

CLASSIFICATION AND CATALOG OF NATIVE WETLAND PLANT COMMUNITIES IN OREGON

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Purpose and Scope of Classification

This revised classification includes all native wetland plant communities known to occur in the state of Oregon. It serves as an index to the diversity, distribution and relative rarity of the state's wetland communities, and as a guide to their literature.

A key provides access to, and is followed by, a classification modeled after Cowardin et al. (1979). This is followed by a catalog listing each plant community alphabetically, showing the physiographic province and landform in which each occurs, its global and state rank, and a listing of community descriptions here considered synonymous. The catalog is followed by a bibliography.

Published and unpublished reports were the primary sources for the classification. Descriptions supported by quantitative data were used whenever possible. Publications from other states or provinces in the Pacific Northwest were used for communities known to occur in, but not described from Oregon.

Sampling methods and concepts of species and communities differed greatly among researchers. For the sake of brevity, community descriptions were lumped. When possible, the original wording of the description is included in the catalog to aid interpretation.

Terminology, Codes and Abbreviations

I used the term "plant community" in the broad sense. It includes "habitat type," "dominance type," "community type," "plant association," and other terms used by various authors.

For convenience, all willows (Salix) are treated here as shrubs, and all alders (Alnus) and birches (Betula) are treated as trees.

The ten-character alphanumeric code assigned to each community is for the Heritage Program data base, and can be ignored by most users.

Ranks assigned to each community follow standard Heritage Program methodology:

- G = Global rank indicator; denotes rank based on worldwide status.
- S = State rank indicator; denotes rank based on status within Oregon.
- 1 = Critically imperiled because of extreme rarity; 5 or fewer occurrences or very few remaining acres.
- 2 = Imperiled because of rarity; 6-20 occurrences or few remaining acres.
- 3 = Either very rare and local throughout its range or found locally in a restricted range; uncommon; 21-100 occurrences.
- 4 = Apparently secure, though it may be quite rare in parts of its range, especially at the periphery; many occurrences.
- 5 = Demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery; ineradicable under present conditions.

Physiographic provinces follow those used by the Oregon Natural Heritage Program (1993):

- BR = Basin and Range
- CB = Columbia Basin
- CR = Coast Range
- EC = East Slope Cascade Range
- HP = High Lava Plains
- BM = Ochoco, Blue and Wallowa Mountains
- OU = Owyhee Uplands
- KM = Siskiyou Mountains
- WV = Western Interior Valleys
- WC = West Slope and Crest of Cascade Range

Nomenclature

Plant names are those used by Munz and Keck (1959), Hitchcock and Cronquist (1973) and Cronquist et al. (1977). Although a number of nomenclatural changes have been made recently by some authors, most are not included here because they would be unfamiliar to most users. Some of the more common synonyms for taxa included in the classification are:

Caltha biflora = C. leptosepala
Carex eurycarpa = C. angustata
Carex rostrata = C. utriculata
C. sitchensis = C. aquatilis var. dives
Cornus stolonifera = C. sericea
Distichlis stricta = D. spicata
Eleocharis palustris = E. macrostachya
Ledum glandulosum = Rhododendron neoglandulosum
Lysichiton americanum = Lysichiton americanum
Myriophyllum hippuroides = Myriophyllum verticillatum
Nuphar polysepalum = N. luteum
Phragmites communis = P. australis
Populus tremuloides = P. tremula
Populus trichocarpa = P. balsamifera
Potentilla pacifica = P. anserina
Pyrus fusca = Malus fusca
Rorippa nasturtium-aquaticum = Nasturtium officinale
Salix rigida = S. lutea
Scirpus olneyi = S. americanus
Vaccinium occidentale = V. uliginosum

**KEY TO CLASSIFICATION OF WETLAND PLANT COMMUNITIES
IN OREGON**

This key is based on community structure and geography. The codes used here correspond to those used in each heading in the classification, which is arranged alphabetically. Use the key to find the correct code, and look under that heading to find your plant community. If you can't find your community in the classification, check the catalog, which is arranged alphabetically by dominant species, to see if it was lumped under some other name.

