala mat	PSME/CEPR
CDG111	Douglas-fir/elk sedge	PSME/CAGE2

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CDS141	Douglas-fir/greenleaf manzanita	PSME/ARPA6
CDS673	Douglas-fir/bitterbrush	PSME/PUTR2
CPC731	Ponderosa pine-incense cedar/common snowberry	PIPO-CADE27/SYAL
CPC732	Ponderosa pine-incense cedar/mahala mat	PIPO-CADE27/CEPR
CPC733	Ponderosa pine-incense cedar/greenleaf manzanita	PIPO-CADE27/ARPA6
CPC734	Ponderosa pine-incense cedar/bitterbrush	PIPO-CADE27/PUTR2
CPH215	Ponderosa pine-Oregon white oak/common snowberry	PIPO-QUGA4/SYAL
CPH212	Ponderosa pine-Oregon white oak/bitterbrush	PIPO-QUGA4/PUTR2
CPS541	Ponderosa pine/Douglas spirea	PIPO/SPDO
CPH312	Ponderosa pine-aspen	PIPO-POTR5
CPS641	Ponderosa pine/kinnikinnick	PIPO/ARUV
CPS542	Ponderosa pine/creeping snowberry	PIPO/SYMO
CPF141	Ponderosa pine/prince's pine	PIPO/CHUM
CPS524	Ponderosa pine/common snowberry	PIPO/SYAL
CPS341	Ponderosa pine/mahala mat	PIPO/CEPR
CPF111	Ponderosa pine/woolly wyethia	PIPO/WYMO
CPS325	Ponderosa pine/curl-leaf mountain mahogany	PIPO/CELE3
CPG211	Ponderosa pine/long-stolon sedge	PIPO/CAIN9
CPS219	Ponderosa pine/greenleaf manzanita	PIPO/ARPA6

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CPS211	Ponderosa pine/bitterbrush/Idaho fescue	PIPO/PUTR2/FEID
CPS210	Ponderosa pine/bitterbrush	PIPO/PUTR2
CPS141	Ponderosa pine/big sagebrush	PIPO/ARTR2
CPG135	Ponderosa pine/Idaho fescue	PIPO/FEID
CPG125	Ponderosa pine/western needlegrass	PIPO/ACOC3
CLC113	Whitebark pine-lodgepole pine/pinemat manzanita	PIAL-PICO/ARNE
CLC114	Whitebark pine-lodgepole pine/long-stolon sedge	PIAL-PICO/CAIN9
CLM912	Lodgepole pine/few-flowered spikerush	PICO/ELQU2
CLM113	Lodgepole pine/widefruit sedge	PICO/CAAN15
CLM312	Lodgepole pine/bog blueberry/widefruit sedge	PICO/VAUL/CAAN15
CLM314	Lodgepole pine/Douglas spirea/widefruit sedge	PICO/SPDO/CAAN15
CLM311	Lodgepole pine/bog blueberry/widefruit sedge	PICO/VAUL
CLM313	Lodgepole pine/Douglas spirea	PICO/SPDO
CLM211	Lodgepole pine/bearberry	PICO/ARUV
CLS311	Lodgepole pine/pinemat manzanita	PICO/ARNE
CLG419	Lodgepole pine/long-stolon sedge	PICO/CAIN9
CLS214	Lodgepole pine/bitterbrush/Idaho fescue	PICO/PUTR2/FEID
CLS211	Lodgepole pine/bitterbrush/western needlegrass	PICO/PUTR2/ACOC3
CLG316	Lodgepole pine/Idaho fescue	PICO/FEID

PV_CODE	COMMON_NAME	SCIENTIFIC_NAME
CLG317	Lodgepole pine/western needlegrass	PICO/ACOC3

APPENDIX H: FUEL PHOTO REFERENCES & CODES

Table 53: Fuel Photo References

Code	Reference
1	Fischer, William C. 1981. Photo Guide for Appraising Downed Woody Fuels in Montana Forests: Grand fir – Larch – Douglas-fir – Western Redcedar Cover Types. USDA Forest Service, Gen. Tech. Rep. Int-96, 53 p. Intermt. For. And Range Exp. Stn., Ogden, UT 84401.
2	Fischer, William C. 1981. Photo Guide for Appraising Downed Woody Fuels in Montana Forests: Ponderosa Pine, Ponderosa Pine – Larch – Douglas-fir, Larch – Douglas-fir, and Interior Douglas-fir Cover Types. USDA Forest Service, Gen. Tech. Rep. INT-97, 133 p. Intermt. For. And Range Exp. Stn., Ogden, UT 84401.
3	Fischer, William C. 1981. Photo Guide for Appraising Downed Woody Fuels in Montana Forests: Lodgepole Pine and Englemann Spruce-Subapline fir Cover Types. USDA Forest Service, Gen. Tech. Rep. INT-98. 143 p. Intermt. For. and Range Exp. Stn., Ogden, UT 84401.
4	Fischer, William C. 1981. Photo Guides for Appraising Downed Woody Fuels in Montana Forests: How They Were Made. USDA Forest Service, Res. Note INT-299, 12 p. Intermt. For. And Range Exp. Stn., Ogden, UT 84401.
5	Koski, Wayne H. and William C. Fischer. 1979. Photo Series for Appraising Thinning Slash in North Idaho: Western Hemlock, Grand fir, and Western Redcedar Timber Types. USDA Forest Service, Gen. Tech. Rep. INT-46, 50 p. Intermt. For. And Range Exp. Stn., Ogden, UT 84401
6	Maxwell, Wayne G. and Franklin R. Ward. 1976. Photo Series for Quantifying Forest Residues in the: Ponderosa Pine Type, Ponderosa Pine and Associated Species Types, Lodgepole Pine Type. USDA Forest Service Gen. Tech. Rep. PNW-52, 74 p. Pacific Northwest Range Exp. Stn., Portland, OR 97208.

Code	Reference
7	Blonski, Kenneth S. and Schramel, John L. 1981. Photo Series for Quantifying Natural Forest Residues: Southern Cascades, Northern Sierra Nevada. USDA Forest Service, Gen Tech. Rep. PSW-56, Pacific Southwest Forest and Range Exp. Stn., Forest Service, Berkeley, CA 145 p.
8	Maxwell, Wayne G. and Ward, Franklin R. 1980. Photo Series for Quantifying Natural Forest Residues in Common Vegetation Types of the Pacific Northwest. USDA Forest Service, Gen. Tech. Rep. PNW-105. Pacific Northwest Forest and Range Exp. Stn., Portland, OR. 229 p.
9	Ottmar, Roger D. and Hardy, Colin C. 1989. Stereo Photo Series for Quantifying Forest Residues in Coastal Oregon Forests: Second Growth Douglas-fir—Western Hemlock Type, Western Hemlock—Sitka Spruce Type, and Red Alder Type. USDA Forest Service, Gen. Tech. Rep. PNW-231. Pacific Northwest Range Exp. Stn., Portland, OR 67 p.
10	Mackay, Douglas H. and Everett M. Stiger, Delman Goss, Byron Bonney. Photo Series for Quantifying Forest Residues in: Douglas-fir, Englemann Spruce Type, Limber Pine Type, Lodgepole Pine Type, Ponderosa Pine Type, Subalpine Fir Type for Eastern Montana. USDA Forest Service Northern Region. 162 p.
11	Maxwell, Wayne G. 1982. Photo Series for Quantifying Forest Residues in the Black Hills. Ponderosa Pine Type and Spruce Type. USDA Forest Service, Rocky Mountain Region. Report Number A-89-6-82. 80 p.
12	Anonymous. Photo Series for Quantifying Forest Residues in the Southwestern Region. USDA Forest Service, Southwest Region, Albuquerque, NM. Date Unknown. 227 p.
13	Wayne G. Maxwell, Franklin R. Ward. 1976. Photo Series for Quantifying Forest Residues in the Coastal Douglas-fir-Hemlock type, Coastal Douglas-fir-Hardwood Type. USDA Forest Service, Gen. Tech. Rep. PNW-51. Northwest Forest and Range Experiment Station, Portland, OR.
14	NFES 2580. Volume 1: Mixed Conifer with Mortality, Western Juniper, Sagebrush, and Grassland Types in the Interior Pacific Northwest.
15	Ottmar, Roger D., R.E. Vihnanek, and S.C. Wright. 1998. Stereo Photo Series for Quantifying Natural Fuels in Mixed-conifer with Mortality, Western Juniper, Sagebrush, and Grassland Types in the Interior Pacific Northwest.

Code	Reference
23	Ottmar, Roger D.; Colin C. Hardy, and Robert E. Vihnanek. 1990. Stereo Photo Series for Quantifying Forest Residues in the Douglas-fir Hemlock Type of the Willamette National Forest. PNW-GTR-258. 63 p.
27	Roger D. Ottmar et.al., 2004. 75 p. Stereo Photo Series for Quantifying Natural Fuels. Volume VII: Oregon White Oak, California Deciduous Oak, and Mixed-Conifer with Shrub Types in the Western United States.

FUEL PHOTO CODES

Table 54: Fuel Photo Codes for Reference 1

Code
3A
4A
5A
6A
7A
8A
9A
10A
11A
13A
15
15A
16
16A
17A
18A
19A

Code
25
63
65
66
67

Table 55: Fuel Photo Codes for Reference 2

Code
5
7
8
9
12A
13
14
14A
17
18
23
24
27A
28
28A
29
29A
30

Code
30A
31
31A
32
40A
41A
42
42A
43
43A
48
49
56
64
68
69
70
71
72
73
74
75
76
77
78

Code
79
80
84
86
88
89
91
95

Table 56: Fuel Photo Codes for Reference 3

Code
1
1A
2
2A
3
4
6
10
11
12
19
20
20A
21
21A

Code
22
22A
23A
24A
25A
26
26A
27
34A
35
35A
36
37
38
39
40
41
44
44A
45
45A
53
54
55
57

Code
58
59
60
61
62
81
82
83
85
87
90
92
93
94
96
97
98

Table 57: Fuel Photo Codes for Reference 5

Code
1WH1TH
2WH1TH
3WH1TH
4WH1TH
5WH1TH
6WH1TH

Code
1GF1TH
2GF1TH
3GF1TH
4GF1TH
1WC1TH
2WC1TH
3WC1TH
4WC1TH
5WC1TH
6WC1TH
7WC1TH

Table 58: Fuel Photo Codes for Reference 6

Code
1PP4CC
2PP4CC
1PP4PC
2PP4PC
3PP4PC
4PP4PC
5PP4PC
1PP1TH
2PP1TH
3PP1TH
4PP1TH
5PP1TH

Code
6PP1TH
1PP&ASSOC4PC
2PP&ASSOC4PC
3PP&ASSOC4PC
4PP&ASSOC4PC
5PP&ASSOC4PC
6PP&ASSOC4PC
7PP&ASSOC4PC
8PP&ASSOC4PC
1LP3PC
2LP3PC
3LP3PC
4LP3PC
5LP3P

Table 59: Fuel Photo Codes for Reference 7

Code
1LP2
1LP3
1LP4
1MF4
1MH4
1MP4
1PP2
1PP3
1PP4

Code
1RF3
1RF4
1WF2
1WF3
1WF4
2LP2
2LP3
2MF4
2MP4
2PP2
2PP3
2PP4
2RF3
2RF4
2WF2
2WF3
2WF4
3LP2
3LP3
3MF4
1MP4
3MP4
3PP2
3PP3
3PP4

Code
3RF3
3RF4
3WF2
3WF3
3WF4
4LP2
4LP3
4MF4
4MP4
4PP2
4PP3
4RF3
4RF4
4WF2
4WF3
4WF4
5LP2
5MF4
5MP4
5RF3
5RF4
5WF3
5WF4

Table 60: Fuel Photo Codes for Reference 8

Code
1BR
1DF2
1DF3
1DF4
1DFHD3
1DFHD4
1GR
1HD2
1JU2
1LP1
1LP2
1LP3
1MC2
1MC3
1MC4
1PP&ASSOC3
1PP&ASSOC4
1PP1
1PP2
1PP3
1PP4
1SA1
1SA2
1SA3

Code
1SA4
2BR
2DF2
2DF3
2DF4
2DFHD3
2DFHD4
2GR
2HD2
2JU2
2LP1
2LP2
2LP3
2MC2
2MC3
2MC4
2PP&ASSOC3
2PP&ASSOC4
2PP1
2PP2
2PP3
2PP4
2SA1
2SA2
2SA3

Code
2SA4
3DFHD3
3DFHD4
3LP1
3LP2
3LP3
3MC2
3MC3
3PP&ASSOC3
3PP&ASSOC4
3PP1
3PP2
3PP3
3PP4
3SA1
3SA3
4DF4
4DFHD4
4LP2
4PP&ASSOC3
4PP2
4PP3
4PP4
4DF4
5DFHD4

Code
5PP&ASSOC3
5PP3
5PP4
6DF4
6PP3
6PP4
7DF4
7PP3
7PP4
8PP3
8PP4

Table 61: Fuel Photo Codes for Reference 9

Code
1DFWHPRE01
1DFWHPRE02
1DFWHPRE03
1DFWHPRE04
1DFWHPRE05
1DFWHPRE06
1DFWHPRE07
1DFWHPRE08
1DFWHPRE09
2WHSSPRE01
3RAPRE01
3RAPRE02

Code
3RAPRE03
3RAPRE05
3RAPRE06
RAPRE07
4DFWHPOST01
4DFWHPOST02
4DFWHPOST03
4DFWHPOST04
5RAPOST01
5RAPOST02
5RAPOST03
5RAPOST04
5RAPOST05

Table 62: Fuel Photo Codes for Reference 11

Code
1PP1
1PP1PPC
1PP1TH
1PP2
1PP3
1PP3CC
1PP3PC
1PPSP3PC
1SP3PC
2PP1TH

Code
2PP2
2PP2PC
2PP3PC
2PPSP3PC
2SP3PC
3PP1TH
3PP2PC
3PP3PC
3PPSP3PC
4PP1TH
4PP2PC
5PP1TH
5PP2PC
6PP1TH
7PP1TH

Table 63: Fuel Photo Codes for Reference 12

Code
1AZPPSPPRE01
1AZPPSPPRE02
1AZPPSPPRE03
1AZPPSPPRE04
1JU2
1MC2
1MC3
1PP&ASSOC3

Code
1PP&ASSOC4
1PP1
1PP1(BH)
1PP1TH
1PP1TH(BH)
1PP2
1PP2(BH)
1PP2(PNW-105)
1PP2PC
1PP3
1PP3(BH)
1PP3(PNW-105)
1PP3CC
1PP3PC
1PP4
1PP4PC
1PP4(PNW-105)
1PPSPEPC
1SP3PC
2JU2
2MC2
2MC3
2PP&ASSOC3
2PP&ASSOC4
2PP1

Code
2PP1TH
2PP1TH(BH)
2PP2
2PP2(BH)
2PP2(PNW-105)
2PP2PC
2PP3CC
2PP3PC
2PP3
2PP3(PNW-105)
2PP4
2PP4PC
2PP4(PNW-105)
2PPSP3PC
2SP3PC
3MC2
3MC3
3PP&ASSOC3
3PP&ASSOC4
3PP1
3PP1TH
3PP2
3PP2(PNW-105)
3PP2PC
3PP3PC

Code
3PP3
3PP3(PNW-105)
3PP4
3PP4PC
3PP4(PNW-105)
3PPSP3PC
3WF2
3WF3
4PP&ASSOC3
4PP1TH
4PP1TH(BH)
4PP2
4PP2(PNW-105)
4PP2PC
4PP3
4PP3(PNW-105)
4PP4
4PP4PC
4WF3
5PP&ASSOC3
5PP1TH
5PP1TH(BH)
5PP2PC
5PP3
5PP4PC

Code
6PP1TH
6PP1TH(BH)
6PP3
7PP1TH
7PP1TH(BH)
7PP3
8PP3

Table 64: Fuel Photo Codes for Reference 13

Code
10DF4CC
1DF1TH
1DF3PC
1DF4CC
1DF4PC
1DFHD4CC
1DFHD4PC
2DF1TH
2DF3PC
2DF4CC
2DF4PC
2DFHD4CC
2DFHD4PC
3DF1TH
3DF3PC
3DF4CC

Code
3DF4PC
3DFHD4CC
3DFHD4PC
4DF1TH
4DF3PC
4DF4CC
4DF4PC
4DFHD4CC
4DFHD4PC
5DF3PC
5DF4CC
5DF4PC
5DFHD4CC
5DFHD4PC
6DF3PC
6DF4CC
6DF4PC
6DFHD4CC
6DFHD4PC
7DF4CC
7DF4PC
7DFHD4CC
8DF4CC
8DF4PC
9DF4CC

Code
9DF4PC

Table 65: Fuel Photo Codes for Reference 14

Code
MC01
MC02
MC03
MC04
MC05
MC06
MC07
MC08
MC09
MC10
MC11
MC12
MC13
MC14
MC15
MC16
MC17
WJ01
WJ02
WJ03
WJ04

Table 66: Fuel Photo Codes for Reference 15

Code
BG01
BG02
BG03
BG04
MC01
MC02
MC03
MC04
MC05
MC06
MC07
MC08
MC09
MC10
MC11
MC12
MC13
MC14
MC15
MC16
MC17
SB01
SB02
SB03

Code
SB04
SG04
WJ01
WJ02
WJ03
WJ04

Table 67: Fuel Photo Codes for Reference 23

Code
1DFWHPRE01
1DFWHPRE02
1DFWHPRE03
1DFWHPRE04
1DFWHPRE05
1DFWHPRE06
1DFWHPRE07
1DFWHPRE08
1DFWHPRE09
1DFWHPRE10
1DFWHPRE11
1DFWHPRE12
1DFWHPRE13
1DFWHPRE14
1DFWHPRE15
1DFWHPRE16
1DFWHPRE17

Code
1DFWHPRE18
1DFWHPRE19
2DFWHPOST01
2DFWHPOST02
2DFWHPOST03
2DFWHPOST04
2DFWHPOST05
2DFWHPOST06
2DFWHPOST07

Table 68: Fuel Photo Codes for Reference 27

Code
WO-01
WO-02
WO-03
WO-04
WO-05
WO-06
WO-07
WO-08
WO-09
WO-10
CDO-01
CDO-02
CDO-03
CDO-04

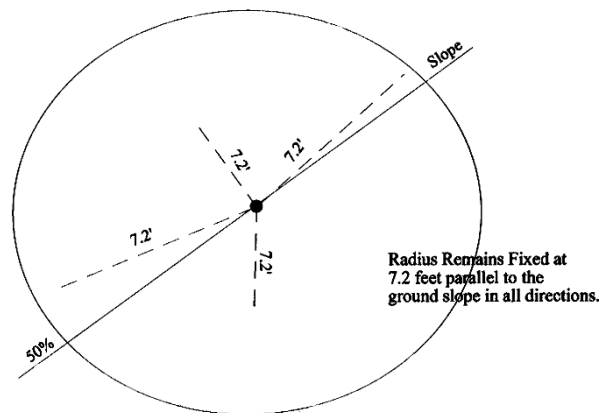
Code
CDO-05
CDO-06
CDO-07
CDO-08
CDO-09
MCS-01
MCS-02
MCS-03
MCS-04
MCS-05
MCS-06
MCS-07
MCS-08
MCS-09
MCS-10
MCS-11

APPENDIX I: FIXED RADIUS PLOT

A fixed radius plot is used to sample trees that are less than the specified breakpoint diameter. These sample trees are determined to be “in” or “out” at ground line. If the measured distance from plot center to the central axis of the tree at ground line is equal to or less than the fixed plot radius the tree is tallied as a sample tree. If this distance is greater than the fixed plot radius, the tree is not tallied.

METHOD 1

Figure 2: Correcting the fixed plot radius for slope percent



Slope %	1 / 300	1 / 100	1 / 50	1 / 20	1 / 10	1 / 5
0-9	6.8	11.8	16.7	26.3	37.2	52.7
10-17	6.8	11.8	16.7	26.5	37.4	52.9

Slope %	1 / 300	1 / 100	1 / 50	1 / 20	1 / 10	1 / 5
18-22	6.9	11.9	16.8	26.6	37.6	53.2
23-26	6.9	12.0	16.9	26.7	37.8	53.4
27-30	6.9	12.0	17.0	26.9	38.0	53.7
31-33	7.0	12.1	17.1	27.0	38.2	54.0
34-36	7.0	12.1	17.1	27.1	38.3	54.2
37-39	7.0	12.2	17.2	27.2	38.5	54.5
40-42	7.1	12.2	17.3	27.4	38.7	54.7
43-44	7.1	12.3	17.4	27.5	38.9	55.0
45-47	7.1	12.3	17.5	27.6	39.1	55.2
48-49	7.2	12.4	17.5	27.7	39.2	55.5
50-51	7.2	12.5	17.6	27.9	39.4	55.7
52-53	7.2	12.5	17.7	28.0	39.6	56.0
54-55	7.3	12.6	17.8	28.1	39.8	56.2
56-57	7.3	12.6	17.9	28.2	39.9	56.5
58-59	7.3	12.7	17.9	28.4	40.1	56.7
60-61	7.4	12.7	18.0	28.5	40.3	57.0
62-63	7.4	12.8	18.1	28.6	40.4	57.2
64-65	7.4	12.8	18.2	28.7	40.6	57.4
66-67	7.4	12.9	18.2	28.8	40.8	57.7
68-69	7.5	13.0	18.3	29.0	41.0	57.9
70	7.5	13.0	18.4	29.1	41.1	58.2
71-72	7.5	13.1	18.5	29.2	41.3	58.4
73-74	7.6	13.1	18.5	29.3	41.5	58.6
75	7.6	13.2	18.6	29.4	41.6	58.7
76-77	7.6	13.2	18.7	29.6	41.8	59.1

Slope %	1 / 300	1 / 100	1 / 50	1 / 20	1 / 10	1 / 5
78-79	7.7	13.3	18.8	29.7	42.0	59.3
80	7.7	13.3	18.8	29.8	42.1	59.6
81-82	7.7	13.4	18.9	29.9	42.3	59.8
83	7.8	13.4	19.0	30.0	42.5	60.0
84-85	7.8	13.5	19.1	30.1	42.6	60.3
86	7.8	13.5	19.1	30.3	42.8	60.5
87-88	7.8	13.6	19.2	30.4	42.9	60.7
89	7.9	13.6	19.3	30.5	43.1	61.0
90-91	7.9	13.7	19.3	30.6	43.3	61.2
92	7.9	13.7	19.4	30.7	43.4	61.4
93-94	8.0	13.8	19.5	30.8	43.6	61.6
95	8.0	13.8	19.6	30.9	43.7	61.9
96-97	8.0	13.9	19.6	31.0	43.9	62.1
98	8.0	13.9	19.7	31.2	44.1	62.3
99-100	8.1	14.0	19.8	31.3	44.2	62.5
101	8.1	14.0	19.8	31.4	44.4	62.8
102	8.1	14.1	19.9	31.5	44.5	63.0
103-104	8.2	14.1	20.0	31.6	44.7	63.2
105	8.2	14.2	20.1	31.7	44.8	63.4
106-107	8.2	14.2	20.1	31.8	45.0	63.6
108	8.2	14.3	20.2	31.9	45.1	63.8
109	8.3	14.3	20.3	32.0	45.3	64.1
110-111	8.3	14.4	20.3	32.1	45.5	64.3
112	8.3	14.4	20.4	32.2	45.6	64.5
113	8.4	14.5	20.5	32.4	45.8	64.7

Slope %	1 / 300	1 / 100	1 / 50	1 / 20	1 / 10	1 / 5
114-115	8.4	14.5	20.5	32.5	45.9	64.9
116	8.4	14.6	20.6	32.6	46.1	65.1
117	8.4	14.6	20.7	32.7	46.2	65.3
118-119	8.5	14.7	20.7	32.8	46.4	65.6
120	8.5	14.7	20.8	32.9	46.5	65.8
121	8.5	14.8	20.9	33.0	46.7	66.0
122	8.5	14.8	20.9	33.1	46.8	66.2
123-124	8.6	14.8	21.0	33.2	47.0	66.4
125	8.6	14.9	21.1	33.3	47.1	66.6
130	8.7	15.1	21.3	33.7	47.7	67.4
135	8.8	15.3	21.6	34.1	48.3	68.3
140	8.9	15.4	21.8	34.5	48.8	69.1
145	9.0	15.6	22.1	34.9	49.4	69.9
150	9.1	15.8	22.3	35.3	50.0	70.0

METHOD 2

Determine the slope limiting distance to borderline trees by using the "Slope Correction Table" (the slope being corrected is the slope from plot center to the tree, not the overall plot slope). Measure the distance parallel to the ground line to the borderline tree. This method always results in an oval on the slope. Following is a list of fixed plot sizes and the specific radius for each.

Table 70: Method 2 plot size/radius slope

Plot Size	Plot Radius
1/1000	3.7 feet
1/500	5.3 feet
1/400	5.9 feet
1/300	6.8 feet

Plot Size	Plot Radius
1/250	7.4 feet
1/200	8.3 feet
1/150	9.6 feet
1/100	11.8 feet
1/50	16.7 feet
1/20	26.3 feet
1/10	37.2 feet
1/5	52.7 feet
1/4	58.9 feet
1/3	68.0 feet
1/2	83.3 feet
1	117.8 feet

To determine the slope limiting distance, multiply the plot radius for the appropriate plot size by the appropriate slope correction factor.

Example 1

1/300 acre fixed plot with a borderline tree on a 45 percent slope. A 1/300-acre plot equals a 6.8-foot radius and the slope correction factor for a 45 percent slope is 1.10. $6.8 \times 1.10 = 7.48$; thus, a tree on a 1/300 acre fixed plot at a 45 percent slope can be 7.5 feet from plot center.

Example 2

The same plot has another borderline tree on a 25 percent slope. The slope correction factor for a 25 percent slope is 1.03. $6.8 \times 1.03 = 7.0$; thus, a tree on a 1/300 acre fixed plot at a 25 percent slope can be 7.0 feet from plot center.

Figure 3: Plot size radius slope

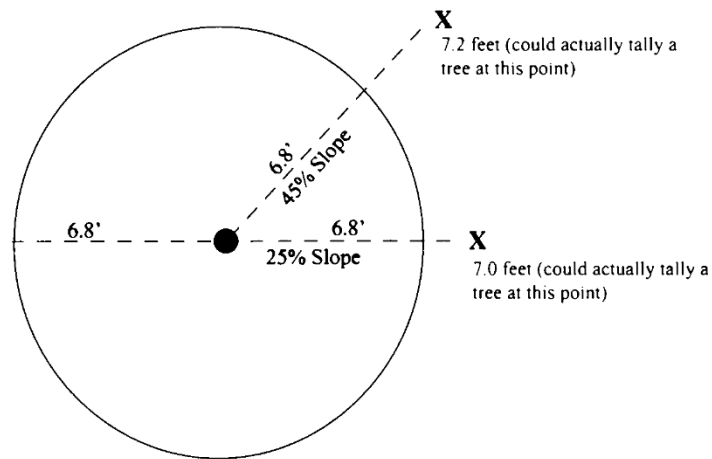


Table 71: Slope Correction Table

Percent of Slope	Degree of Slope	Correction Factor
0 to 9	0-6	1.00
10 to 17	7-10	1.01
18 to 22	11-12	1.02
23 to 26	13-14	1.03
27 to 30	15-17	1.04
31 to 33	18	1.05
34 to 36	19-20	1.06
37 to 39	21	1.07
40 to 42	22	1.08
43 to 44	23	1.09
45 to 47	24	1.10
48 to 49	25-26	1.11
50 to 51	27	1.12
52 to 53	28	1.13
54 to 55	29	1.14

Percent of Slope	Degree of Slope	Correction Factor
56 to 57	29	1.15
58 to 59	30	1.16
60 to 61	31	1.17
62 to 63	32	1.18
64 to 65	33	1.19
66 to 67	34	1.20
68 to 69	34	1.21
70	35	1.22
71 to 72	36	1.23
73 to 74	37	1.24
75	37	1.25
76 to 77	38	1.26
78 to 79	38	1.27
80	39	1.28
81 to 82	39	1.29
83	40	1.30
84 to 85	40	1.31
86	41	1.32
87 to 88	41	1.33
89	42	1.34
90 to 91	42	1.35
92	43	1.36
93 to 94	43	1.37
95	44	1.38
96 to 97	44	1.39

Percent of Slope	Degree of Slope	Correction Factor
98	44	1.40
99 to 100	45	1.41
101	45	1.42
102	46	1.43
103 to 104	46	1.44
105	46	1.45
106 to 107	47	1.46
108	47	1.47
109	47	1.48
110 to 111	48	1.49
112	48	1.50
113	48	1.51
114 to 115	49	1.52
116	49	1.53
117	49	1.54
118 to 119	50	1.55
120	50	1.56
121	50	1.57
122	51	1.58
123 to 124	51	1.59
125	51	1.60
126	52	1.61
127 to 128	52	1.62
129	52	1.63
130	52	1.64

Percent of Slope	Degree of Slope	Correction Factor
131	53	1.65
132 to 133	53	1.66
134	53	1.67
135	53	1.68
136	54	1.69
137 to 138	54	1.70
139	54	1.71
140	54	1.72
141	55	1.73
142 to 143	55	1.74
144	55	1.75
145	55	1.76
146	56	1.77
147	56	1.78
148 to 149	56	1.79
150	56	1.80

APPENDIX J: VARIABLE RADIUS PLOT

INTRODUCTION

In our determination is made at the DBH or DRC of each tree. For information on the theory and mathematics of variable plot cruising, and formulas for determining the plot radius factor for any given BAF, the reader is referred to **Log Scaling and Timber Cruising**, 1973, J.R. Dilworth. OSU Book Stores, Inc., Corvallis, Oregon.

The experienced field person using a wedge prism, angle gauge, or relaskop can quickly tell in which case trees are “in” or “out” on the variable plot. However, there are certain trees that are questionable (borderline) for tally because they are located at the outer limits of the variable plot radius. This narrative deals with the procedures needed to ascertain if these borderline trees should be tallied: the mechanics of using plot radius tables in the field, the associated measurements, and corrections of variable plot radii for slope.

MEASUREMENT OF BORDERLINE TREES TO DETERMINE “IN OR OUT” STATUS

In variable plot sampling, the plot radius varies according to the DBH or DRC of each tree. To determine whether a tree is to be sampled requires measurement of its DBH or DRC and its distance from plot center. [Table 72](#), [Table 73](#), [Table 74](#), [Table 75](#), [Table 76](#), [Table 77](#), and [Table 78](#) display limiting distances (the maximum horizontal distance from plot center to the face of the tree at breast height for a tree to be considered “in”) for various tree diameters and commonly used basal area factors (BAF).

Once the DBH or DRC of the borderline tree is taken, the limiting distance is found by entering the table appropriate for the specified BAF. This limiting distance is then compared to the horizontal distance between plot center and the nearest **face of the tree** at breast height. If the measured horizontal distance from plot center is *less than or equal to* the limiting distance from the table, the tree in question is “in” and is tallied as a sample tree. However, if measured horizontal distance from plot center is greater than the limiting distance, then the tree in question is “out” and is not tallied.

1. Measure the diameter to the nearest tenth of an inch
2. Measure the percent slope from the face of the tree at DBH or DRC to plot center

If the slope is less than ten percent look up limiting distance in Tables 1 through 5 or use the BAF correction factors listed in Table 78 below.

Table 72: BAF correction factors

Type	Correction Factors								
BAF	10	15	20	25	30	35	40	50	60
Plot Radius Factor*	27.08	2.203	1.902	1.697	1.546	1.428	1.333	1.188	1.081

** This is a corrected plot radius factor, corrected for determining the limiting distance to the face of the tree. A standard plot radius factor was used to determine limiting distance to the center of a tree, and is computed by $8.696/\text{SQR}(\text{BAF})$. A corrected PRF subtracts $1/24$ (0.041666) from the standard plot radius factor.*

Example:

BAF = 40; DBH = 20.9 inches; Slope = 5%

Limiting Distance = Plot Radius Factor * DBH, $1.333 * 20.9 = 27.9$ feet

3. **If the slope is greater than ten percent**, first determine the slope correction factor. The slope correction factor and the slope corrected plot radius factor can be obtained by using the formula below or by referring to [Table 77](#). Then, multiply the slope correction factor by the plot radius factor identified in step #3 above to obtain the slope corrected plot radius factor. Finally, multiply the slope corrected plot radius factor by the diameter to obtain the limiting distance.

Example:

BAF = 40; DBH = 20.9 inches; Slope = 20%

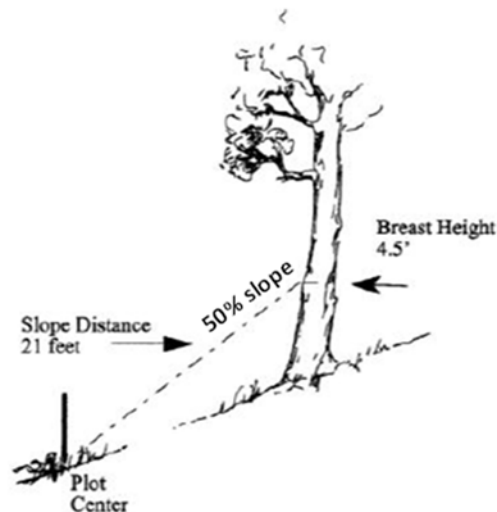
Slope Correction Factor = $\text{SQR}(1 + (\text{slope}/100)^2) = \text{SQR}(1 + (20/100)^2) = 1.0198$

Slope Corrected Plot Radius Factor = Slope Correction Factor * Plot Radius Factor =
 $1.0198 * 1.333 = 1.359$

Limiting Distance = Slope Corrected Plot Radius Factor * DBH = $1.359 * 20.9 = 28.4$ feet

4. Measure the distance from plot center to the face of the tree, nearest plot center, at DBH or DRC. Both the slope measurement and distance measurement must be taken at plot center. If the measured distance is less than the limiting distance, the tree is "in."

Figure 4: Determining limiting distance on a slope



Example:

BAF = 40; DBH = 15.0; Slope = 50%; Slope Distance = 21.0 feet

Referring to [Table 77](#), the Combined Factor for a slope of 50% with a 4- BAF is 1.490.

Limiting Distance = DBH * Combined Factor = $15.0 * 1.490 = 22.35$

Since 21.0 is less than or equal to the limiting distance of 22.35 feet, the tree is "in" and is tallied as a sample tree.

Measuring "In" or "Out" Down Trees

Down trees are "in" or "out" of the variable plot radius based on where the DBH or DRC now lies, not on where the tree once stood. The distance measurement is taken from plot center to the nearest face of the tree at breast height.