1. Low to mid-elevation coast, Coast Range and Cascade foothills, Willamette Valley

A. Coastal -- Estuarine (salt or brackish water)

Subtidal aquatic beds **CEA** (p. 6)
Mud flats and low salt marsh **CEC** (p. 6)
High salt marsh **CEF** (p. 6)

B. Coastal -- Palustrine (freshwater)

Aquatic beds **CPB** (p. 7)
Shores of pools, ponds and lakes **CPF** (p. 9)
Fens, marshes, deflation plains **CPKG1** (p. 10)
Shrub-dominated swamps, bogs, brush prairie
 Broadly distributed **CPQF1** (p. 13)
 Restricted to province **CPQF2** (p. 14)
Tree-dominated swamps and muskeg **CPV** (p. 17)

C. Coast Range and Cascade foothills, Willamette Valley

Aquatic beds **CPB** (p. 7)
Vernal pools **CPE** (p. 8)
Shores of pools, ponds and lakes **CPF** (p. 9)
Seeps, intermittent streams, spray zones, talus slopes,
 shallow soils over bedrock **CPJ** (p. 10)
Fens, marshes and prairies **CPKG2** (p. 11)
Serpentine fens, including riparian
 Herb-dominated **CPC** (p. 7)
 Shrub-dominated **CPO** (p. 13)

Tree-dominated	CPU (p. 16)
Shrub-dominated swamps, brush prairie and riparian	
Broadly distributed	CPQF1 (p. 13)
Restricted to province	CPQF3 (p. 14)
Tree-dominated swamps and riparian	CPW (p. 17)

2. Low to mid-elevation eastern Oregon

A. Alkaline

Aquatic beds	CPA (p. 7)
Marshes and playas	
Herb-dominated	CPD (p. 7)
Shrub-dominated	CPM (p. 13)

B. Freshwater

Aquatic beds	CPB (p. 7)
Vernal pools	CPE (p. 8)
Shores of pools, ponds and lakes	CPF (p. 9)
Riparian zones	
Shrub-dominated	CPS (p. 16)
Tree-dominated	CPY (p. 18)

3. Montane - Coast Range, Cascades and Eastern Oregon

Aquatic beds	CPB (p. 7)
Shores of pools, ponds and lakes	CPF (p. 9)
Seeps, intermittent streams, spray zones, talus slopes, shallow soils over bedrock	
Herb-dominated	CPJ (p. 10)
Shrub and tree-dominated	CPT (p. 16)
Snowbed depressions	CPE (p. 8)
Fens, flushes, marshes and grassland	
Sedge-dominated	CPKG3 (p. 11)
Spikerush-dominated	CPKG4 (p. 12)
Forb-dominated	CPKG5 (p. 12)
Grass-dominated	CPKG6 (p. 12)
Shrub-dominated swamps and brush prairie	
Broadly distributed	CPQF1 (p. 13)
Restricted to province	CPQF4 (p. 15)
Tree-dominated swamps and riparian	CPX (p. 18)

**CLASSIFICATION OF NATIVE WETLAND PLANT COMMUNITIES
IN OREGON**

CEA ESTUARINE: SUBTIDAL AQUATIC BED

CEAG1ZM0Z1 Zostera marina
G5S4 ZOSMAR Eelgrass bed

CEC ESTUARINE: INTERTIDAL MUD FLATS AND LOW SALT MARSH

CECG1CL0C1 Carex lyngbyei-*Triglochin maritimum*
G4S4 CARLYN-TRIMAR Lyngby sedge-arrow grass salt
marsh

CECG1DS0D1 Distichlis spicata-Salicornia virginica
G4S4 DISSPI-SALVIR Saltgrass-glasswort salt marsh

CECG1RM0R1 Ruppia maritima (estuarine association)
G5S4 RUPMAR (estuarine association) Ditch-grass bed

CECG1SA0S1 Scirpus americanus (estuarine association)
G5S4 SCIAME (estuarine association) Three-square
bulrush salt marsh

CECG1SM0S1 Scirpus maritimus (estuarine association)
G5S4 SCIMAR (estuarine association) Seacoast bulrush
salt marsh

CECG1TM0T1 Triglochin maritimum
G5S4 TRIMAR Arrow grass salt marsh

CEF ESTUARINE: HIGH SALT MARSH

CEFG1AS0A1 Aster subspicatus-Potentilla pacifica
G4S4 ASSSUB-POTPAC Douglas aster-Pacific silverweed
salt marsh

CEFG1CL0C1 Carex lyngbyei-Potentilla pacifica
G4S4 CARLYN-POTPAC Lyngby sedge-Pacific silverweed
salt marsh

CEFG1DC0D1 Deschampsia cespitosa-Juncus balticus
G4S4 DESCES-JUNBAL Tufted hairgrass-Baltic rush salt
marsh

CEFG1DC0D2 Deschampsia cespitosa-Potentilla pacifica
G4S4 DESCES-POTPAC Tufted hairgrass-Pacific
silverweed salt marsh

CEFG1JB0J1 Juncus balticus-Potentilla pacifica
G4S4 JUNBAL-POTPAC Baltic rush-Pacific silverweed

salt marsh

CPA PALUSTRINE AQUATIC BED: ALKALINE

CPAG1RM0R1 Ruppia maritima (interior alkaline association)
G5S3 RUPMAR (interior alkaline association) Ditch-
grass alkaline bed

CPB PALUSTRINE AQUATIC BED: FRESHWATER

CPBG1BS0B1 Brasenia schreberi
G5S4 BRASCH Water-shield bed
CPBG1CD0C1 Ceratophyllum demersum
G5S5 CERDEM Coontail bed
CPBH1CP001 Chiloscyphus polyanthos
G5S3 CHIPOL Aquatic liverwort bed
CPBG1EC0E1 Elodea canadensis
G5S5 ELOCAN Waterweed bed
CPBH1FA001 Fontinalis antipyretica
G5S5 FONANT Fountain moss bed
CPBG1LM0L1 Lemna minor
G5S5 LEMMIN Duckweed bed
CPBG1MH0M1 Myriophyllum hippuroides
G5S2 MYRHIP Western water-milfoil bed
CPBG1NP0N1 Nuphar polysepalum
G5S5 NUPPOL Pond-lily bed
CPBG1PN0P1 Potamogeton natans
G5S5 POTNAT Floating-leaved pondweed bed
CPBG1SS0S1 Scirpus subterminalis
G3S1 SCISUB Water clubrush bed

CPC PALUSTRINE EMERGENT WETLAND: SERPENTINE FENS

CPCG1DC0D1 Darlingtonia californica
G2S2 DARCAL Darlingtonia serpentine fen

CPD PALUSTRINE EMERGENT WETLAND: ALKALINE MARSHES AND PLAYAS

CPDG1CD0C1 Carex douglasii-Deschampsia cespitosa
G1S1 CARDOU-DESCES Tufted hairgrass-Douglas sedge
alkaline meadow

CPEG1P00P1 Plagiobothrys-Veronica peregrina
 GUS2 PLAGIO-VERPER/MOSS Popcorn flower-veronica
 vernal pool
 CPEH1PC001 Polytrichum commune
 G5S4 POLCOM Haircap moss snowbed

**CPF PALUSTRINE EMERGENT WETLAND: BROADLY DISTRIBUTED,
 SHORES OF POOLS, PONDS AND LAKES**

CPFG1CL0C1 Carex lyngbyei (freshwater association)
 G4S3 CARLYN (freshwater association) Lyngby sedge
 freshwater marsh
 CPFG1CO0C1 Carex obnupta
 G4S4 CAROBN Slough sedge marsh
 CPFG1CR0C1 Carex rostrata
 G5S4 CARROS Beaked sedge marsh
 CPFG1CS0C1 Carex sitchensis
 G4S4 CARSIT Sitka sedge fen
 CPFG1CV0C1 Carex vesicaria
 G5S4 CARVES Inflated sedge marsh
 CPFG1DA0D1 Dulichium arundinaceum
 G5S3 DULARU Threeway sedge marsh
 CPFG1EP0E1 Eleocharis palustris
 G5S5 ELEPAL Creeping spikerush marsh
 CPFG1EF0E1 Equisetum fluviatile
 G5S3 EQUFLU Water horsetail marsh
 CPFG1JB0J1 Juncus balticus
 G5S5 JUNBAL Baltic rush marsh
 CPFG1JN0J1 Juncus nevadensis
 G4S4 JUNNEV Nevada bulrush marsh
 CPFG1LO0L1 Lilaeopsis occidentalis-Tillaea aquatica
 G4S4 LILOCC-TILAQU Lilaeopsis-pigmy weed marsh
 CPFG1MT0M1 Menyanthes trifoliata
 G5S5 MENTRI Buckbean marsh
 CPFG1OS0O1 Oenanthe sarmentosa
 G4S4 OENSAR Water-parsley marsh
 CPFG1PA0P1 Phragmites australis
 G5S3 PHRAUS Reed marsh
 CPFG1SA0S1 Scirpus americanus (freshwater association)
 G4S3 SCIAME (freshwater association) Three-square
 bulrush freshwater marsh
 CPFG1SA0S2 Scirpus acutus
 G5S4 SCIACU Hardstem bulrush marsh
 CPFG1SM0S1 Scirpus microcarpus
 G4S4 SCIMIC Small-fruited bulrush marsh