Table 73: BAF 10 Plot Radii in Feet and Tenths of Feet from Plot Center to Face of Tree at DBH for 0% Slope

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
5	13.5	13.8	14.1	14.4	14.6	14.9	15.2	15.4	15.7	16.0
6	16.2	16.5	16.8	17.1	17.3	17.6	17.9	18.1	18.4	18.7
7	19.0	19.2	19.5	19.8	20.0	20.3	20.6	20.9	21.1	21.4
8	21.7	21.9	22.2	22.5	22.7	23.0	23.3	23.6	23.8	24.1
9	24.4	24.6	24.9	25.2	25.5	25.7	26.0	26.3	26.5	26.8
10	27.1	27.4	27.6	27.9	28.2	28.4	28.7	29.0	29.2	29.5
11	29.8	30.1	30.3	30.6	30.9	31.1	31.4	31.7	32.0	32.2
12	32.5	32.8	38.5	38.7	39.0	39.3	39.5	39.8	40.1	40.3
13	35.2	35.5	35.7	36.0	36.3	36.6	36.8	37.1	37.4	37.6
14	37.9	38.2	38.5	38.7	39.0	39.3	39.5	39.8	40.1	40.3
15	40.6	40.9	41.2	41.4	41.7	42.0	42.2	42.5	42.8	43.1
16	43.3	43.6	43.9	44.1	44.4	44.7	45.0	45.2	45.5	45.8
17	46.0	46.3	46.6	46.8	47.1	47.4	47.7	47.9	48.2	48.5
18	48.7	49.0	49.3	49.6	49.8	50.1	50.4	50.6	50.9	51.2
19	51.5	51.7	52.0	52.3	52.5	52.8	53.1	53.3	53.6	53.9
20	54.2	54.4	54.7	55.0	55.2	55.5	55.8	56.1	56.3	56.6
21	56.9	57.1	57.4	57.7	58.0	58.2	58.5	58.8	59.0	59.3
22	59.6	57.1	57.4	57.7	58.0	58.2	58.5	58.8	59.0	59.3
23	62.3	62.6	62.8	63.1	63.4	63.6	63.9	64.2	64.5	64.7
24	65.0	65.3	65.5	65.8	66.1	66.3	66.6	66.9	67.2	67.4
25	67.7	68.0	68.2	63.1	63.4	63.6	63.9	64.2	64.5	64.7
26	70.4	70.7	70.9	71.2	71.5	71.8	72.0	72.3	72.6	72.8
27	73.1	73.4	73.7	73.9	74.2	74.5	74.7	75.0	75.3	75.6
28	75.8	76.1	76.4	76.6	76.9	77.2	77.4	77.7	78.00	78.3

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
29	78.5	78.8	79.1	79.3	79.6	79.9	80.2	80.4	80.7	81.0
30	81.2	81.5	81.8	82.1	82.3	82.6	82.9	83.1	83.4	83.7
31	83.9	84.2	84.5	84.8	85.0	85.3	85.6	85.8	86.1	86.4
32	86.7	86.9	87.2	87.5	87.7	88.0	88.3	88.6	88.8	89.1
33	89.4	89.6	89.9	90.2	90.4	90.7	91.0	91.3	91.5	91.8
34	92.1	92.3	92.6	92.9	93.2	93.4	93.7	94.0	94.2	94.5
35	94.8	95.1	95.3	95.6	95.9	96.1	96.4	96.7	96.9	97.2
36	97.5	97.8	98.0	98.3	98.6	98.8	99.1	99.4	99.7	99.9
37	100.2	100.5	100.7	101.0	101.3	101.6	101.8	102.1	102.4	102.6
38	102.9	103.2	103.4	103.7	104.0	104.3	104.5	104.8	105.1	105.3
39	105.6	105.9	106.2	106.4	106.7	107.0	107.2	107.5	107.8	108.0
40	108.3	108.6	108.9	109.1	109.4	109.7	109.9	110.2	110.5	110.8
41	111.0	111.3	111.6	111.8	112.1	112.4	112.7	112.9	113.2	113.5
42	113.7	114.0	114.3	114.5	114.8	115.1	115.4	115.6	115.9	116.2
43	116.4	116.7	117.0	117.3	117.5	117.8	118.1	118.3	118.6	118.9
44	119.2	119.4	119.7	120.0	120.2	120.5	120.8	121.0	121.3	121.6
45	121.9	122.1	122.4	122.7	122.9	120.2	123.5	123.8	124.0	124.3
46	124.6	124.8	125.1	125.4	125.7	125.9	126.2	126.5	126.7	127.0
47	127.3	127.5	127.8	128.1	128.4	128.6	128.9	129.2	129.4	129.7
48	130.0	130.3	130.5	130.8	131.1	131.3	131.6	131.9	132.2	132.4
49	132.7	133.0	133.2	133.5	133.8	134.0	134.3	134.6	134.9	135.1
50	135.4	135.7	135.9	136.2	136.5	136.8	137.0	137.3	137.6	137.8

Prepared by multiplying the BAF 10 Plot Radius Factor 2.708 * DBH. For example, if DBH = 14.3 inches, then $14.3 * 2.708 = 38$.

Table 74: BAF 20 Plot Radii in Feet and Tenths of Feet from Plot Center to Face of Tree at DBH for 0% Slope

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
5	9.5	9.7	9.9	10.1	10.3	10.5	10.7	10.8	11.0	11.2
6	11.4	11.6	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.1
7	13.3	13.5	13.7	13.9	14.1	14.3	14.5	14.7	14.8	15.0
8	15.2	15.4	15.6	15.8	16.0	16.2	16.4	16.6	16.8	16.9
9	17.1	17.3	17.5	17.7	17.9	18.1	18.3	18.5	18.6	18.8
10	19.0	19.2	19.4	19.6	19.8	20.0	20.2	20.4	20.6	20.7
11	20.9	21.1	21.3	21.5	21.7	21.9	22.1	22.3	22.5	22.6
12	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.2	24.4	24.5
13	24.7	24.9	25.1	25.3	25.5	25.7	25.9	26.1	26.3	26.5
14	26.6	26.8	27.0	27.2	27.4	27.6	27.8	28.0	28.2	28.4
15	28.5	28.7	28.9	29.1	29.3	29.5	29.7	29.9	30.1	30.3
16	30.4	30.6	30.8	31.0	31.2	31.4	31.6	31.8	32.0	32.2
17	32.4	32.5	32.7	32.9	33.1	33.3	33.5	33.7	33.9	34.1
18	34.3	34.4	34.6	34.8	35.0	35.2	35.4	35.6	35.8	36.0
19	36.2	36.3	36.5	36.7	36.9	37.1	37.3	37.5	37.7	37.9
20	38.1	38.3	38.4	38.6	38.8	39.0	39.2	39.4	39.6	39.8
21	40.0	40.2	40.3	40.5	40.7	40.9	41.1	41.3	41.5	41.7
22	41.9	42.1	42.2	42.4	42.6	42.8	43.0	43.2	43.4	43.6
23	43.8	44.0	44.1	44.3	44.5	44.7	44.9	45.1	45.3	45.5
24	45.7	45.9	46.1	46.2	46.4	46.6	46.8	47.0	47.2	47.4
25	47.6	47.8	48.0	48.1	48.3	48.5	48.7	48.9	49.1	49.3
26	49.5	49.7	49.9	50.0	50.2	50.4	50.6	50.8	51.0	51.2
27	51.4	51.6	51.8	52.0	52.1	52.3	52.5	52.7	52.9	53.1
28	53.3	53.5	53.7	53.9	54.0	54.2	54.4	54.6	54.8	55.0

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
29	55.2	55.4	55.6	55.8	55.9	56.1	56.3	56.5	56.7	56.9
30	57.1	57.3	57.5	57.7	57.9	58.0	58.2	58.4	58.6	58.8
31	59.0	59.2	59.4	59.6	59.8	59.9	60.1	60.3	60.5	60.7
32	60.9	61.1	61.3	61.5	61.7	61.8	62.0	62.2	62.4	62.6
33	62.8	63.0	63.2	63.4	63.6	63.8	63.9	64.1	64.3	64.5
34	64.7	64.9	65.1	65.3	65.5	65.7	65.8	6.0	66.2	66.4
35	66.6	66.8	67.0	67.2	67.4	67.6	67.7	67.9	68.1	68.3
36	68.5	68.7	68.9	69.1	69.3	69.5	69.6	69.8	70.0	70.2
37	70.4	70.6	70.8	71.0	71.2	71.4	71.6	71.7	71.9	72.1
38	72.3	72.5	72.7	72.9	73.1	73.3	73.5	73.6	73.8	74.0
39	74.2	74.4	74.6	74.8	75.0	75.2	75.4	75.5	75.7	75.9
40	76.1	76.3	76.5	76.7	76.9	77.1	77.3	77.5	77.6	77.8
41	78.0	78.2	78.4	78.6	78.8	79.0	79.2	79.4	79.5	79.7
42	79.9	80.1	80.3	80.5	80.7	80.9	81.1	81.3	81.4	81.6
43	81.8	82.0	82.2	82.4	82.6	82.8	83.0	83.2	83.4	83.5
44	83.7	83.9	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.4
45	85.6	85.8	86.0	86.2	86.4	86.6	86.8	87.0	87.2	87.3
46	87.5	87.7	87.9	88.1	88.3	88.5	88.7	88.9	89.1	89.3
47	89.4	89.6	89.8	90.0	90.2	90.4	90.6	90.8	91.0	91.2
48	91.3	91.5	91.7	91.9	92.1	92.3	92.5	92.7	92.9	93.1
49	93.2	93.4	93.6	93.8	94.0	94.2	94.4	94.6	94.8	95.0
50	95.2	95.3	95.5	95.7	95.9	96.1	96.3	96.5	96.7	96.9

Prepared by multiplying the BAF 20 Plot Radius Factor 1.902 * DBH. For example, if DBH = 14.3 inches, then $14.3 * 1.903 = 27$.

Table 75: BAF 30 Plot Radii in Feet and Tenths of Feet from Plot Center to Face of Tree at DBH for 0% Slope

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
5	7.7	7.9	8.0	8.2	8.3	8.5	8.7	8.8	9.0	9.1
6	9.3	9.4	9.6	9.7	9.9	10.0	10.2	10.4	10.5	10.7
7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	12.1	12.2
8	12.4	12.5	12.7	12.8	13.0	13.1	13.3	13.5	13.6	13.8
9	13.9	14.1	14.2	14.4	14.5	14.7	14.8	15.0	15.2	15.3
10	15.5	15.6	15.8	15.9	16.1	16.2	16.4	16.5	16.7	16.9
11	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4
12	18.6	18.7	18.9	19.0	19.2	19.3	19.5	19.6	19.8	19.9
13	20.1	20.3	20.4	20.6	20.7	20.9	21.0	21.2	21.3	21.5
14	21.6	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	23.0
15	23.2	23.3	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6
16	24.7	24.9	25.0	25.2	25.4	25.5	25.7	25.8	26.0	26.1
17	26.3	26.4	26.6	26.7	26.9	27.1	27.2	27.4	27.5	27.7
18	27.8	28.0	28.1	28.3	28.4	28.6	28.8	28.9	29.1	29.2
19	29.4	29.5	29.7	29.8	30.0	30.1	30.3	30.5	30.6	30.8
20	30.9	31.1	31.2	31.4	31.5	31.7	31.8	32.0	32.2	32.3
21	32.5	32.6	32.8	32.9	33.1	33.2	33.4	33.5	33.7	33.9
22	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4
23	35.6	35.7	35.9	36.0	36.2	36.3	36.5	36.6	36.8	36.9
24	37.1	37.3	37.4	37.6	37.7	37.9	38.0	38.2	38.3	38.5
25	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	40.00
26	40.2	40.4	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6
27	41.7	41.9	42.1	42.2	42.4	42.5	42.7	42.8	43.0	43.1
28	43.3	43.4	43.6	43.8	43.9	44.1	44.2	44.4	44.5	44.7

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
29	44.8	45.0	45.1	45.3	45.5	45.6	45.8	45.9	46.1	46.2
30	46.4	46.5	46.7	46.8	47.0	47.2	47.3	47.5	47.6	47.8
31	47.9	48.1	48.2	48.4	48.5	48.7	48.9	49.0	49.2	49.3
32	49.5	49.6	49.8	49.9	50.1	50.2	50.4	50.6	50.7	50.9
33	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.3	52.4
34	52.6	52.7	52.9	53.0	53.2	53.3	53.5	53.6	53.8	54.0
35	54.1	54.3	54.4	54.6	54.7	54.9	55.0	55.2	55.3	55.5
36	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	57.0
37	57.2	57.4	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6
38	58.7	58.9	59.1	59.2	59.4	59.5	59.7	59.8	60.0	60.1
39	60.3	60.4	60.6	60.8	60.9	61.1	61.2	61.4	61.5	61.7
40	61.8	62.0	62.1	62.3	62.5	62.6	62.8	62.9	63.1	63.2
41	63.4	63.5	63.7	63.8	64.0	64.2	64.3	64.5	64.3	64.8
42	64.9	65.1	65.2	65.4	65.6	65.7	65.9	66.0	66.2	66.3
43	66.5	66.6	66.8	66.9	67.1	67.3	67.4	67.6	67.7	67.9
44	68.0	68.2	68.3	68.5	68.6	68.8	69.0	69.1	69.3	69.4
45	69.6	69.7	69.9	70.0	70.2	70.3	70.5	70.7	70.8	71.0
46	71.1	71.3	71.4	71.6	71.7	71.9	72.0	72.2	72.4	72.5
47	72.7	72.8	73.0	73.1	73.3	73.4	73.6	73.7	73.9	74.1
48	74.2	74.4	74.5	74.7	74.8	75.0	75.1	75.3	75.4	75.6
49	75.8	75.9	76.1	76.2	76.4	76.5	76.7	76.8	77.0	77.1
50	77.3	77.5	77.6	77.8	77.9	78.1	78.2	78.4	78.5	78.7

Prepared by multiplying the BAF 30 Plot Radius Factor 1.546 * DBH. For example, if DBH = 14.3 inches, then $14.3 * 1.546 = 22$.

Table 76: BAF 40 Plot Radii in Feet and Tenths of Feet from Plot Center to Face of Tree at DBH for 0% Slope

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
5	6.7	6.8	6.9	7.1	7.2	7.3	7.5	7.6	7.7	7.9
6	8.0	8.1	8.3	8.4	8.5	8.7	8.8	8.9	9.1	9.2
7	9.3	9.5	9.6	9.7	9.9	10.0	10.1	10.3	10.4	10.5
8	10.7	10.8	10.9	11.1	11.2	11.3	11.5	11.6	11.7	11.9
9	12.0	12.1	12.3	12.4	12.5	12.7	12.8	12.9	13.1	13.2
10	13.3	13.5	13.6	13.7	13.9	14.0	14.1	14.3	14.4	14.5
11	14.7	14.8	14.9	15.1	15.2	15.3	15.5	15.6	15.7	15.9
12	16.0	16.1	16.3	16.4	16.5	16.7	16.8	16.9	17.1	17.2
13	17.3	17.5	17.6	17.7	17.9	18.0	18.1	18.3	18.4	18.5
14	18.7	18.8	18.9	19.1	19.2	19.3	19.5	19.6	19.7	19.9
15	20.0	20.1	20.3	20.4	20.5	20.7	20.8	20.9	21.1	21.2
16	21.3	21.5	21.6	21.7	21.9	22.0	22.1	22.3	22.4	22.5
17	22.7	22.8	22.9	23.1	23.2	23.3	23.5	23.6	23.7	23.9
18	24.0	24.1	24.3	24.4	24.5	24.7	24.8	24.9	25.1	25.2
19	25.3	25.5	25.6	25.7	25.9	26.0	26.1	26.3	26.4	26.5
20	26.7	26.8	26.9	27.1	27.2	27.3	27.5	27.6	27.7	27.9
21	28.0	28.1	28.3	28.4	28.5	28.7	28.8	28.9	29.1	29.2
22	29.3	29.5	29.6	29.7	29.9	30.0	30.1	30.3	30.4	30.5
23	30.7	30.8	30.9	31.1	31.2	31.3	31.5	31.6	31.7	31.9
24	32.0	32.1	32.3	32.4	32.5	32.7	32.8	32.9	33.1	33.2
25	33.3	33.5	33.6	33.7	33.9	34.0	34.1	34.3	34.4	34.5
26	34.7	34.8	34.9	35.1	35.2	35.3	35.5	35.6	35.7	35.9
27	36.0	36.1	36.3	36.4	36.5	36.7	36.8	36.9	37.1	37.2
28	37.3	37.5	37.6	37.7	37.9	38.0	38.1	38.3	38.4	38.5

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
29	38.7	34.8	34.9	35.1	35.2	35.3	35.5	35.6	35.7	35.9
30	40.0	40.1	40.3	40.4	40.5	40.7	40.8	40.9	41.1	41.2
31	41.3	41.5	41.6	41.7	41.9	42.0	42.1	42.3	42.4	42.5
32	42.7	42.8	42.9	43.1	43.2	43.3	43.5	43.6	43.7	43.9
33	44.0	44.1	44.3	44.4	44.5	44.7	44.8	44.9	45.1	45.2
34	45.3	45.5	45.6	45.7	45.9	46.0	46.1	46.3	46.4	46.5
35	46.7	46.8	46.9	47.1	47.2	47.3	47.5	47.6	47.7	47.9
36	48.0	48.1	48.2	48.4	48.5	48.7	48.	48.9	49.1	49.2
37	49.3	49.5	49.6	49.7	49.9	50.0	50.1	50.3	50.4	50.5
38	50.7	50.8	50.9	51.1	51.2	51.3	51.5	51.6	51.7	51.9
39	52.0	52.1	52.2	52.4	52.5	52.7	52.8	52.9	53.1	53.2
40	53.3	53.5	53.6	53.7	53.9	54.0	54.1	54.3	54.4	54.5
41	54.7	54.8	54.9	55.1	55.2	55.3	55.5	55.6	55.7	55.9
42	56.0	56.1	56.2	56.4	56.5	56.7	56.8	56.9	57.1	57.2
43	57.3	57.5	57.6	57.7	57.9	58.0	58.1	58.3	58.4	58.5
44	58.7	58.8	58.9	59.1	59.2	59.3	59.5	59.6	59.7	59.9
45	60.0	60.1	60.2	60.4	60.5	60.7	60.8	60.9	61.1	61.2
46	61.3	61.5	61.6	61.7	61.9	62.0	62.1	62.3	62.4	62.5
47	62.7	62.8	62.9	63.1	63.2	63.3	63.5	63.6	63.7	63.9
48	64.0	64.1	64.2	64.4	64.5	64.7	64.8	64.9	65.1	65.2
49	65.3	65.5	65.6	65.7	65.9	66.0	66.1	66.3	66.4	66.5
50	66.7	66.8	66.9	67.0	67.2	67.3	67.4	67.6	67.7	67.8

Prepared by multiplying the BAF 40 Plot Radius Factor 1.333 * DBH. For example, if DBH = 14.3 inches, then $14.3 * 1.333 = 19.1$ feet.

Table 77: BAF 60 Plot Radii in Feet and Tenths of Feet from Plot Center to Face of Tree at DBH for 0% Slope

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
5	5.4	5.5	5.6	5.7	5.8	5.9	6.1	6.2	6.3	6.4
6	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.4	7.5
7	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5
8	8.6	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6
9	9.7	9.8	9.9	10.1	10.2	10.3	10.4	10.5	10.6	10.7
10	10.8	10.9	11.0	11.1	11.2	11.4	11.5	11.6	11.7	11.8
11	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.8	12.9
12	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9
13	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0
14	15.1	15.2	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1
15	16.2	16.3	16.4	16.5	16.6	16.7	16.9	17.0	17.1	17.2
16	17.3	17.4	17.5	17.6	17.7	17.8	17.9	18.1	18.2	18.3
17	18.4	18.5	18.6	18.7	18.8	18.9	19.0	19.1	19.2	19.3
18	19.5	19.6	19.7	19.8	19.9	20.0	20.1	20.2	20.3	20.4
19	20.5	20.6	20.8	20.9	21.0	21.1	21.2	21.3	21.4	21.5
20	21.6	21.7	21.8	21.9	22.1	22.2	22.3	22.4	22.5	22.6
21	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.5	23.6	23.7
22	23.8	23.9	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.8
23	24.9	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8
24	25.9	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9
25	27.0	27.1	27.2	27.3	27.5	27.6	27.7	27.8	27.9	28.0
26	28.1	28.2	28.3	28.4	28.5	28.6	28.8	28.9	29.0	29.1
27	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	30.1	30.2
28	30.3	30.4	30.5	30.6	30.7	30.8	30.9	31.0	31.1	31.2

Inches	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
29	31.3	31.5	31.6	31.7	31.8	31.9	32.0	32.1	32.2	32.3
30	32.4	32.5	32.6	32.8	32.9	33.0	33.1	33.2	33.3	33.4
31	33.5	33.6	33.7	33.8	33.9	34.1	34.2	34.3	34.4	34.5
32	35.7	35.8	35.9	36.0	36.1	36.2	36.3	36.4	36.5	36.6
33	35.7	35.8	35.9	36.0	36.1	36.2	36.3	36.4	36.5	36.6
34	36.8	36.9	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7
35	37.8	37.9	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8
36	38.9	39.0	39.1	39.2	39.3	39.5	39.6	39.7	39.8	39.9
37	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.8	40.9	41.0
38	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	42.1
39	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	43.0	43.1
40	43.2	43.3	43.5	43.6	43.7	43.8	43.9	44.0	44.1	44.2
41	44.3	44.4	44.5	44.6	44.8	44.9	45.0	45.1	45.2	45.3
42	45.4	45.5	45.6	45.7	45.8	45.9	46.1	46.2	46.3	46.4
43	46.5	46.6	46.7	46.8	46.9	47.0	47.1	47.2	47.3	47.5
44	47.6	47.7	47.8	47.9	48.0	48.1	48.2	48.3	48.4	48.5
45	48.6	48.8	48.9	49.0	49.1	49.2	49.3	49.4	49.5	49.6
46	49.7	49.8	49.9	50.1	50.2	50.3	50.4	50.5	50.6	50.7
47	50.8	50.9	51.0	51.1	51.2	51.3	51.5	51.6	51.7	51.8
48	51.9	52.0	52.1	52.2	52.3	52.4	52.5	52.6	52.8	52.9
49	53.0	53.1	53.2	53.3	53.4	53.5	53.6	53.7	53.8	53.9
50	54.1	54.2	54.3	54.4	54.5	54.6	54.7	54.8	54.9	55.0

Prepared by multiplying the BAF 60 Plot Radius Factor 1.081 * DBH. For example, if DBH = 14.3 inches, then $14.3 * 10.81 = 15.5$ feet.

Table 78: Limiting Distances to Face of Tree and Slope Correction Factors for Various Basal Area Factors

This table provides an expanded list of slope correction factors to the face of the tree for use with various basal area factors. To use the table, measure the slope and distance from plot-center to the face of the tree at DBH. To obtain the corrected limiting distance to a tree, multiply the tree's DBH by the "combined factor" shown under the appropriate BAF heading.

Slope	Factor	5 BAF	10 BAF	15 BAF	20 BAF	30 BF	40 BAF
1	1.00000	3.847	2.708	2.203	1.902	1.546	1.333
2	1.00020	3.848	2.709	2.203	1.902	1.546	1.333
3	1.00045	3.489	2.709	2.204	1.903	1.547	1.334
4	1.00080	3.850	2.710	2.205	1.904	1.547	1.334
5	1.00125	3.852	2.711	2.206	1.904	1.548	1.335
6	1.00180	3.854	2.713	2.207	1.905	1.549	1.335
7	1.00245	2.856	2.715	2.208	1.907	1.550	1.336
8	1.00319	3.859	2.717	2.210	1.908	1.551	1.337
9	1.00404	3.863	2.719	2.212	1.910	1.552	1.338
10	1.00499	3.866	2.722	2.214	1.911	1.554	1.340
11	1.00603	3.870	2.724	2.216	1.912	1.555	1.341
12	1.00717	3.875	2.727	2.219	1.916	1.557	1.341
13	1.00841	3.879	2.731	2.222	1.918	1.559	1.344
14	1.00975	3.884	2.734	2.224	1.921	1.567	1.346
15	1.01119	3.890	2.738	2.228	1.923	1.563	1/348
16	1.01272	3.896	2.742	2.231	1.926	1.566	1.350
17	1.01435	3.902	2.747	2.235	1.921	1.568	1.352
18	1.01607	3.909	2.752	2.238	1.933	1.571	1.354
19	1.01789	3.916	2.756	2.245	1.936	1.574	1.357
20	1.01980	3.923	2.762	2.245	1.940	1.577	1.359
21	1.02181	3.931	2.767	2.251	1.943	1.580	1.362

Slope	Factor	5 BAF	10 BAF	15 BAF	20 BAF	30 BF	40 BAF
22	1.02391	3.939	2.773	2.256	1.947	1.583	1.365
23	1.02611	3.947	2.779	2.261	1.952	1.586	1.368
24	1.02840	3.956	2.785	2.266	1.956	1.590	1.371
25	1.03078	3.965	2.791	2.271	1.967	1.594	1.374
26	1.03325	3.975	2.798	2.276	1.965	1.597	1.377
27	1.03581	3.985	2.805	2.282	1.970	1.601	1.381
28	1.03846	3.995	2.812	2.288	1.975	1.605	1.384
29	1.04120	4.005	2.820	2.294	1.980	1.610	1.388
30	1.04403	4.016	2.827	2.300	1.986	1.614	1.392
31	1.04695	4.028	2.835	2.306	1.991	1.619	1.396
32	1.04995	4.039	2.843	2.313	1.997	1.623	1.400
33	1.05304	4.051	2.852	2.320	2.003	1.628	1.404
34	1.05622	4.063	2.960	2.327	2.009	1.633	1.408
35	1.05948	4.076	2.869	2.334	2.015	1.638	1.412
36	1.06283	4.089	2.878	2.341	2.022	1.643	1.417
37	1.06626	4.102	2.887	2.349	2.028	1.648	4.421
38	1.06977	4.115	2.897	2.357	2.035	1.654	1.426
39	1.07336	4.129	2.907	2.365	2.042	1.659	1.431
40	1.07703	4.143	2.917	2.373	2.049	1.665	1.436
41	1.08079	4.158	2.927	2.381	2.056	1.671	1.441
42	1.08462	4.173	2.937	2.389	2.063	1.677	1.446
43	1.08853	4.188	2.948	2.398	2.070	1.683	1.451
44	1.09252	4.203	2.959	2.407	2.078	1.689	1.456
45	1.09659	4.219	2.970	2.416	2.086	1.695	1.462
46	1.10073	4.235	2.981	2.425	2.094	1.702	1.467

Slope	Factor	5 BAF	10 BAF	15 BAF	20 BAF	30 BF	40 BAF
47	1.10494	4.251	2.992	2.434	2.102	1.708	1.473
48	1.10923	4.267	3.004	2.444	2.110	1.715	1.479
49	1.11360	4.284	3.016	2.453	2.118	1.723	1.484
50	1.11803	4.301	3.028	2.463	2.126	1.728	1.490
51	1.12254	4.318	3.040	2.473	2.135	1.735	1.496
52	1.12712	4.336	3.052	2.483	2.144	1.743	1.502
53	1.13177	4.354	3.065	2.493	2.153	1.750	1.509
54	1.13649	4.372	3.078	2.504	2.162	1.757	1.515
55	1.14127	4.390	3.091	2.514	2.171	1.764	1.521
56	1.14612	4.409	3.104	2.525	2.180	1.772	1.528
57	1.15104	4.428	3.117	2.536	2.189	1.780	1.534
58	1.15603	4.447	3.131	2.547	2.199	1.788	1.541
59	1.16108	4.467	3.144	2.558	2.208	1.795	1.548
60	1.16619	4.486	3.158	2.569	2.218	1.803	1.555
61	1.17137	4.506	3.172	2.581	2.228	1.811	1.561
62	1.17661	4.526	3.186	2.592	2.238	1.819	1.568
63	1.18191	4.547	3.201	2.604	2.248	1.827	1.575
64	1.18727	4.567	3.215	2.616	2.258	1.836	1.583
65	1.19269	4.588	3.230	2.627	2.268	1.844	1.590
66	1.19817	4.609	3.245	2.640	2.279	1.852	1.597
67	1.20370	4.631	3.260	2.652	2.289	1.861	1.605
68	1.20930	4.652	3.275	2.664	2.300	1.870	1.612
69	1.21499	4.691	3.302	2.687	2.319	1.885	1.626
70	1.22066	4.696	3.306	2.689	2.322	1.887	1.627
71	1.22642	4.718	3.321	2.702	2.333	1.896	1.635

Slope	Factor	5 BAF	10 BAF	15 BAF	20 BAF	30 BF	40 BAF
72	1.23223	4.740	3.337	2.715	2.344	1.905	1.643
73	1.23810	4.763	3.353	2.728	2.355	1.914	1.650
74	1.24403	4.786	3.369	2.741	2.366	1.923	1.658
75	1.25000	4.809	3.385	2.754	2.378	1.933	1.666
76	1.25603	4.832	3.401	2.767	2.389	1.942	1.674
77	1.26210	4.855	3.418	2.780	2.401	1.951	1.682
78	1.26823	4.879	3.434	2.794	2.412	1.961	1.691
79	1.27440	4.903	3.451	2.808	2.424	1.970	1.699
80	1.28062	4.927	3.468	2.821	2.436	1.980	1.707
81	1.28690	4.951	3.485	2.835	2.448	1.990	1.715
82	1.29321	4.975	3.502	2.849	2.460	1.999	1.724
83	1.29958	4.999	3.519	2.863	2.472	2.009	1.732
84	1.30599	5.024	3.537	2.877	2.484	2.019	1.741
85	1.31244	5.049	3.554	2.891	2.496	2.029	1.749
86	1.31894	5.074	3.572	2.906	2.509	2.039	1.758
87	1.32548	5.099	3.589	2.920	2.521	2.049	1.767
88	1.33207	5.124	3.607	2.935	2.534	2.059	1.776
89	1.33870	5.150	3.625	2.949	2.546	2.070	1.784
90	1.34536	5.176	3.643	2.964	2.559	2.080	1.793
91	1.35207	5.201	3.661	2.979	2.572	2.090	1.802
92	1.35882	5.227	3.680	2.993	2.584	2.101	1.811
93	1.36561	5.254	3.698	3.008	2.597	2.111	1.820
94	1.37244	5.280	3.717	3.023	2.610	2.122	1.829
95	1.37931	5.306	3.735	3.039	2.623	2.132	1.839
96	1.38622	5.333	3.754	3.054	2.637	2.143	1.848

Slope	Factor	5 BAF	10 BAF	15 BAF	20 BAF	30 BF	40 BAF
97	1.39316	5.359	3.773	3.069	2.650	2.154	1.875
98	1.40014	5.386	3.792	3.085	2.663	2.165	1.866
99	1.40716	5.413	3.811	3.100	2.676	2.175	1.876
100	1.41421	5.440	3.830	3.116	2.690	2.186	1.885
102	1.42843	5.495	3.868	3.147	2.717	2.208	1.904
103	1.43558	5.523	3.888	3.163	5.730	2.219	1.914
104	1.44278	5.550	3.907	3.178	2.744	2.231	1.923
105	1.45000	5.578	3.927	3.194	2.758	2.242	1.933
106	1.45726	5.606	3.946	3.210	2.772	2.253	1.943
107	1.46455	5.634	3.966	3.226	2.876	2.264	1.952
108	1.47187	5.662	3.986	3.243	2.799	2.276	1.962
109	1.47922	5.691	4.006	3.259	2.813	2.287	1.972
110	1.48661	5.719	4.026	3.275	2.828	2.298	1.982
111	1.49402	5.747	4.046	3.291	2.842	2.310	1.992
112	1.50147	5.776	4.066	3.308	2.856	2.321	2.001
113	1.50894	5.805	4.086	3.324	2.870	2.333	2.011
114	1.51644	5.834	4.107	3.341	2.884	2.344	2.021
115	1.52498	5.863	4.127	3.357	2.899	2.356	2.031
116	1.53154	5.892	4.147	3.374	2.913	2.368	2.042
117	1.53912	5.921	4.168	3.391	2.927	2.379	2.052
118	1.54674	5.950	4.189	3.407	2.942	2.391	2.062
119	1.55438	5.980	4.209	3.424	2.956	2.403	2.072
120	1.56205	6.000	4.230	3.441	2.971	2.415	2.082
121	1.56975	6.039	4.251	3.458	2.985	2.427	2.092
122	1.57747	6.069	4.272	3.475	3.000	2.439	2.103

Slope	Factor	5 BAF	10 BAF	15 BAF	20 BAF	30 BF	40 BAF
123	1.58521	6.098	4.293	3.492	3.015	2.451	2.113
124	1.59298	6.128	4.314	3.509	3.030	2.463	2.123
125	1.60078	6.158	4.335	3.527	3.045	2.475	2.134
126	1.60860	6.188	4.356	3.544	3.060	2.487	2.144
127	1.61645	6.218	4.377	3.561	3.074	2.499	2.155
128	1.62432	6.249	4.399	3.578	3.089	2.511	2.165
129	1.63221	6.279	4.420	3.595	3.104	2.523	2.176
130	1.64012	6.310	4.441	3.613	3.120	2.536	2/186
131	1.64806	6.340	4.463	3.631	3.135	2.546	2.197
132	1.65602	6.370	4.485	3.648	3.150	2.560	2.207
133	1.66400	6.401	4.506	3.666	3.165	2.573	2.218
134	1.67200	6.432	4.528	3.683	3.180	2.585	2.229
135	1.68003	6.463	4.550	3.701	3.195	2.597	2.239
136	1.68808	6.494	4.571	3.719	3.211	2.261	2.250
137	1.69614	6.525	4.593	3.737	3.226	2.622	2.261
138	1.70423	6.556	4.615	3.754	3.241	2.635	2.272
139	1.71234	6.587	4.637	3.772	3.257	2.647	2.283
140	1.72047	6.619	4.659	3.790	3.272	2.660	2.293
141	1.72861	6.650	4.681	3.808	3.288	2.672	2.304
142	1.73678	6.681	4.703	3.826	3.303	2.685	2.315
143	1.74497	6.713	4.725	3.844	3.319	2.698	2.326
144	1.75317	6.744	4.748	3.862	3.335	2.710	2.337
145	1.76139	6.776	4.770	3.880	3.350	2.723	2.348
146	1.76963	6.808	4.792	3.898	3.366	2.736	2.359
147	1.77789	6.840	4.815	3.917	3.382	2.749	2.370

Slope	Factor	5 BAF	10 BAF	15 BAF	20 BAF	30 BF	40 BAF
148	1.78617	6.871	4.837	3.935	3.397	2.761	2.381
149	1.79446	6.903	4.859	3.953	3.413	2.774	2.392

APPENDIX K: DAMAGE CATEGORIES, AGENTS, SEVERITY RATINGS, AND TREE PARTS

DAMAGE CATEGORIES

Detailed descriptions and examples of the content in these tables is available using the Insect & Disease Codes links on the [FSVeg Documentation web page](#).

Table 79: Damage category codes

Code	Description
10	General Insects
11	Bark Beetles
12	Defoliators
13	Chewing Insects
14	Sucking Insects
15	Boring Insects
16	Seed/Cone/Flower/Fruit Insects
17	Gallmaker Insects
18	Insect Predators
19	General Diseases
20	Biotic Damage
21	Root/Butt Diseases
22	Stem Decays/Cankers
23	Parasitic/Epiphytic Plants
24	Decline Complexes/Dieback/Wilts

Code	Description
25	Foliage Diseases
26	Stem Rusts
27	Broom Rusts
30	Fire
40	Animal Damage, Source Unknown
41	Wild Animals
42	Domestic Animals
50	Abiotic Damage
60	Competition
70	Human Activities
71	Harvest
80	Multi-Damage (Insect-Disease)
90	Unknown
99	Physical Effects

DAMAGE AGENTS

Detailed descriptions and examples of the content in these tables is available using the Insect & Disease Codes links on the [FSVeg Documentation web page](#).