**CPKG2 PALUSTRINE EMERGENT WETLAND: LOW TO MID ELEVATION
WESTERN OREGON FENS, MARSHES AND PRAIRIE**

CPKG2BC0B1 Bidens cernua
G4S3 BIDCER Nodding beggars-tick marsh
CPKG2CA0C1 Carex aperta
G1S1 CARAPE Columbia sedge marsh
CPKG2CD0C1 Carex densa-Eleocharis palustris
G4S4 CARDEN-ELEPAL Dense sedge marsh
CPKG2CU0C1 Carex unilateralis-Hordeum brachyantherum
G2S2 CARUNI-HORBRA One-sided sedge-meadow barley
marsh
CPKG2DC0D1 Deschampsia cespitosa (interior valley
G2S2 association)
DESCES (interior valley associaton) Tufted
hairgrass prairie
CPKG2LP0L1 Ludwigia palustris-Polygonum hydropiperoides
G2S2 LUDPAL-POLHYD Water purslane-waterpepper marsh
CPKG2PD0P1 Paspalum distichum
G4S3 PASDIS Knotgrass marsh
CPKG2PA0P2 Polygonum amphibium
G5S3 POLAMP Water smartweed marsh
CPKG2SL0S1 Sagittaria latifolia
G4S2 SAGLAT Wapato marsh

**CPKG3 PALUSTRINE EMERGENT WETLAND: MONTANE (COAST RANGE,
CASCADE AND EASTERN OREGON) FENS, FLUSHES, MARSHES
AND GRASSLAND: SEDGE-DOMINATED**

CPKG3C00C1 Carex/Philonotis fontana
G5S5 CAREX/PHIFON Sedge/apple moss flush
CPKG3CA0C1 Carex amplifolia
G4S4 CARAMP Bigleaf sedge meadow
CPKG3CA0C2 Carex aquatilis
G4S4 CARAQU Water sedge meadow
CPKG3CC0C1 Carex canescens-Carex muricata
G5S4 CARCAN-CARMUR Gray sedge-muricate sedge meadow
CPKG3CE0C1 Carex eurycarpa
G4S4 CAREUR Wide-fruited sedge meadow
CPKG3CI0C1 Carex illota-Eleocharis pauciflora
G4S3 CARILL-ELEPAU Small-headed sedge fen
CPKG3CI0C2 Carex interrupta
G4S4 CARINT Green-fruited sedge meadow
CPKG3CL0C1 Carex lanuginosa
G5S4 CARLAN Woolly sedge meadow

CPKG3CL0C2 Carex lasiocarpa
 G4S4 CARLAS Slender sedge meadow
 CPKG3CL0C3 Carex leporinella
 G4S4 CARLEP Sierra hair-sedge meadow
 CPKG3CN0C1 Carex nebrascensis
 G4S4 CARNEB Nebraska sedge meadow
 CPKG3CN0C2 Carex nigricans
 G4S4 CARNIG Black alpine sedge meadow
 CPKG3CS0C1 Carex scopulorum
 G4S4 CARSCO Holm's alpine sedge meadow
 CPKG3CS0C2 Carex simulata
 G4S4 CARSIM Short-beaked sedge meadow

**CPKG4 PALUSTRINE EMERGENT WETLAND; MONTANE FENS, ETC.:
 SPIKERUSH-DOMINATED**

CPKG4EA0E1 Eleocharis acicularis
 G4S4 ELEACI Needle sedge marsh
 CPKG4EP0E2 Eleocharis pauciflora/Hamatocaulis vernicosus
 G3S2 ELEPAU/HAMVER Few-flowered spikerush/brown moss
 fen
 CPKG4ER0E1 Eleocharis rostellata
 G5S4 ELEROS Beaked spikerush marsh

**CPKG5 PALUSTRINE EMERGENT WETLAND; MONTANE FENS, ETC.:
 FORB-DOMINATED FLUSHES**

CPKG5CB0C1 Caltha biflora-Dodecatheon jeffreyi
 G4S4 CALBIF-DODJEF Marsh-marigold-shooting star
 flush
 CPKG5LP0L1 Luetkea pectinata-Saxifraga tolmiei
 G4S4 LUEPEC-SAXTOL Partridgefoot-saxifrage flush
 CPKG5PB0P1 Polygonum bistortoides-Ranunculus macounii
 G4S4 POLBIS-RANMAC Bistort-Macoun's buttercup flush
 CPKG5ST0S1 Senecio triangularis-Veratrum californicum
 G4S4 SENTRI-VERCAL Arrowleaf groundsel-hellebore
 flush

**CPKG6 PALUSTRINE EMERGENT WETLAND; MONTANE FENS, ETC.:
 GRASS-DOMINATED**

CPKG6DC0D1 Deschampsia cespitosa (montane association)
 G4S4 DESCES (montane association) Tufted hairgrass
 montane meadow

CPKG6GB0G1 Glyceria borealis
 G5S4 GLYBOR Northern mannagrass marsh
 CPKG6GE0G1 Glyceria elata-Juncus balticus
 G5S4 GLYELA-JUNBAL Tall mannagrass-Baltic rush marsh
 CPKG6GG0G1 Glyceria grandis-Mimulus guttatus
 G5S4 GLYGRA-MIMGUT Reed mannagrass-monkeyflower
 marsh
 CPKG6GS0G1 Glyceria striata
 G5S4 GLYSTR Fowl mannagrass marsh
 CPKG6PC0P1 Poa cusickii
 G4S4 POACUS Cusick bluegrass meadow
 CPKG6PN0P1 Poa nevadensis
 G4S4 POANEV Nevada bluegrass meadow

**CPM PALUSTRINE SCRUB-SHRUB WETLAND: ALKALINE SEEPS,
 FLOODPLAINS AND PLAYAS**

CPMF1AOA01 Allenrolfea occidentalis
 G4S3 ALLOCC Iodine bush playa
 CPMF1ACAC1 Artemisia cana/Carex nebrascensis-Poa cusickii
 G4S3 ARTCAN/CARNEB-POACUS Silver sagebrush/Nebraska
 sedge-Cusick bluegrass playa
 CPMF1ACAM1 Artemisia cana/Muhlenbergia richardsonis
 G3S3 ARTCAN/MUHRIC Silver sagebrush/mat muhly playa
 CPMF1ACAD1 Atriplex confertifolia/Distichlis spicata
 G4S3 ATRCON/DISSPI Spiny saltbush/saltgrass playa
 CPMF1SVSD1 Sarcobatus vermiculatus/Distichlis spicata
 G4S4 SARVER/DISSPI Greasewood/saltgrass playa
 CPMF1SVSS1 Sarcobatus vermiculatus/Suaeda nigra
 G4S4 SARVER/SUANIG Greasewood/seablite playa

CPO PALUSTRINE SCRUB-SHRUB WETLAND: SERPENTINE FENS

CPOF1RORC1 Rhododendron occidentale/Camassia quamash
 G2S2 RHOCC/CAMQUA Western azalea/camas shrub swamp

**CPQF1 PALUSTRINE SCRUB-SHRUB WETLAND: BROADLY DISTRIBUTED
 SHRUB SWAMP AND BRUSH PRAIRIE**

CPQF1SDS01 Spiraea douglasii
 G4S4 SPIDOU Douglas spiraea shrub swamp

**CPQF2 PALUSTRINE SCRUB-SHRUB WETLAND: COASTAL SHRUB SWAMP,
BOG AND BRUSH PRAIRIE**

CPQF2LGL01 Ledum glandulosum/Sphagnum
G2S2 LEDGLA/SPHAGN Labrador-tea/sphagnum bog
CPQF2LGLD1 Ledum glandulosum/Darlingtonia californica/
G2S2 Sphagnum
LEDGLA/DARCAL/SPHAGN Labrador-tea/darlingtonia/
sphagnum bog
CPQF2LGL02 Ledum glandulosum-Myrica gale
G1S1 LEDGLA-MYRGAL Labrador tea-sweet gale heath
CPQF2MCM01 Myrica californica-Salix hookeriana
G4S4 MYRCAL-SALHOO Waxmyrtle-Hooker willow shrub
swamp
CPQF2PFPC1 Pyrus fusca-Salix hookeriana/Carex obnupta
G4S3 PYRFUS-SALHOO/LYSAME Crabapple-Hooker
willow/slough sedge shrub swamp
CPQF2SHS01 Salix hookeriana-Spiraea douglasii
G4S3 SALHOO-SPIDOU. Hooker willow-Douglas spiraea
shrub swamp
CPQF2VUVD1 Vaccinium uliginosum/Deschampsia cespitosa
G2S2 VACULI/DESCES Coastal bog blueberry/tufted
hairgrass brush prairie