Table 80: Damage agent codes

Category	Agent	Common Name	Scientific Name
10	000	General insects	n / a
10	001	Thrips	<i>n/a</i>
10	002	Tip moth	<i>n/a</i>
10	003	Wasp	<i>n/a</i>
10	007	Clerid beetle	<i>Cleridae</i>
10	008	Weevil	<i>Curculionidae</i>

Category	Agent	Common Name	Scientific Name
10	011	Ant	<i>Formicidae</i>
10	017	Bagworm moth	<i>Psychidae</i>
10	019	Scarab	<i>Scarabaeidae</i>
10	023	Wood wasps	<i>Siricidae spp.</i>
11	000	Bark beetles	n / a
11	001	Roundheaded pine beetle	<i>Dendroctonus adjunctus</i>
11	002	Western pine beetle	<i>Dendroctonus brevicomis</i>
11	004	Jeffrey pine beetle	<i>Dendroctonus jeffreyi</i>
11	005	Lodgepole pine beetle	<i>Dendroctonus murrayanae</i>
11	006	Mountain pine beetle	<i>Dendroctonus ponderosae</i>
11	007	Douglas-fir beetle	<i>Dendroctonus pseudotsugae</i>
11	009	Spruce beetle	<i>Dendroctonus rufipennis</i>
11	012	Red turpentine beetle	<i>Dendroctonus valens</i>
11	015	Western balsam bark beetle	<i>Dryocoetes confuses</i>
11	016	Unknown	<i>Dryocoetes sechelti</i>
11	019	Pinon ips	<i>Ips confuses</i>
11	021	Sixspined ips	<i>Ips calligraphus</i>
11	022	Emarginated ips	<i>Ips emarginatus</i>
11	025	Arizona five-spined ips	<i>Ips lecontei</i>
11	029	Pine engraver	<i>Ips pini</i>
11	030	Ips engraver beetles	<i>Ips spp/</i>
11	031	Unknown	<i>Ips tridens</i>
11	032	Western ash bark beetle	<i>Leperisinus californicus</i>
11	035	Cedar bark beetle	<i>Phloeosinus spp.</i>
11	036	Western cedar bark beetle	<i>Phloeosinus punctatus</i>

Category	Agent	Common Name	Scientific Name
11	037	Tip beetles	<i>Pityogenes spp.</i>
11	038	Douglas-fir twig beetle	<i>Pityophthorus pseudotsugae</i>
11	039	Twig beetles	<i>Pityophthorus spp.</i>
11	040	Four-eyed spruce beetle	<i>Polygraphus rufipennis</i>
11	041	Fir root bark beetle	<i>Pseudohylesinus granulates</i>
11	043	Douglas-fir pole beetle	<i>Pseudohylesinus nebulosus</i>
11	045	Small European elm bark beetle	<i>Scolytus multistriatus</i>
11	046	Spruce engraver	<i>Scolytus piceae</i>
11	048	True fir bark beetle	<i>Scolytus spp.</i>
11	049	Douglas-fir engraver	<i>Scolytus unispinosus</i>
11	050	Fir engraver	<i>Scolytus ventralis</i>
11	055	Spruce ips	<i>Ips pilifrons</i>
11	056	Mexican pine beetle	<i>Dendroctonus mexicanus</i>
12	000	Defoliators	n / a
12	001	Casebearer	<i>n/a</i>
12	002	Leaftier	<i>n/a</i>
12	003	Looper	<i>n/a</i>
12	004	Needleminer	<i>n/a</i>
12	005	Sawfly	<i>n/a</i>
12	006	Skeletonizer	<i>n/a</i>
12	009	Webworm	<i>n/a</i>
12	011	Western blackheaded budworm	<i>Acleris gloverana</i>
12	013	Whitefly	<i>Aleyrodoidae</i>
12	014	Fall cankerworm	<i>Alsophila pometaria</i>
12	016	Mountain mahogany looper	<i>Anacamptodes clivinaria profanata</i>

Category	Agent	Common Name	Scientific Name
12	020	Western larch sawfly	<i>Anoplonyx occidentis</i>
12	023	Boxelder defoliator	<i>Archips negundanus</i>
12	024	Oak leafroller	<i>Archips semiferana</i>
12	025	Birch sawfly	<i>Arge pectoralis</i>
12	033	Boxelder leafroller	<i>Caloptilia negundella</i>
12	037	Large aspen tortrix	<i>Choristoneura conflictana</i>
12	039	Sugar pine tortrix	<i>Choristoneura lambertiana</i>
12	040	Western spruce budworm	<i>Choristoneura occidentalis</i>
12	043	Aspen leaf beetle	<i>Chrysomela crotchii</i>
12	044	Cottonwood leaf beetle	<i>Chrysomela scripta</i>
12	045	Leafhopper	<i>Cicadellidae</i>
12	047	Larch casebearer	<i>Coleophora laricella</i>
12	049	Lodgepole needleminer	<i>Coleotechnites milleri</i>
12	050	Ponderosa needleminer	<i>Coleotechnites spp.</i>
12	052	Pandora moth	<i>Coloradia Pandora</i>
12	056	Dusky birch sawfly	<i>Croesus latitarus</i>
12	060	Spruce coneworm	<i>Dioryctria reniculelloides</i>
12	066	White fir needleminer	<i>Epinotia meritana</i>
12	069	Pine needleminer	<i>Exoteleia pinifoliella</i>
12	072	Geometrid moth	<i>Geometridae</i>
12	073	Leafblotch miner	<i>Gracillariidae</i>
12	074	Spotted tussock moth	<i>Halisidota maculate</i>
12	077	Brown day moth	<i>Hemileuca eglanderina</i>
12	082	Fall webworm	<i>Hyphantria cunea</i>
12	084	Unknown	<i>Lambdina punctate</i>

Category	Agent	Common Name	Scientific Name
12	087	Willow leafblotch miner	<i>Lithocolletis spp.</i>
12	089	Gypsy moth	<i>Lymantria dispar</i>
12	094	Western tent caterpillar	<i>Malacosoma californicum</i>
12	096	Forest tent caterpillar	<i>Malacosoma disstria</i>
12	099	Blister beetle	<i>Meloidae</i>
12	116	Pine butterfly	<i>Neophasia menapia</i>
12	121	Rusty tussock moth	<i>Orgyia antiqua</i>
12	123	Douglas-fir tussock moth	<i>Orgyia pseudotsugata</i>
12	124	Western tussock moth	<i>Orgyia vetusta</i>
12	125	Spring cankerworm	<i>Paleacrita vernata</i>
12	128	Pine tussock moth	<i>Parorygia griseofacta</i>
12	135	Aspen leafminer	<i>Phyllocnistis populiella</i>
12	139	Larch sawfly	<i>Pristiphora erichsonii</i>
12	140	Mountain-ash sawfly	<i>Pristiphora geniculate</i>
12	141	Elm leaf beetle	<i>Prrhalta luetola</i>
12	143	Giant silkworm moth	<i>Saturniidae</i>
12	144	Redhumped caterpillar	<i>Schizura concinna</i>
12	150	Spruce needleminer (west)	<i>Taniva albolineana</i>
12	155	Leafroller/seed moth	<i>Tortricidae</i>
12	156	Willow defoliation	<i>Tortricidae</i>
12	160	Pine needle sheathminer	<i>Zelleria haimbachi</i>
12	178	Western oak looper	<i>Lambdina discellaria somniaria</i>
12	181	Tent Caterpillar	<i>Malacosoma spp.</i>
12	190	Hickory tussock moth	<i>Halisidota caryae</i>
12	191	Pin oak sawfly	<i>Caliroa lineata</i>

Category	Agent	Common Name	Scientific Name
12	192	Palmerworm	<i>Dichomeris ligulella</i>
12	193	Pitch pine looper	<i>Lambdina athasaria pellucidaria</i>
12	194	Red pine sawfly	<i>Neodiprion annulus annulus</i>
12	195	Pine tip moth	<i>Argyrotaenia pinatubana</i>
12	196	Baldcypress leafroller	<i>Archips goyerana</i>
12	197	Winter moth	<i>Operophtera</i>
12	198	Basswood thrip	<i>Neohydatothrips</i>
12	199	Noctuid moth	<i>Xylomyges simplex (walker)</i>
12	200	Pyralid moth	<i>Palpita magniferalis</i>
13	000	Chewing insects	n / a
13	001	Grasshopper	<i>n/a</i>
13	006	Cicadas	<i>Cicadidae</i>
13	008	Cutworms	<i>Euxoa excellens</i>
13	021	Ponderosa pine tip moth	<i>Rhyacionia zozana</i>
13	022	Pine needle weevil	<i>Scythropus spp.</i>
13	030	Adana tip moth	<i>Rhyacionia adana</i>
14	000	Sucking insects	n / a
14	001	Scale insect	<i>n/a</i>
14	002	Western larch wooly aphid	<i>Adelges oregonensis</i>
14	003	Balsam woolly adelgid	<i>Adelges piceae</i>
14	006	Aphid	<i>Aphididae</i>
14	008	Western pine spittlebug	<i>Aphrophora permutata</i>
14	012	Pine needle scale	<i>Chionaspis pinifoliae</i>
14	014	Giant conifer aphid	<i>Cinara spp.</i>
14	017	Spruce aphid	<i>Elatobium anatinum</i>

Category	Agent	Common Name	Scientific Name
14	018	Woolly apple aphid	<i>Eriosoma lanigerum</i>
14	024	Honeysuckle aphid	<i>Hyadaphis tataricae</i>
14	026	Lecanium scale	<i>Lecanium spp.</i>
14	028	Oystershell scale	<i>Lepidosaphes ulmi</i>
14	029	Pinyon needle scale	<i>Matsucoccus acalyptus</i>
14	035	Treehoppers	<i>Membracidae</i>
14	039	Black pineleaf scale	<i>Nuculaspis California</i>
14	040	Spruce spider mite	<i>Oligonychus ununquis</i>
14	043	Maple aphid	<i>Periphyllus spp.</i>
14	050	Mealybug	<i>Pseudococcidae</i>
14	054	Spruce mealybug	<i>Puto sandini</i>
14	069	Elm scurfy scale	<i>Chionaspis Americana</i>
15	000	Boring insects	n / a
15	001	Shoot borer	<i>n/a</i>
15	002	Termite	<i>n/a</i>
15	003	Ponderosa pine bark borer	<i>Acanthocinus princeps</i>
15	004	Bronze birch borer	<i>Agrilus anxius</i>
15	006	Bronze poplar borer	<i>Agrilus liragus</i>
15	007	Carpenter bees	<i>Apidae</i>
15	008	Flatheaded borer	<i>Buprestidae</i>
15	009	Golden buprestid	<i>Buprestis aurulenta</i>
15	010	Carpenter ants	<i>Camponotus spp.</i>
15	011	Gouty pitch midge	<i>Cecidomyia piniinopis</i>
15	013	Roundheaded borer	<i>Cermbycidae</i>
15	018	Carpenterworm moth	<i>Cossidae</i>

Category	Agent	Common Name	Scientific Name
15	019	Poplar and willow borer	<i>Cryptorhynchus lapathi</i>
15	021	Douglas-fir twig weevil	<i>Cylindrocopturus furnissi</i>
15	027	Ponderous borer	<i>Ergates spiculatus</i>
15	029	Western pine shoot borer	<i>Eucosma sonomana</i>
15	030	Eucosma species	<i>Eucosma spp.</i>
15	035	Powderpost beetle	<i>Lyctidae</i>
15	039	Locust borer	<i>Megacyclene robiniae</i>
15	041	Flatheaded fir borer	<i>Melanophila drummondi</i>
15	042	Whitespotted sawyer	<i>Monochamus scutellatus</i>
15	044	Western ash borer	<i>Neoclytus conjunctus</i>
15	050	White pine weevil	<i>Pissodes radiatae</i>
15	051	Lodgepole terminal weevil	<i>Pissodes terminalis</i>
15	052	Ambrosia beetles	<i>Platypus spp.</i>
15	057	Lilac borer	<i>Podosesia syringae</i>
15	060	Western subterranean termite	<i>Reticulitermes Hesperus</i>
15	064	Western pine tip moth	<i>Rhyacionia bushnelli</i>
15	068	Poplar borer	<i>Saperda calcarata</i>
15	070	Saperda shoot borer	<i>Saperda spp.</i>
15	071	Clearwing moths	<i>Sesiidae</i>
15	073	Roundheaded fir borer	<i>Tetropium abietis</i>
15	076	Douglas-fir pitch moth	<i>Vespamima novaroensis</i>
15	077	Sequoia pitch moth	<i>Vespamima sequoia</i>
15	087	Emerald ash borer	<i>Agrilus planipennis</i>
16	000	Seed / Cone / Flower / Fruit Insects	n / a
16	001	Douglas-fir cone moth	<i>Barbara colfaxiana</i>

Category	Agent	Common Name	Scientific Name
16	002	Lodgepole cone beetle	<i>Conophthorus contortae</i>
16	003	Limber pine cone beetle	<i>Conophthorus flexilis</i>
16	004	Mountain pine cone beetle	<i>Conophthorus monticolae</i>
16	005	Ponderosa pine cone beetle	<i>Conophthorus ponderosae</i>
16	010	Douglas-fir cone midge	<i>Contarinia oregonesis</i>
16	015	Fir coneworm	<i>Dioryctria abietivorella</i>
16	017	Pine cone worm	<i>Dioryctria merkeli</i>
16	019	Ponderosa twig moth	<i>Dioryctria ponderosae</i>
16	020	Unknown	<i>Dioryctria pseudotsugella</i>
16	021	Dioryctria moths	<i>Dioryctria spp.</i>
16	022	Lodgepole cone moth	<i>Eucosma rescissoriana</i>
16	023	Seed chalcid	<i>Eurytomidae</i>
16	025	Cone maggot	<i>Hylemya anthracina</i>
16	027	Ponderosa pine seed worm/moth	<i>Laspeyresia piperana</i>
16	028	Spruce seed moth	<i>Laspeyresia youngana</i>
16	029	Boxelder bug	<i>Leptocoris trivittatus</i>
16	031	Western conifer seed bug	<i>Leptoglossus occidentalis</i>
16	034	Spruce seed chalcid	<i>Magastigmus piceae</i>
16	035	Ponderosa pine seed chalcid	<i>Megastigmus albifrons</i>
16	036	Fir seed chalcid	<i>Megastigmus pinus</i>
16	037	Douglas-fir seed chalcid	<i>Megastigmus spermotrophs</i>
16	042	Coneworm	<i>Phycitidae</i>
16	043	Harvester ants	<i>Pogonomyrmex spp.</i>
16	049	Prairie tent caterpillar	<i>Malacosoma lutescens</i>
16	050	Jack pine tip beetle	<i>Conophthorus banksianae</i>

Category	Agent	Common Name	Scientific Name
17	000	Gallmarker insects	n / a
17	003	Cooley spruce gall adelgid	<i>Adelges cooleyi</i>
17	007	Douglas-fir needle gall midge	<i>Contarinia pseudotsugae</i>
17	010	Hackberry nipplegall maker	<i>Pachypsylla celtidismamma</i>
17	013	Gall aphid	<i>Phylloxera</i>
17	018	Gouty pitch midge	<i>Cecidomyia piniinopsis</i>
17	019	Spider mites	<i>Oligonychus spp.</i>
18	000	Insect predators	n / a
18	001	Lacewing	<i>n/a</i>
18	002	Blackbellied clerid	<i>Enoclerus lecontei</i>
18	003	Redbellied clerid	<i>Enoclerus sphegeus</i>
18	004	Unknown	<i>Formica rufa</i>
18	005	Western yellowjacket	<i>Vespula pennsylvanica</i>
19	000	General diseases	n / a
20	000	Biotic damage	n / a
20	001	Damping off	<i>n/a</i>
20	002	Gray mold	<i>Botrytis cinerea</i>
21	000	Root / butt diseases	n / a
21	001	Armillaria root disease	<i>Armillaria spp.</i>
21	004	Brown crumbly rot	<i>Fomitopsis pinicola</i>
21	007	White mottled rot	<i>Ganoderma applanatum</i>
21	008	Ganoderma rot of hardwoods	<i>Ganoderma lucidum</i>
21	009	Ganoderma rot of conifers	<i>Ganoderma tsugae</i>
21	010	Annosus root disease	<i>Heterobasidion annosum</i>
21	012	Tomentosus root disease	<i>Inonotus tomentosus</i>

Category	Agent	Common Name	Scientific Name
21	013	Charcoal root rot	<i>Macrophomina phaseolina</i>
21	014	Black stain root disease	<i>Ophiostoma wagneri</i>
21	015	Schweinitzii butt rot	<i>Phaeolus schweinitzii</i>
21	018	Phytophthora root rot	<i>Phytophthora cinnamomi</i>
21	022	Pythium root rot	<i>Pythium spp.</i>
21	024	Crown gall	<i>Agrobacterium tumefaciens</i>
21	027	Brown cubical rot	<i>Laetiporus sulphureus</i>
22	000	Stem decays/cankers	n/a
22	006	Black knot of cherry	<i>Apiosporina morbosa</i>
22	007	Atropellis canker	<i>Atropellis piniphila</i>
22	012	Black canker of aspen	<i>Ceratocystis fimbriata</i>
22	025	Cryptosphaeria canker of aspen	<i>Cryptosphaeria populina</i>
22	026	Cytospora canker of fir	<i>Cytospora abietis</i>
22	028	Rust-red stringy rot	<i>Echinodontium tinctorium</i>
22	029	Sooty-bark canker	<i>Encoelia pruinosa</i>
22	034	Scleroderris canker	<i>Gremmeniella abietina</i>
22	035	Amelanchier rust	<i>Gymnosporangium harknessianum</i>
22	036	Cedar apple rust	<i>Gymnosporangium juniper-virginianae</i>
22	038	Hypoxylon canker of aspen	<i>Hypoxylon mammatum</i>
22	047	Red ring rot	<i>Phellinus pini</i>
22	048	Aspen trunk rot	<i>Phellinus tremulae</i>
22	057	Cytospora canker of aspen	<i>Cytospora chrysosperma</i>
22	058	Dothichiza canker	<i>Dothichiza populae</i>
22	059	Red belt fungus	<i>Fomitopsis pinicola</i>

Category	Agent	Common Name	Scientific Name
22	060	Leucocytospora canker of spruce	<i>Leucocytospora kunzei</i>
22	061	Sooty bark canker	<i>Phialis singular</i>
22	064	Tinder fungus	<i>Fomes formntarius</i>
22	066	Pinyon black stain	<i>Leptographium wagnerii</i>
22	068	False tinder fungus	<i>Phellinus igniarius</i>
22	071	Oyster mushroom	<i>Pleurotus ostreatus</i>
22	074	Cedar brown pocket rot	<i>Poria serceomollis</i>
22	075	Lachnellula canker	<i>Lachnellula flavovirens</i>
22	076	Strumella canker	<i>Strumella coryneoidea</i>
22	077	Phomopsis blight	<i>Phomopsis juniperovora</i>
22	078	Fusarium canker of yellow poplar	<i>Fusarium solani</i>
22	079	Sterile conk of maple and beech	<i>Inonotus glomeratus</i>
22	080	Canker of spruce	<i>Aleurodiscus spp.</i>
22	081	Birch conk	<i>Piptoporus betulinusai</i>
22	082	Canker	<i>Discocainia treleasei</i>
23	000	Parasitic	Epiphytic plants
23	005	White fir dwarf mistletoe	<i>Arceuthobium abietinum f. sp. Concoloris</i>
23	006	Lodgepole pine dwarf mistletoe	<i>Arceuthobium americanum</i>
23	008	Western dwarf mistletoe	<i>Arceuthobium compylopodum</i>
23	009	Limber pine dwarf mistletoe	<i>Arceuthobium cyanocarpum</i>
23	010	Pinyon dwarf mistletoe	<i>Arceuthobium divaricatum</i>
23	011	Douglas-fir dwarf mistletoe	<i>Arceuthobium douglasii</i>
23	013	Larch dwarf mistletoe	<i>Arceuthobium laricis</i>
23	017	Southwestern dwarf mistletoe	<i>Arceuthobium vaginatum subsp. Cryptopodum</i>