**CPQF3 PALUSTRINE SCRUB-SHRUB WETLAND: LOW TO MID ELEVATION
WESTERN OREGON SHRUB SWAMP, BRUSH PRAIRIE AND
RIPARIAN**

CPQF3CSS0C Cornus stolonifera-Salix sitchensis
G3S3 CORSTO-SALSIT Creek dogwood-Sitka willow shrub
swamp
CPQF3RNR01 Rosa nutkana/Oenanthe sarmentosa
G2S2 ROSNUT/OENSAR Nootka rose/water parsley
shrubs swamp
CPQF3RNRD1 Rosa nutkana/Deschampsia cespitosa
G2S2 ROSNUT/DESCES Nootka rose/hairgrass brush
prairie
CPQF3SFS01 Salix fluviatilis-Salix lasiandra
G3S3 SALFLU-SALLAS River willow-Pacific willow
riparian
CPQF3SGS01 Salix geyeriana-Salix piperi
G1S1 SALGEY-SALPIP Geyer willow-Piper willow shrub
swamp
CPQF3SLS01 Salix lasiandra/Urtica dioica
G3S2 SALLAS-URTDIO Pacific willow shrub swamp

CPQF3SPS02 Salix piperi
 G3S3 SALPIP Piper willow shrub swamp
 CPQF3SPS01 Salix piperi-Salix sitchensis
 G2S2 SALPIP-SALSIT Piper willow-Sitka willow shrub
 swamp
 CPQF3VVCV01 Vaccinium caespitosum
 G3S1 VACCAE Dwarf blueberry brush prairie

CPQF4 PALUSTRINE SCRUB-SHRUB WETLAND: MONTANE (CASCADE AND EASTERN OREGON) SHRUB SWAMP AND RIPARIAN

CPQF4BGB01 Betula glandulosa
 G4S4 BETGLA Bog birch shrub swamp
 CPQF4KMK01 Kalmia microphylla
 G4S4 KALMIC Bog laurel shrub swamp
 CPQF4SBS01 Salix boothii-Salix drummondiana
 G3S1 SALBOO-SALDRU Booth willow-Drummond willow
 shrub swamp
 CPQF4SBS02 Salix boothii-Salix eastwoodiae
 G3S2 SALBOO-SALEAS Booth willow-mountain willow
 riparian
 CPQF4SBS03 Salix boothii-Salix geyeriana
 G3S3 SALBOO-SALGEY Booth willow-Geyer willow shrub
 swamp
 CPQF4SBS04 Salix boothii-Salix lemmonii
 G3S2 SALBOO-SALLEM/CARAQU Booth willow-Lemmon willow
 riparian
 CPQF4SCS01 Salix commutata-Salix eastwoodiae
 G4SU SALCOM-SALEAS Undergreen willow-mountain willow
 shrub swamp
 CPQF4SDS01 Salix drummondiana
 G3S1 SALDRU Drummond willow shrub swamp
 CPQF4SGS01 Salix geyeriana
 G4S4 SALGEY Geyer willow shrub swamp
 CPQF4SGS02 Salix geyeriana-Salix lemmonii
 G3S2 SALGEY-SALLEM Geyer willow-Lemmon willow
 riparian
 CPQF4SGS03 Salix geyeriana-Salix rigida
 G3S2 SALGEY-SALRIG Geyer willow-rigid willow
 riparian
 CPQF4SLS01 Salix lemmonii-Vaccinium occidentale
 G4S3 SALLEM-VACCOCC Lemmon willow-bog blueberry shrub
 swamp
 CPQF4VOVC1 Vaccinium occidentale/Carex sitchensis
 G4S4 VACCOCC/CARSIT Bog blueberry/Sitka sedge shrub

swamp

CPQF4VOVD1 Vaccinium occidentale/Deschampsia cespitosa
 G4S4 VACOCC/DESCES Montane bog blueberry/hairgrass
 shrub swamp

CPQF4VOVE1 Vaccinium occidentale/Eleocharis pauciflora
 G4S3 VACOCC/ELEPAU Bog blueberry/few-flowered
 spikerush shrub swamp

CPQF4VOV01 Vaccinium occidentale/Sphagnum fuscum
 G1S1 VACOCC/SPHFUS Bog blueberry/sphagnum shrub
 swamp

**CPS PALUSTRINE SCRUB-SHRUB WETLAND: LOW TO MID ELEVATION
 EASTERN OREGON RIPARIAN**

CPSF1SAS01 Salix amygdaloides-Salix exigua
 G3S2 SALAMY-SALEXI Peachleaf willow-coyote willow

CPSF1SES01 Salix exigua
 G3S2 SALEXI Coyote willow riparian

CPSF1SES02 Salix exigua-Salix lasiandra
 G3S2 SALEXI-SALLAS Coyote willow-Pacific willow
 riparian

CPSF1SES03 Salix exigua-Salix rigida
 G3S2 SALEXI-SALRIG Coyote willow-rigid willow
 riparian

CPSF1SLS01 Salix lasiandra-Rosa woodsii
 G3S2 SALLAS-ROSWOO Pacific willow-Woods rose
 riparian

CPSF1SRS01 Salix rigida-Ribes aureum
 G3S2 SALRIG-RIBAUR Rigid willow-golden currant
 riparian

**CPT PALUSTRINE FORESTED WETLAND: PERENNIAL SEEPS ON
 TALUS SLOPES**

CPTA1ASA01 Alnus sinuata-Oplopanax horridum
 G4S4 ALNSIN-OPLHOR Sitka alder/devils club swamp

**CPU PALUSTRINE FORESTED WETLAND: SERPENTINE FENS AND
 RIPARIAN**

CPUB1CLRD1 Chamaecyparis lawsoniana/Rhododendron
 G2S2 occidentale/Darlingtonia californica
 CHALAW/RHOCC/DARCAL Port Orford cedar-western

azalea/darlingtonia riparian

CPV PALUSTRINE FORESTED WETLAND: COASTAL SWAMPS AND MUSKEG

CPVB1PSC01 Picea sitchensis/Cornus stolonifera
 G3S1 PICSIT/CORSTO Old-growth Sitka spruce/creek
 dogwood tideland swamp

CPVB1PSRL1 Picea sitchensis/Rubus spectabilis/Lysichitum
 G3S1 americanum
 PICSIT/RUBSPE/LYSAME Old-growth Sitka
 spruce/salmonberry/skunk cabbage swamp

CPVB1PC0C2 Pinus contorta/Carex obnupta
 G2S1 PINCON/CAROBN Shore pine/slough sedge vernal
 pool

CPVB1PCL01 Pinus contorta-Thuja plicata/Ledum glandulosum
 G3S1 PINCON-THUPLI/LEDGLA Shore pine-red cedar/
 Labrador tea muskeg

CPW PALUSTRINE FORESTED WETLAND: LOW TO MID ELEVATION WESTERN OREGON SWAMPS AND RIPARIAN

CPWA1FL0C1 Fraxinus latifolia/Carex obnupta
 G4S4 FRALAT/CAROBN Oregon ash/slough sedge woodland

CPWA1FLCU1 Fraxinus latifolia-Populus trichocarpa/Cornus
 G4S4 stolonifera/Urtica dioica
 FRALAT-POPTRI/CORSTO-URTDIO Oregon ash/creek
 dogwood/nettle riparian

CPWA1FLSU1 Fraxinus latifolia-Populus trichocarpa/
 G4S4 Symphoricarpos albus/Urtica dioica
 FRALAT-POPTRI/SYMALB/URTDIO Oregon ash-black
 cottonwood/ snowberry/ nettle woodland

CPWA1FL0U1 Fraxinus latifolia/Urtica dioica
 G3S2 FRALAT/URTDIO Oregon ash/nettle woodland

CPWA1PTCI1 Populus trichocarpa/Cornus stolonifera/Impatiens
 G3S3 capensis
 POPTRI/CORSTO/IMPCAP Black cottonwood/creek
 dogwood/ touch-me-not swamp

CPWB1TP0L1 Thuja plicata/Lysichitum americanum
 G3S1 THUPLI/LYSAME Old-growth red cedar/skunk
 cabbage swamp