Category	Agent	Common Name	Scientific Name
23	021	Red fir dwarf mistletoe	<i>Arceuthobium abietinum f. sp. Pauciflorum</i>
23	022	Juniper true mistletoe	<i>Phoradendron junipeum</i>
24	000	Decline complexes / dieback / wilts	n / a
24	004	Ash decline/yellows	<i>n/a</i>
24	011	Larch decline	<i>n/a</i>
24	017	True fir pest complex	<i>n/a</i>
24	018	Western X disease	<i>n/a</i>
24	019	Pinewood nematode	<i>Bursaphelenchus xylophilus</i>
24	030	Elm phloem necrosis	<i>Mycoplasma</i>
25	000	Foliage diseases	n / a
25	009	True fir needlecast	<i>n/a</i>
25	011	Cercospora blight of juniper	<i>Cercospora sequoia</i>
25	014	Ink spot of aspen	<i>Ciborinia whetzellii</i>
25	015	Pine needle rust	<i>Coleosporium spp.</i>
25	022	Elytroderma disease	<i>Elytroderma deformans</i>
25	027	Brown felt blight	<i>Herpotrichia juniper</i>
25	029	Hardwood anthracnose	<i>Kabatiella apocrypta</i>
25	031	Spruce needle cast	<i>Lirula macrospora</i>
25	033	White pine needle cast	<i>Lophodermella arcuata</i>
25	034	Lophodermella needle cast	<i>Lophodermella spp.</i>
25	035	Lophodermium needle cast	<i>Lophodermium spp.</i>
25	036	Marssonina blight	<i>Marssonina populi</i>
25	037	Melampsora rusts	<i>Melampsora medusa</i>
25	039	Larch needle cast	<i>Meria laricis</i>

Category	Agent	Common Name	Scientific Name
25	040	Dothistroma needle blight	<i>Mycosphaerella pini</i>
25	041	Brown felt blight of pines	<i>Neopeckia coulteri</i>
25	042	Snow blight	<i>Phacidum abietis</i>
25	050	Douglas-fir needle cast	<i>Rhabdocline spp.</i>
25	055	Septoria leaf spot	<i>Septoria alnifolia</i>
25	056	Septoria leaf spot and canker	<i>Septoria musiva</i>
25	057	Sirococcus tip blight	<i>Sirococcus conigenus</i>
25	058	Diplodia blight	<i>Sphaeropsis sapinea</i>
25	059	Leaf blister of oak	<i>Taphrina caerulescens</i>
25	060	Venturia leaf blight of maple	<i>Venturia acerina</i>
25	061	Shepherd's crook	<i>Venturia tremulae</i>
25	062	Dothistroma needle blight	<i>Dothistroma septospora</i>
25	064	Broom rust	<i>Chrysomyxa arctostaphyli</i>
25	065	Spruce needle rust	<i>Lophodermium picea</i>
25	067	Spruce needle cast	<i>Lophodermium picea</i>
25	068	Hardwood leaf rust	<i>Rhizosphaera pini</i>
25	071	Spruce needle cast	<i>Rhizosphaera pini</i>
25	073	Shepards crook	<i>Ventirua populina</i>
25	074	Delphinella shoot blight	<i>Delphinella abietis</i>
25	075	Tar spot	<i>Rhytisma acerinum</i>
26	000	Stem rusts	n/a
26	001	White pine blister rust	<i>Cronartium ribicola</i>
26	002	Western gall rust	<i>Peridermium harknessii</i>
26	003	Stalactiform blister rust	<i>Cronartium coleosporioides</i>
26	004	Comandra blister rust	<i>Cronartium comandrae</i>

Category	Agent	Common Name	Scientific Name
26	005	Pinyon blister rust	<i>Cronartium occidentale</i>
26	011	Bethuli rust	<i>Peridermium bethuli</i>
26	012	Limb rust	<i>Peridermium filamentosum</i>
26	013	Southern cone rust	<i>Cronartium strobilinum</i>
27	000	Broom rusts	n / a
27	001	Spruce broom rust	<i>Chrysomyxa arctostaphyll</i>
27	002	Incense cedar broom rust	<i>Gymnosporangium libocedri</i>
27	003	Juniper broom rust	<i>Gymnosporangium nidus-avis</i>
27	004	Fir broom rust	<i>Melampsorella caryophyllacearum</i>
30	000	Fire	n / a
30	031	Wild-fire	<i>n/a</i>
30	032	Human caused fire	<i>n/a</i>
30	033	Crown fire damage	<i>n/a</i>
30	034	Ground fire damage	<i>n/a</i>
40	000	Animal damage, source unknown	n / a
41	000	Wild animals	n / a
41	001	Bear	<i>n/a</i>
41	002	Beaver	<i>n/a</i>
41	003	Big game (deer)	<i>n/a</i>
41	004	Mice or voles	<i>n/a</i>
41	005	Pocket gophers	<i>n/a</i>
41	006	Porcupines	<i>n/a</i>
41	007	Rabbits or hares	<i>n/a</i>
41	008	Sapsucker	<i>n/a</i>

Category	Agent	Common Name	Scientific Name
41	009	Squirrels	<i>n/a</i>
41	010	Woodpeckers	<i>n/a</i>
41	011	Moose	<i>n/a</i>
41	012	Elk	<i>n/a</i>
41	013	Deer	<i>n/a</i>
41	014	Feral pigs	<i>n/a</i>
41	015	Mountain beaver	<i>n/a</i>
41	016	Deer or elk	<i>n/a</i>
41	017	Earthworm	<i>Lumbricidae</i>
42	000	Domestic animals	n / a
42	001	Cattle	<i>n/a</i>
42	002	Goats	<i>n/a</i>
42	003	Horses	<i>n/a</i>
42	004	Sheep	<i>n/a</i>
50	000	Abiotic damage	n / a
50	001	Air pollutants	<i>n/a</i>
50	002	Chemical	<i>n/a</i>
50	003	Drought	<i>n/a</i>
50	004	Flooding/high water	<i>n/a</i>
50	005	Frost	<i>n/a</i>
50	006	Hail	<i>n/a</i>
50	007	Heat	<i>n/a</i>
50	008	Lightning	<i>n/a</i>
50	009	Nutrient imbalances	<i>n/a</i>
50	010	Radiation	<i>n/a</i>

Category	Agent	Common Name	Scientific Name
50	011	Snow/ice	<i>n/a</i>
50	013	Wind-tornado	<i>n/a</i>
50	014	Winter injury	<i>n/a</i>
50	015	Avalanche	<i>n/a</i>
50	016	Mud-land slide	<i>n/a</i>
50	017	Volcano	<i>n/a</i>
50	018	Other geologic events	<i>n/a</i>
50	019	Mechanical (non-human caused)	<i>n/a</i>
60	000	Competition	n / a
70	000	Human activities	n / a
70	001	Herbicides	<i>n/a</i>
70	003	Imbedded objects	<i>n/a</i>
70	004	Improper planting technique	<i>n/a</i>
70	005	Land clearing	<i>n/a</i>
70	006	Land use conversion	<i>n/a</i>
70	007	Logging damage	<i>n/a</i>
70	008	Mechanical	<i>n/a</i>
70	009	Pesticides	<i>n/a</i>
70	010	Roads	<i>n/a</i>
70	011	Soil compaction	<i>n/a</i>
70	012	Suppression	<i>n/a</i>
70	013	Vehicle damage	<i>n/a</i>
70	014	Road salt	<i>n/a</i>
71	000	Harvest	n / a
80	000	Multi-damage (insect / disease)	n / a

Category	Agent	Common Name	Scientific Name
80	001	Aspen defoliation	<i>n/a</i>
80	002	Subalpine fir mortality	<i>n/a</i>
80	004	Pinion pine decline	<i>n/a</i>
90	000	Unknown	n / a
99	000	Physical effects	n / a
99	001	Broken or top missing	<i>n/a</i>
99	002	Dead top	<i>n/a</i>
99	003	Limby (large limbs top to ground)	<i>n/a</i>
99	004	Forked top	<i>n/a</i>
99	005	Forked below merch top	<i>n/a</i>
99	006	Crook or sweep	<i>n/a</i>
99	007	Checks, bole cracks	<i>n/a</i>
99	008	Foliage discoloration	<i>n/a</i>
99	009	Mortality (for plantation surveys only)	<i>n/a</i>
99	010	Lack of seed source or dieback (for plantation surveys only)	<i>n/a</i>
99	011	Poor planting stock (for plantation surveys only)	<i>n/a</i>
99	012	Poor growth/fading/foliage is yellowing and loss of needles is occurring	<i>n/a</i>
99	013	Total board foot volume loss	<i>n/a</i>
99	014	Total cubic foot volume loss	<i>n/a</i>
99	015	Bark removal	<i>n/a</i>
99	016	Foliage loss	<i>n/a</i>
99	017	Sunscauld	<i>n/a</i>
99	018	Uproot	<i>n/a</i>

Category	Agent	Common Name	Scientific Name
99	019	Scorched foliage	<i>n/a</i>
99	020	Scorched bark	<i>n/a</i>
99	021	Dieback (for plantation surveys only)	<i>n/a</i>
99	022	Poor crown form	<i>n/a</i>
99	023	Severe forking	<i>n/a</i>
99	026	Open wound	<i>n/a</i>
99	031	Broken or dead branches	<i>n/a</i>
99	033	Damaged shoots, buds, or foliage (for plantation surveys only)	<i>n/a</i>
99	034	Excessively deformed sapling	<i>n/a</i>
99	036	Fire scar	<i>n/a</i>
99	037	Leaning tree	<i>>15% and self-supporting</i>
99	038	Charred bark	<i>Not recorded unless cambium is killed from heating</i>

DAMAGE SEVERITY RATINGS

Table 81: Damage severity rating codes

Category	Severity	Description
10	n / a	General insects
10	1	Minor: bottlebrush or shortened leaders, 0-2 forks on stem, OR <20% of branches affected, OR <50% of bole with visible larval galleries
10	2	Severe: 3 or more forks on bole, OR 20% or more branches affected, OR terminal leader dead, OR 50% or more of bole with visible larval galleries
11	n / a	Bark beetles

Category	Severity	Description
11	1	Unsuccessful bole attack: pitchout and beetle brood absent
11	2	Strip attacks: galleries and brood present
11	3	Successful current bole attack
11	4	Topkill
11	5	Successful attack last year
11	6	Older dead
12	n / a	Defoliators
12	1	Light defoliation (1-25%), no topkill
12	2	Light defoliation (1-25%), topkill $\leq 10\%$
12	3	Light defoliation (1-25%), topkill $> 10\%$
12	4	Moderate defoliation (26-75%), no topkill
12	5	Moderate defoliation (26-75%), topkill $\leq 10\%$
12	6	Moderate defoliation (26-75%), topkill $> 10\%$
12	7	Heavy defoliation (76-100%), no topkill
12	8	Heavy defoliation (76-100%), topkill $\leq 10\%$
12	9	Heavy defoliation (76-100%), topkill $> 10\%$
13	n / a	Chewing insects
13	1	Minor: bottlebrush or shortened leaders, 0-2 forks on stem, OR $< 20\%$ of branches affected
13	2	Severe: 3 or more forks on bole, OR 20% or more branches affected, OR terminal leader dead
14	n / a	Sucking insects
14	1	Minor: bottlebrush or shortened leaders, 0-2 forks on stem, OR $< 20\%$ of branches affected
14	2	Severe: 3 or more forks on bole, OR 20% or more branches affected, OR terminal leader dead

Category	Severity	Description
15	n / a	Boring insects
15	1	Minor: bottlebrush or shortened leaders, 0-2 forks on stem, OR <20% of branches affected
15	2	Severe: 3 or more forks on bole, OR 20% or more branches affected, OR terminal leader dead
16	n / a	Seed / cone / flower / fruit insects
16	1	Minor
16	2	Severe
17	n / a	Gallmaker insects
17	1	Minor
17	2	Severe
18	n / a	Insect predators
18	1	Minor
18	2	Severe
19	n / a	General diseases
19	1	Minor
19	2	Severe
20	n / a	Biotic damage
20	1	Minor
20	2	Severe
21	n / a	Root / butt diseases
21	1	(for individual trees) Tree within 30 feet of tree with deteriorating crown, tree with diagnostic symptoms or signs, or tree killed by root disease
21	2	(for individual trees) Pathogen (sign) or diagnostic symptom detected – no crown deterioration

Category	Severity	Description
21	3	(for individual trees) Crown deterioration detected – no diagnostic symptom or signs
21	4	(for individual trees) Both crown deterioration and diagnostic signs symptoms detected
21	5	(for individual trees) Bleeding present on bole
21	6	(for individual trees) Bleeding present on bole and adjacent mortality present
21	7	(for individual trees) Laboratory confirmed Sudden Oak Death
21	G2	(for setting level) Minor evidence of RDS on plot
21	G3	(for setting level) RDS present, canopy reduction less than 20%
21	G4	(for setting level) RDS present, canopy reduction 20-30%
21	G5	(for setting level) RDS present, canopy reduction 30-50%
21	G6	(for setting level) RDS present, canopy reduction 50-75%, most ground area infested
21	G7	(for setting level) RDS present, 76+ % canopy reduction
21	G8	(for setting level) Entire area infested with RDS, one or very few susceptible overstory trees
21	G9	(for setting level) Entire area infested with RDA, no susceptible overstory trees present
22	n / a	Stem decay/canker
22	0	0-4% rotten
22	1	5-15% rotten
22	2	16-25% rotten
22	3	26-35% rotten
22	4	36-45% rotten
22	5	46-55% rotten

Category	Severity	Description
22	6	56-65% rotten
22	7	66-75% rotten
22	8	76-85% rotten
22	9	86-100% rotten
23	n / a	Parasitic / epiphytic plants
23	1	Hawksworth tree DMR rating = 1; light infection
23	2	Hawksworth tree DMR rating = 2; light infection
23	3	Hawksworth tree DMR rating = 3; medium infection
23	4	Hawksworth tree DMR rating = 4; medium infection
23	5	Hawksworth tree DMR rating = 5; heavy infection
23	6	Hawksworth tree DMR rating = 6; heavy infection
23	7	Vine damage: less than 50% of crown involved
23	8	Vine damage: 50% or more of crown involved
24	n / a	Decline complexes / diebacks / wilts
24	1	Minor: minor crown symptoms
24	2	Severe: severe crown symptoms
25	n / a	Foliage diseases
25	1	Minor: <20% of foliage affected or <20% of crown in brooms
25	2	Severe: >20% of foliage affected or >20% of crown in brooms
26	n / a	Rust Stems
26	1	Branch infections located greater than 2 feet from tree bole

Category	Severity	Description
26	2	Branch infections located between 6 inches and 2 feet from tree bole
26	3	Bole infections or branch infections located within 6 inches of bole
26	4	Topkill
27	n / a	Broom rusts
27	1	Minor: <20% of crown in brooms
27	2	Severe: >20% of crown in brooms
30	n / a	Fire
30	1	Minor: <20% of crown affected
30	2	Severe: >20% of crown affected or any damage to the bole
40	n / a	Animal damage, source unknown
40	1	Minor
40	2	Severe
41	n / a	Wild animals
41	1	Minor: <20% of crown affected, bole damage is <50% circumference
41	2	Severe: >20% of crown affected, bole damage is >50% circumference, upper 1/3 of crown is killed
41	5	Earthworms are present
41	6	Earthworms are absent
50	n / a	Abiotic damage
50	1	Minor: <20% of crown affected, bole damage is <50% circumference
50	2	Severe: >20% of crown affected, bole damage is >50% circumference, upper 1/3 of crown is killed

Category	Severity	Description
60	n / a	Competition
60	1	Minor: tree slightly deformed and has some lie, terminal growth
60	2	Severe: tree extremely deformed or has no live terminal, growth severely reduced relative to neighbors
70	n / a	Human activities
70	1	Minor
70	2	Severe
71	n / a	Harvest
71	1	Minor
71	2	Severe
80	n / a	Multi-damage (insect / disease)
80	1	Minor
80	2	Severe
90	n / a	Unknown
90	0	0 – 9% affected
90	1	10 – 19% affected
90	2	20 – 29% affected
90	3	30 – 39% affected
90	4	40 – 49% affected
90	5	50 – 59% affected
90	6	60 – 69% affected
90	7	70 – 79% affected
90	8	80 – 89% affected
90	9	90 – 100% affected

Category	Severity	Description
99	n / a	Physical effects
99	001	Broken top
99	002	Dead top

Table 82: Category 99 damage severity rating codes

Category	Severity	Description	Actual percent of tree affected
99	n / a	Physical effects	n / a
99	001	Broken top	% of original height that is missing; for example, if a tree was originally 100 feet high, but 15 feet of the top is broken or missing; enter "15" in the severity code
99	002	Dead top	% of total tree height that is dead
99	003	Limby (large limbs top to bottom)	% of total tree height with many limbs/knots
99	004	Forked top	% of total tree height above fork
99	005	Forked below merch top	% of the total length of the bole affected
99	006	Crook or sweep	% of total tree height, which contains the crook or sweep
99	007	Checks, bole cracks	% of total tree height, which contains a crack or check
99	008	Foliage discoloration	% of foliage discolored
99	009	Mortality	1 = dead tree
99	010	Lack of seed source	If present, 100%
99	011	Poor planting stock source	If present, 100%
99	012	Poor growth	1 = minor (reduced growth); 2 = severe (affecting survival)
99	013	Total board foot volume loss	%of total board foot volume loss

Category	Severity	Description	Actual percent of tree affected
99	014	Total cubic foot volume loss	% of total cubic foot volume loss
99	015	Bark removal	% of tree circumference missing bark
99	016	Foliage loss	1 = minor; 2 = severe
99	017	Sunscald	1 = minor; 2 = severe
99	018	Uproot	1 = uprooted
99	019	Scorched foliage	% of foliage scorched
99	020	Scorched bark	% of bark scorched
99	021	Dieback source	1 = minor; 2 = severe
99	022	Poor crown form	1 = minor; 2 = severe
99	023	Severe forking	% of bole with forks
99	026	Open wound	% of bole or trunk affected using the height and width of the wound; for example, if a tree is 100 feet tall and the wound covers 15 feet of the bole, enter a value of "15"
99	031	Broken or dead branches	% of branches broken or dead
99	033	Damage shoots, buds, or foliage source	1 = minor; 2 = severe
99	034	Excessively deformed sapling	% of sapling deformed
99	036	Fire scar	% of bole covered by fire scar
99	037	Leaning tree	% lean from vertical
99	038	Charred bark	Not recorded unless cambium is killed from heating

TREE PARTS

Table 83: Tree part codes

Code	Description
UN	Unspecified
TO	Top
FO	Foliar (crown)
LI	Limb
BO	Bole, other than Top or Base
BA	Base
RO	Roots
WT	Whole tree
TT	Top third of crown
MT	Middle third of crown
BT	Bottom third of crown

APPENDIX L: ACCURACY STANDARDS

Table 84: Settings Measurements

Field	Tolerance
Project Name	No errors
Region	No errors
Proclaimed Forest	No errors
District	No errors
Location	No errors
Stand Number	No errors
Ownership	No errors

Field	Tolerance
State	No errors
County	No errors
Administrative Forest	No errors
Date	No errors
Photo ID	No errors
Exam Level	No errors
Exam Purpose	No errors
Stratum	No errors
Existing Vegetation Composition Type	No errors
Potential Vegetation Reference	No errors
Potential Vegetation	No errors
Structure	No errors
Capable Growing Area	± 10 percent
Fuel Model	No errors
Elevation	± 2 contour intervals
Aspect	± 45 degrees
Slope	± 10 percent
Slope Position	± 1 class
Acres	No errors
Radial Growth Interval	No errors
Radial Growth Interval #2	No errors
Height Growth Interval	No errors
Fuel Photo Reference	No errors
Precision Protocol	No errors
Examiner	No errors

Field	Tolerance
Stand Remarks	No errors
Damage Category	No errors
Damage Agent	No errors
Damage Severity	No errors
Species of Management Interest	No errors
Sketch Map and Traverse Notes	n/a

Table 85: Sample Design Criteria

Field	Tolerance
Form Type	n/a
Selection Method Type	No errors
Sample Expansion Factor	No errors
Plots Installed	No errors
Sub-population Filter	No errors
Starting Azimuth	No errors
Sample Design Remarks	No errors
Selection Criteria Number	No errors
Sub-pop Variable	No errors
Sub-pop Minimum Value	No errors
Sub-pop Maximum Value	No errors

Table 86: Plot Data

Field	Tolerance
Plot Number	No errors
Plot Latitude	No errors
Plot Longitude	No errors

Field	Tolerance
Capable Grow Area	± 10 percent
Plot Aspect	± 45
Plot Scope	± 10 percent
Slope Position	± 1 class
Slope Horizontal Shape	± 1 class
Slope Vertical Shape	± 1 class
Plot Elevation	± 2 contour intervals
Existing Vegetation	No errors
Potential Vegetation	Accurate to series understory union and phases
Plot History	No errors
Plot History Date	Year required in field 12 is other than code 10 or blank
Fuel Model	No errors
Residual Descriptive Code	No errors
Distance to Seed Wall	± 100 feet
Plot Remarks	n/a

Table 87: Tree Data

Field	Tolerance
Plot Number	No errors
Tag ID Number	No errors
Tree Status	No errors allowed in recognizing and coding down trees
Site/Growth Trees	No errors
Tree Species	No errors
Tree Count	See specifics in Table 88

Field	Tolerance
Number Stems	No errors
DBH/DRC Intensive Exam	See specifics in Table 89
DBH/DRC Extensive Exam	See specifics in Table 90
DBH/DRC Quick Exam	See specifics in Table 91
Height	10 percent
Height to Crown	10 percent
Radial Growth	1/20 th inch
Radial Growth #2	1/20 th inch
Height Growth	See specifics in Table 92
Tree Age	10 percent (based on actual tree ring count at breast height for trees ≥ 3.0" DBH otherwise based on total age recorded)
Crown Ratio	10 percent
Crown Class	No errors
Crown Width	No errors
Wildlife Use	No errors
Log/Snag Decay	No errors
Cone Serenity	No errors
Damage Category	No errors, specifics listed in Table 93
Damage Agent	No errors
Damage Part	No errors
Damage Severity	No errors
Tree Remarks	n/a

Table 88: Tree Data, Tree Count

Height Range	Diameter Range	Trees on Point	Tolerance
*All	All	0	0 trees
≤ 0.5 feet	All	1-5	± 2 trees
≤ 0.5 feet	All	6+	± 50 percent
> 0.5 feet	< 0.5 in.	1-5	± 1 tree
> 0.5 feet	< 0.5 in.	6+	± 20 percent
All	.5" – breakpoint DBH	1-5	± 1 tree
All	.5" – breakpoint DBH	6+	± 10 percent
All	Breakpoint DBH +	1+	0 trees

* There is no tolerance for recording a tree when none are actually present in any of the above size classes. The recording of a fixed plot tree when none are present will result in a single discrepancy. The recording of a variable plot tree when none are present will result in an unacceptable unit.

Group criteria are standardized to facilitate stand exam contract inspection and payment. However, distinguishing characteristics other than tree class, species, and size class may warrant individual tree recording or more refined grouping criteria. Such characteristics include: age, crown ratio, crown class, or incident of damage.

Table 89: Tree Data, DBH/DRC Intensive Exam

Tolerance	Diameter
No errors	<.5 inch
± .1 inch	.5 inch – 13.9 inches
± .2 inch	14.0 inches – 23.9 inches
± .3 inch	24.0 inches – 34.9 inches
± .5 inch	35.0 inches +
± .1 inch	Borderline variable plot trees
± .1 inch	Estimated DRC

Table 90: Tree Data, DBH/DRC Extensive Exam

Tolerance	Diameter
± 1 inch	≤ 20 inches
± 5% of diameter	> 20 inches

Table 91: Tree Data, DBH/DRC Quick Exam

Tolerance	Diameter
± 2 inches	≤ 20 inches
± 10% of diameter	> 20 inches

Table 92: Tree Data, Height Growth

Tolerance	Diameter
± 1 foot	Trees > 6 feet
± 0.1 foot	Trees ≤ 6 feet

Table 93: Tree Data, Damage Category

Damage Category	Damage Category Description	Tolerance
11	Bark Beetles	No misses on live trees with a severity of 2 or greater
12	Defoliators	No misses on live trees with a severity of 3 or greater
13-17	Other Insects	No misses of shoot moths or weevils on live trees
21	Root/Butt Diseases	No misses on live trees with a severity of 2 or greater
22	Stem Decays/Cankers	No misses on live trees with a severity of 3 or greater
25	Foliage Diseases	No misses on Elytroderma on live trees

Damage Category	Damage Category Description	Tolerance
41-42	Animal Damage	No misses on live trees with terminal leader damage or with greater than $\frac{1}{4}$ of bole circumference affected
50	Abiotic Damage	No misses on wind, snow, or ice bending, breakage, or bole cracks and frost damage to shoots on trees less than 1-inch diameter and lightning
70	Human Damage	No misses on live trees for logging damage or fire if the damage affects greater than $\frac{1}{4}$ of the bole circumference or if an open wound is in contact with the ground

Table 94: Ground Surface Cover

Field	Tolerance
Plot Number	No errors
Cover Type	No errors
Cover Percent	$\pm$ 10 percent

Table 95: Vegetation Composition

Field	Tolerance
Plot Number	No errors
Live/Dead	No errors
Layer	No errors
Life form	No errors
Species	No error in species-level identification for dominant, common, or community type indicator plants; no plant name can be repeated within a layer
Minimum Height	$\pm$ 10 percent of height

Field	Tolerance
Average Height	± 10 percent of height
Maximum Height	± 10 percent of height
Canopy Cover	± 10 percent
Average Diameter	No errors
Maturity	No errors
Cover Remarks	n/a
User Field	n/a

Table 96: Down Woody

Field	Tolerance
Plot Number	No errors
First Duff	± ½ inch
Second Duff	± ½ inch
Fuel Depth	No errors
Twigs 0 – .24	± 40 percent
Twigs .25 - .99	± 30 percent
Twigs 1.0 – 2.99	± 20 percent
Volume 1	n/a
Weight 1	n/a
Volume 2	n/a
Weight 2	n/a
Volume 3	n/a
Weight 3	n/a
Volume 4	n/a
Weight 4	n/a
Piece Count	No missed pieces

Field	Tolerance
Decay Class	No errors
Diameter	± 1 inch on measurements
Piece Length	No errors

APPENDIX M: GLOSSARY OF TERMS

Table 97: Glossary

Term	Definition
Aspect	A position facing or commanding a given direction; exposure. Aspect is the compass direction of the prevailing slope with respect to true north.
Azimuth	A horizontal angular measure from true north to an object of interest.
Basal Area	The cross-sectional area of the stem or stems of a plant or of all plants in a stand; generally expressed as square units per unit area. For trees, measured at 4.5 feet above ground; forbs and grasses are measure at the root crown
Bole Length	The straight-line distance measured parallel to the main bole of a tree, from its base to its tip.
Breast Height	A point located on the uphill side of the main stem, by measuring 4.5 feet along the uphill side of the bole from ground level or the predominant root collar. Preclude slight, non-compacted litter accumulations when establishing breast height.
CALVEG	Classification and Assessment with LANDSAT of Visible Ecological Groupings. It is a California-wide system for classifying vegetative and non-vegetative cover types. The primary cover type relates to life form and uses a 3-character alpha code.
Canopy Cover	The percent of a fixed area covered by the crown of an individual plant species or delimited by the vertical projection of its outermost perimeter; small openings in the crown are included.

Term	Definition
Compacted Live Crown Ratio	The percent of the total height of the tree that supports a full, live crown. For trees that have uneven length crowns, occularly transfer lower branches to fill holes in the upper portions of the crown, until a full, even crown is created.
Compartment	A land area, usually between 3,000 and 8,000 acres, easily identified on the ground by physical features. A compartment tis comparable in size to a sub-watershed, or landscape management unit. It is used as a convenience for maintaining stand records and planning vegetation management projects.
Crown Class	The relative position of the tree or shrub crown with respect to the competing vegetation around it. Crown class for each tree or shrub is judged in the context of its immediate environment, that is those trees or shrubs which are competing for sunlight with the subject tree or shrub.
Crown Length	The vertical distance from the top of the leader to the base of the crown, measured to the lowest live branch-whorl with live branches in at least three quadrants, and continuous with the main crown.
Crown Ratio	The ratio of compacted live crown length to bole length. Lengths are measured parallel to the bole from the base of the tree to the tip.
DEM	Digital Elevation Model. USGS geographic elevation data distributed in raster form. Digital representation of the shape of the earth's surface. Typically, digital elevation data consists of arrays of values that represent topographic elevations measured at equal intervals on the Earth's surface.
Diameter	The length of a straight-line segment passing through the center of an item and terminating at its periphery.
Diameter at Breast Height (DBH)	A measure at breast height (4.5 feet), outside bark, of the tree bole, perpendicular to the tree bole.
Diameter at Root Collar (DRC)	The straight line passing through the center of a cross section of a bole measured at the root collar of a shrub or tree.
Down Log	Stem material (conifer or hardwood) that is lying on the ground. If a stem material is leaning more than 45 degrees from vertical, is not self-supporting, and/or in contact with the ground, it is considered a down log.

Term	Definition
Down Woody Material	Woody pieces of trees and shrubs that have been uprooted (no longer supporting growth) or severed from their root system, not self-supporting, and are lying on the ground.
Duff Layer	Duff is the fermentation and humus layer of the forest floor. It does not include the freshly cast material in the litter layer. The top of the duff is where needles, leaves, and other cast-off vegetative material have noticeably begun to decompose. Individual particles usually will be bound by fungi mycelium. When moss is present, the top of the duff is just below the green portion of the moss. The bottom of the duff is the start of the soil ("A" horizon).
Elevation	Vertical distance from a datum, usually mean sea level, to a point or object on the earth's surface. Not to be confused with altitude, this refers to points above the earth's surface.
Fuel Bed	The fuel bed is accumulation of dead, woody residue on the forest floor. It begins at the top of the duff layer and above. It includes litter, dead limb wood, and bole wood from tree species, as well as dead material from shrub, herbaceous, and grass species.
Fuel Model	Mathematical descriptions of fuel properties (e.g., fuel load and fuel depth) that are used as inputs to calculations of fire danger indices and fire behavior potential.
GPS	Global Positioning System. A network of radio-emitting satellites deployed by the U.S. Department of Defense. Ground-based GPS receivers can automatically derive accurate surface coordinates for all kinds of GIS, mapping, and surveying data collection.
Ground Level	The forest floor, made up by soil and duff layer. It does not include unincorporated woody debris that may rise above the ground line. In reference to a point of measure, it is the highest point of the ground touching the base of the object being referenced.
Group Tally	A count of one or more items of the same type or species and recorded as a single line entry.
Growth	A measure of the increase in growth layers for a specified time frame.
Height Growth	The increase in height over a set period of time.

Term	Definition
Intersect Diameter	Measurement of diameter at a point where the sampling plane intersects the geometric center of the object being tallied. No adjustment is made for stem irregularities at the point of intersection.
Lean (Tree)	The deflection from vertical, > 15 degrees of a straight line passing through the geometric center of the base and top of the main stem.
Length	The measurement of the extent of something along its greatest dimension.
Life Form	Species and individuals that are grouped into classes on the basis of their similarities in structure and function. A growth form that displays an obvious relationship to important environmental factors.
Limiting Distance	A comparative measurement between the subplot radius and the distance from the subplot center to the center of the object. The comparison is used to determine whether the object is in or out of the fixed area subplot. The object is "IN" if the measured distance is equal to or less than the subplot radius. The object is "OUT" if the measured distance is greater than the subplot radius.
Live Crown Length	The straight-line distance measured parallel to the main bole of a tree, from the top of the live crown to the base of the live crown.
Ownership	The identification of the legal owner/administrator on both the surface and subsurface estates.
Plant Species	The major subdivision of a genus or subgenus of a plant being described or measured.
Plot Configuration	The size and shape of the sampling unit (plot) and the spatial arrangement of subplots within that unit.
Plot	A sub-sample of a plot or stand exam. This is the unit on which data are recorded to individual trees, snags, logs, understory vegetation, and fuels. Data can be collected on either a fixed area or variable radius area.
Proclaimed Forest	Units of the National Forest System as originally proclaimed or designated by Congress.
Quadratic Mean Diameter	The diameter of the tree of average basal area.

Term	Definition
Radial Growth Increment	The increase in tree radius over a period of time at breast height, or occasionally at the base.
Random Sample	Any method of sample selection based on the theory of probability (degree of certainty). At any stage of the operation of selection, the probability of any set of units being selected must be known. It is the only method that can provide a measure of precision of the estimate.
Reconciliation Code	A code used to reflect the status of an individually tallied item with regards to previous surveys.
Slope	A deviation from the horizontal.
Species	A code that represents a fundamental category of taxonomic classification of an organism.
Stand	A spatially continuous group of trees and associated vegetation having similar structures and growing under similar soil and climatic conditions.
Stand Exam Grid	Basic data collection method for stand exams. It consists of a set of plots, separated by equal distances on a grid pattern. The lines of the grid (transects) are oriented in cardinal directions. There is a predetermined distance between plots. The number of transects and grid plots will vary depending upon the size and shape of the stand.
Stratified Sample	A method of sampling forest resources where stands or polygons of similar properties are lumped into strata. This improves the efficiency of an inventory by reducing the variability within a given population. The less variability there is within a strata, the fewer samples will need to be taken to achieve a statistically valid result.
Stratum	A group of stands within a condition class; similar characteristics such as forest type, tree size class, and canopy density.
Stump	The woody base of a tree remaining in contact with the soil after the trunk or main stem has been severed at a point less than 4.5 feet above ground height (measured on the uphill side).
Tree	A woody perennial plant, typically large, with a single well-defined stem carrying a more or less definite crown.

Term	Definition
Tree Age	Total age of the above-ground stem of a tree (not age of the root stock or the total age from seed). Total age is usually the annual ring count to the pith of the tree at breast height plus an estimate of the number of years it took the tree to reach breast height.

APPENDIX N: FUEL MODELS

The original 13 fuel models are from “Aids to Determining Fuel Models for Estimating Fire Behavior,” Hal E. Anderson, INT-122, 1982. The remaining fuel models are from “Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model” by Joe H. Scott and Robert E. Burgan. RMRS – GTR-153. June 2005.

Table 98: Fuel Models

Fuel Model	Fuel Model Code	Fuel Model Name	Fuel Type	Model Set	Fuel 1-hr	Fuel 10-hr	Fuel 100-hr	Fuel Bed Depth
1	n/a	Short grass (1 foot)	Grass and grass-dominated	Original 13	0.74	0	0	1
2	n/a	Timber (grass and understory)	Grass and grass-dominated	Original 13	2	1	0.500	1
3	n/a	Tall grass (2.5 feet)	Grass and grass-dominated	Original 13	3.01	0	0	2.50
4	n/a	Chaparral (6 feet)	Chaparral and shrub fields	Original 13	5.01	4.010	2	6
5	n/a	Brush (2 feet)	Chaparral and shrub fields	Original 13	1	0.500	0	2
6	n/a	Dormant brush, hardwood slash	Chaparral and shrub fields	Original 13	1.50	2.500	2	2.50
7	n/a	Southern rough	Chaparral and shrub fields	Original 13	1.13	1.870	1.500	2.50

Fuel Model	Fuel Model Code	Fuel Model Name	Fuel Type	Model Set	Fuel 1-hr	Fuel 10-hr	Fuel 100-hr	Fuel Bed Depth
8	n/a	Closed timber litter	Timber litter	Original 13	1.50	1	2.500	0.20
9	n/a	Hardwood litter	Timber litter	Original 13	2.92	0.410	0.150	0.20
10	n/a	Timber (litter and understory)	Timber litter	Original 13	3.01	2	5.010	1
11	n/a	Light logging slash	Slash	Original 13	1.50	4.51	5.510	1
12	n/a	Medium logging slash	Slash	Original 13	4.01	14.03	16.53	2.30
13	n/a	Heavy logging slash	Slash	Original 13	7.01	23.04	28.05	3
91	NB1	Urban/ Developed	Non-burnable	Scott and Burgan	0	0	0	0
92	NB2	Snow/Ice	Non-burnable	Scott and Burgan	0	0	0	0
93	NB3	Agricultural	Non-burnable	Scott and Burgan	0	0	0	0
98	NB4	Open Water	Non-burnable	Scott and Burgan	0	0	0	0
99	NB5	Bare Ground	Non-burnable	Scott and Burgan	0	0	0	0
101	GR1	Short, Sparse Dry Climate Grass (Dynamic)	Grass	Scott and Burgan	0.10	0	0	0.40
102	GR2	Low Load, Dry Climate (Dynamic)	Grass	Scott and Burgan	0.10	0	0	1

Fuel Model	Fuel Model Code	Fuel Model Name	Fuel Type	Model Set	Fuel 1-hr	Fuel 10-hr	Fuel 100-hr	Fuel Bed Depth
103	GR3	Low Load, Very Coarse, Humid Climate Grass (Dynamic)	Grass	Scott and Burgan	0.10	0.40	0	2
104	GR4	Moderate Load, Dry Climate Grass (Dynamic)	Grass	Scott and Burgan	0.25	0	0	2
105	GR5	Low Load, Humid Climate Grass (Dynamic)	Grass	Scott and Burgan	0.40	0	0	1.50
106	GR6	Moderate Load, Humid Climate Grass (Dynamic)	Grass	Scott and Burgan	0.10	0	0	1.50
107	GR7	High Load, Dry Climate Grass (Dynamic)	Grass	Scott and Burgan	1	0	0	3
108	GR8	High Load, Very Coarse, Humid Climate Grass (Dynamic)	Grass	Scott and Burgan	0.50	1	0	4
109	GR9	Very High Load, Humid Climate Grass (Dynamic)	Grass	Scott and Burgan	1	1	0	5
121	GS1	Low Load, Dry Climate Grass-Shrub (Dynamic)	Grass-Shrub	Scott and Burgan	0.20	0	0	0.90
122	GS2	Moderate load, Dry Climate Grass-Shrub (Dynamic)	Grass-Shrub	Scott and Burgan	0.50	0.500	0	1.50
123	GS3	Moderate Load, Humid Climate Grass-Shrub (Dynamic)	Grass-Shrub	Scott and Burgan	0.30	0.250	0	1.80

Fuel Model	Fuel Model Code	Fuel Model Name	Fuel Type	Model Set	Fuel 1-hr	Fuel 10-hr	Fuel 100-hr	Fuel Bed Depth
124	GS4	High Load, Humid Climate Grass-Shrub (Dynamic)	Grass-Shrub	Scott and Burgan	1.90	0.300	0.100	2.10
141	SH1	Low Load, Dry Climate Shrub (Dynamic)	Shrub	Scott and Burgan	0.25	0.250	0	1
142	SH2	Moderate Load, Dry Climate Shrub	Shrub	Scott and Burgan	1.35	2.400	0.750	1
143	SH3	Moderate Load, Humid Climate Shrub	Shrub	Scott and Burgan	0.45	3	0	2.40
144	SH4	Low Load, Humid Climate Timber-Shrub	Shrub	Scott and Burgan	0.85	1.150	0.200	3
145	SH5	High Load, Dry Climate Shrub	Shrub	Scott and Burgan	3.60	2.100	0	6
146	SH6	Low Load, Humid Climate Shrub	Shrub	Scott and Burgan	2.90	1.450	0	2
147	SH7	Very High Load, Dry Climate Shrub	Shrub	Scott and Burgan	3.5	5.300	2.200	6
148	SH8	High Load, Humid Climate Shrub	Shrub	Scott and Burgan	2.05	3.400	0.850	3
149	SH9	Very High Load, Humid Climate Shrub (Dynamic)	Shrub	Scott and Burgan	4.50	2.450	0	4.40
161	TU1	Low Load, Dry Climate Timber-Grass-Shrub (Dynamic)	Timber - Understory	Scott and Burgan	0.20	0.900	1.500	0.60

Fuel Model	Fuel Model Code	Fuel Model Name	Fuel Type	Model Set	Fuel 1-hr	Fuel 10-hr	Fuel 100-hr	Fuel Bed Depth
162	TU2	Moderate Load, Humid Climate Timber-Grass-Shrub (Dynamic)	Timber - Understory	Scott and Burgan	0.95	1.800	1.250	1
163	TU3	Moderate Load, Humid Climate Timber-Grass-Shrub (Dynamic)	Timber – Understory	Scott and Burgan	1.10	0.150	0.250	1.30
164	TU4	Dwarf Conifer with Understory	Timber – Understory	Scott and Burgan	4.50	0	0	0.50
165	TU5	Very High Load, Dry Climate Timber-Shrub	Timber – Understory	Scott and Burgan	4	4	3	1
181	TL1	Low Load Compact Conifer Litter	Timber Litter	Scott and Burgan	1	2.200	3.600	0.20
182	TL2	Low Load Broadleaf Litter	Timber Litter	Scott and Burgan	1.40	2.300	2.200	0.200
183	TL3	Moderate Load Conifer Litter	Timber Litter	Scott and Burgan	0.50	2.200	2.800	0.30
184	TL4	Small Downed Logs	Timber Litter	Scott and Burgan	0.50	1.500	4.200	0.40
185	TL5	High Load Conifer Litter	Timber Litter	Scott and Burgan	1.15	2.500	4.400	0.60
186	TL6	Moderate Load Broadleaf Litter	Timber Litter	Scott and Burgan	2.40	1.200	1.200	0.30
187	TL7	Large Downed Logs	Timber Litter	Scott and Burgan	0.30	1.400	8.100	0.40

Fuel Model	Fuel Model Code	Fuel Model Name	Fuel Type	Model Set	Fuel 1-hr	Fuel 10-hr	Fuel 100-hr	Fuel Bed Depth
188	TL8	Long-Needle Litter	Timber Litter	Scott and Burgan	5.80	1.400	1.100	0.30
189	TL9	Very High Load Broadleaf Litter	Timber Litter	Scott and Burgan	6.65	3.300	4.150	0.60
201	SB1	Low Load Activity Fuel	Slash-Blowdown	Scott and Burgan	1.50	3	11	1
202	SB2	High Load Activity Fuel or Moderate Load Blowdown	Slash-Blowdown	Scott and Burgan	4.50	4.250	4	1
203	SB3	High Load Activity Fuel or Moderate Load Blowdown	Slash-Blowdown	Scott and Burgan	5.50	2.750	3	1.20
204	SB4	High Load Blowdown	Slash-Blowdown	Scott and Burgan	5.25	3.500	5.250	2.70

Table 99: Detailed Descriptions of the Fuel Models

Code	Detailed Description
1	Contains fine, very porous, and continuous herbaceous fuels that have cured or are nearly cured. Generally less than one-third of the area contains shrubs or timber. Grasslands and savanna are represented along with stubble, grass-tundra, and grass-shrub combinations. Annual and perennial grasses are included in this fuel model.
2	Herbaceous material with litter and dead-down stem wood from the open shrub or timber overstory. Open shrub lands and pine stands or scrub oak stands that cover one-third to two-thirds of the area. Stand many include clumps and may include pinyon-juniper.
3	Stands are tall, averaging about three feet, but considerable variation may occur. Approximately one-third or more of the stand is considered dead and cured. May include cultivated grains that have not been harvested, tall prairie, and marshland grasses.

Code	Detailed Description
4	Stands of mature shrubs, 6 feet or more tall such as California mixed chaparral, the high pocosin along the east coast, the pine barrens of New Jersey, or the closed jack pine stands of the north-central states. Besides flammable foliage, stand may contain dead woody material. May contains a deep litter layer.
5	Shrubs are young with little dead material, and the foliage contains little volatile material. Usually shrubs are short and almost totally cover the area. Young, green stands with no dead wood qualify: laurel, vine maple, alder, or even chaparral, manzanita, or chamise.
6	The shrubs are older, but not as tall as model 4, nor do they contain as much fuel as model 4. This model covers a broad range of shrub conditions: intermediate stands of chamise, chaparral, oak brush, low pocosin, Alaskan spruce taiga, and shrub tundra. May include hardwood slash that has been cured. Pinyon-juniper shrub lands may be represented.
7	Stands of shrubs are generally between 2 and 6 feet high. Palmetto-galliberry understory, with a pine overstory are typical. Low pocosin may be represented. Black spruce shrub combinations in Alaska may also be represented.
8	Contains closed canopy stands of short needle conifers or hardwoods that have leafed out. The compact litter layer is mainly needles, leaves, and occasionally twigs because little undergrowth is present. Representative conifer types are white pine, lodgepole pine, spruce, fir, and larch.
9	Both long-needle conifer stands and hardwood stands, especially the oak-hickory types, are typical. Closed stands of long-needled pine like ponderosa, Jeffrey, red pines, or southern pine plantations are grouped in this model. May contain concentrations of dead-down woody material.
10	Dead-down fuels include quantities of 3-inch or larger limb wood resulting from over maturity or natural events that create a large load of dead material on the forest floor. Any forest type may be considered if heavy down material is present; examples are insect- or disease-ridden stands, wind thrown stands, over-mature situations with deadfall, and aged light thinning or partial cut slash.
11	Contains slash and herbaceous material intermixed with slash. Light partial cuts or thinning operations in mixed conifer stands, hardwood stands, and southern pine harvests are considered. Clearcuts generally produce more slash than represented here. The less than 3-inch material load is less than 12 tons per acre. The greater than 3 inch is represented by not more than 10 pieces, 4 inches in diameter, along a 60 foot transect.
12	The visual impression is dominated by slash and much of it is less than 3 inches in diameter. The fuels are well distributed. Heavily thinned conifer stands, clearcuts, and medium or heavy partial cuts are represented. The material larger than 3 inches is represented by encountering 11 pieces, 6 inches in diameter along a 50 foot transect.

Code	Detailed Description
13	There is a continuous layer of slash. Large quantities of material larger than 3 inches are present. Clearcuts and heavy partial cuts in mature and over-mature stands are depicted where the slash load is dominated by the greater than 3 inch diameter material. Fuels less than 3 inches are generally only 10 percent of the total load. May include situations where the slash still has “red” needles attached.
91	Land covered by urban and suburban development. The area must not support wildland fire spread. In some cases the area may experience structural fire losses during a wildland fire incident; however, structure ignition in those cases is either house-to-house or by firebrands, neither of which is directly modeled using fire behavior fuel models. If sufficient vegetation surrounds structures such that wildland fire spread is possible, then choose a fuel model appropriate for the wildland vegetation.
92	Land covered by permanent snow and ice. Areas covered by seasonal snow and ice can be mapped to two different fuel models.
93	Agricultural land maintained in a non-burnable condition, examples include irrigated annual crops, mowed or tilled orchards, and so forth. However, there are many agricultural areas that are not kept in a non-burnable condition. For example, grass is often allowed to grow beneath vines or orchard trees, and wheat and similar crops are allowed to cure before harvest; in those cases use a different fuel model.
98	Land covered by open bodies of water such as lakes, rivers, and oceans.
99	Land devoid of enough fuel to support wildland fire spread. Such areas include: gravel pits, arid deserts with little vegetation, sand dunes, rock outcroppings, beaches, and so forth.
101	The primary carrier of fire in sparse grass, though small amounts of fine fuel may be present. The grass is generally short, either naturally or by grazing, and may be sparse or discontinuous. The moisture extraction is indicative of a dry climate fuelbed, but may also be applied in high-extinction moisture fuelbeds because in both cases predicted spread rate and flame length are low compared to other grass models.
102	The primary carrier of fire is grass, though small amounts of fine dead fuel may be present. Load is greater than 101, and fuelbed may be more continuous. Shrubs, if present, do not affect fire behavior.
103	The primary carrier of fire is continuous, coarse, humid-climate grass. Grass and herb fuel load is relatively light; fuelbed depth is about 2 feet. Shrubs are not present in significant quantity to affect fire behavior.
104	The primary carrier of fire is continuous, dry-climate grass. Load and depth are greater than 102; fuelbed depth is about 2 feet.
105	The primary carrier of fire is humid-climate grass. Load is greater than 103 but depth is lower, about 1-2 feet.

Code	Detailed Description
106	The primary carrier of fire is continuous humid-climate grass. Load is greater than 105 but depth is about the same. Grass is less coarse than 105.
107	The primary carrier of fire is continuous dry-climate grass. Load and depth are greater than 104. Grass is about 3 feet tall.
108	The primary carrier of fire is continuous, very coarse, humid-climate grass. Load and depth are greater than 106. Spread rate and flame length can be extreme if grass is fully cured.
109	The primary carrier of fire is dense, tall, humid-climate grass. Load and depth are greater than 108, about 6 feet tall. Spread rate and flame length can be extreme if grass is fully more mostly cured.
121	The primary carrier of fire is grass and shrubs combined. Shrubs are about 1 foot height, grass load is low. Spread rate is moderate; flame length is low. Moisture of extinction is low.
122	The primary carrier of fire is grass and shrubs combined. Shrubs are 1 to 3 feet high, grass load is moderate. Spread rate is high; flame length moderate. Moisture of extinction is low.
123	The primary carrier of fire is grass and shrubs combined. Moderate grass/shrub load, average grass/shrub depth less than 2 feet. Spread rate is high; flame length moderate. Moisture of extinction is high.
124	The primary carrier of fire is grass and shrubs combined. Heavy grass/shrub load, depth greater than 2 feet. Spread rate high; flame length very high. Moisture of extinction is high.
141	The primary carrier of fire is woody shrubs and shrub litter. Low shrub fuel load, fuelbed about 1 foot; some grass may be present. Spread rate is very low; flame length very low.
142	The primary carrier of fire is woody shrubs and shrub litter. Moderate shrub fuel load (higher than 141), depth about 1 foot, no grass fuel present. Spread rate is very low; flame length low.
143	The primary carrier of fire is woody shrubs and shrub litter. Moderate shrub load, possibly with pine overstory or herbaceous fuel, fuel bed depth 2 to 3 feet. Spread rate is low; flame length low.
144	The primary carrier of fire is woody shrubs and shrub litter. Low to moderate shrub and litter load, possibly with pine overstory, fuel bed depth about 3 feet. Spread rate is high; flame length moderate.
145	The primary carrier of fire is woody shrubs and shrub litter. Heavy shrub load, depth 4-6 feet. Spread rate is very high; flame length very high. Moisture of extinction is high.

Code	Detailed Description
146	The primary carrier of fire is woody shrubs and shrub litter. Dense shrubs, little or no herbaceous fuel, fuelbed depth about 2 feet. Spread rate is high; flame length high.
147	The primary carrier of fire is woody shrubs and shrub litter. Very heavy shrub load, depth 4 to 6 feet. Spread rate lower than 146, but flame length similar. Spread rate is high, flame length is very high.
148	The primary carrier of fire is woody shrubs and shrub litter. Dense shrubs, little or no herbaceous fuel, fuelbed depth about 3 feet. Spread rate is high; flame length high.
149	The primary carrier of fire is woody shrubs and shrub litter. Dense, finely branched shrubs with significant fine dead fuel, about 4 to 6 feet tall; some herbaceous fuel may be present. Spread rate is high; flame length is very high.
161	The primary carrier of fire is low load of grass and/or shrub with litter. Spread rate is low; flame length is low.
162	The primary carrier of fire is moderate litter load with shrub component. High extinction moisture. Spread rate is moderate; flame length is low.
163	The primary carrier of fire is moderate forest litter. High extinction moisture. Spread rate is high; flame length is moderate.
164	The primary carrier of fire is short conifer trees with grass or moss understory. Spread rate is moderate; flame length is moderate.
165	The primary carrier of fire is heavy forest litter with a shrub or small tree understory. Spread rate is moderate; flame length is moderate.
181	The primary carrier of fire is compact forest litter. Light to moderate loads, fuels 1 to 2 inches deep. May be used to represent a recently burned forest. Spread rate is very low; flame length is very low.
182	The primary carrier of fire is broadleaf (hardwood) litter. Low load, compact broadleaf litter. Spread rate is very low; flame length is very low.
183	The primary carrier of fire is moderate load conifer litter, light load of coarse fuels. Spread rate is very low; flame length low.
184	The primary carrier of fire is moderate load of fine litter and coarse fuels. Includes small diameter downed logs. Spread rate is low; flame length low.
185	The primary carrier of fire is high load of fine litter; light slash or mortality fuel. Spread rate is low; flame length low.
186	The primary carrier of fire is moderate load broadleaf litter, less compact than 182. Spread rate is very moderate; flame length is low.

Code	Detailed Description
187	The primary carrier of fire is heavy load of forest litter, includes large diameter downed logs. Spread rate is low; flame length low.
188	The primary carrier of fire is moderate load long-needle pine litter, may include small amount of herbaceous load. Spread rate is moderate; flame length low.
189	The primary carrier of fire is very high load, fluffy broadleaf litter. This can also be used to represent heavy needle-drape. Spread rate is very moderate; flame length moderate.
201	The primary carrier of fire is light dead and down activity fuel. Fine fuel load is 10 to 20 t/ac weighted towards fuels 1 to 3 inch diameter class; depth is less than 1 foot. Spread rate is moderate; flame length moderate.
202	The primary carrier of fire is moderate dead and downed activity fuel or light blowdown. Fine fuel load is 7 to 12 t/ac, evenly distributed across 0 to 0.25, 0.25 to 1, and 1 to 3 inch diameter classes, depth is about 1 foot. Blowdown is scattered, with many trees still standing. Spread rate is moderate; flame length moderate.
203	The primary carrier of fire is heavy dead and down activity fuel or moderate blowdown. Fine fuel load is 7 to 12 t/ac, weighted toward 0 to 0.25 inch diameter class, depth is more than 1 foot. Blowdown is moderate; trees compacted to near the ground. Spread rate is high; flame length high.
204	The primary carrier of fire is heavy blowdown fuel. Blowdown is total, fuelbed is not compacted, most foliage and fine fuel still attached to blowdown. Spread rate is very high; flame length very high.