CPX PALUSTRINE FORESTED WETLAND: MONTANE (CASCADE AND EASTERN OREGON) SWAMPS AND RIPARIAN

CPXA1ASAA1 Alnus sinuata/Athyrium filix-femina
 G4S4 ALNSIN/ATHFIL Sitka alder/lady fern swamp
 CPXB1CNO01 Chamaecyparis nootkatensis/Oplopanax horridum
 G4S3 CHANOO/OPLHOR Yellow cedar/devils club swamp
 CPXB1PE0C1 Picea engelmannii/Carex eurycarpa
 G4S4 PICENG/CAREUR Engelmann spruce/widefruit sedge
 swamp
 CPXB1PEV01 Picea engelmannii/Vaccinium occidentale
 G4S4 PICENG/VACOCC Engelmann spruce/bog blueberry
 woodland
 CPXB1PC0C1 Pinus contorta/Carex
 G4S4 PINCON/CAREX Lodgepole pine/sedge woodland
 CPXB1PCS01 Pinus contorta-Populus tremuloides/Spiraea
 G4S4 douglasii
 PINCON-POPTRE/SPIDOU Lodgpole pine-quaking
 aspen/ Douglas spiraea woodland
 CPXB1PCV01 Pinus contorta/Vaccinium occidentale
 G4S4 PINCON/VACOCC Lodgepole pine/bog blueberry
 woodland
 CPXB1THAL1 Tsuga heterophylla/Acer circinatum/Lysichitum
 G4S4 americanum
 TSUHET/ACECIR/LYSAME Western hemlock/skunk
 cabbage swamp

CPY PALUSTRINE FORESTED WETLAND: LOW TO MID ELEVATION EASTERN OREGON RIPARIAN

CPYA1AIS01 Alnus incana/Betula occidentalis-Salix
 G4S4 ALNINC/BETOCOC-SALIX Mountain alder/water birch-
 willow riparian
 CPYA1AI0C1 Alnus incana/Carex
 G4S4 ALNINC/CAREX Mountain alder/sedge riparian
 CPYA1AIC01 Alnus incana/Cornus stolonifera
 G4S4 ALNINC/CORSTO Mountain alder/creek dogwood
 riparian
 CPYA1AI0C2 Alnus incana-Populus trichocarpa/Carex
 G4S4 ALNINC-POPTRE/CAREX Mountain alder-black
 cottonwood/ sedge riparian
 CPYA1AIC02 Alnus incana-Populus trichocarpa/Crataegus
 G4S4 douglasii
 ALNINC-POPTRI/CRADOU Mountain alder-black
 cottonwood/hawthorn riparian

CPYA1AIS02 Alnus incana/Spiraea douglasii
 G4S4 ALNINC/SPIDOU Mountain alder/Douglas spiraea
 riparian

CPYA1AIS03 Alnus incana/Symphoricarpos albus
 G4S4 ALNINC/SYMALB Mountain alder/snowberry riparian

CPYA1ARS01 Alnus rhombifolia/Salix
 G4S4 ALNRHO/SALIX White alder/willow riparian

CPYA1BOS01 Betula occidentalis-Populus trichocarpa/Salix
 G4S4 BETOCC-POPTRI/SALIX Water birch-black
 cottonwood/willow riparian

CPYA1PTS03 Populus tremuloides/Salix scouleriana
 G4S4 POPTRE/SALSCO Quaking aspen/Scouler willow
 riparian

CPYA1PT0C1 Populus trichocarpa/Carex eurycarpa
 G4S4 POPTRI/CAREUR Black cottonwood/widefruit sedge
 riparian

CPYA1PTC01 Populus trichocarpa/Cornus stolonifera
 G4S4 POPTRI/CORSTO Black cottonwood/creek dogwood
 riparian

CPYA1PTS02 Populus trichocarpa/Salix exigua
 G4S4 POPTRI/SALEXI Black cottonwood/sandbar willow
 riparian

CPYA1PTS01 Populus trichocarpa/Symphoricarpos albus
 G4S4 POPTRI/SYMALB Black cottonwood/snowberry
 riparian

**CATALOG OF WETLAND AND RIPARIAN PLANT COMMUNITIES IN
OREGON**

Allenrolfea occidentalis CPM

ALLOCC. Palustrine: playas. BR.

Griffiths 1902: 12 ("Level desert bottoms: Spirostachys occidentalis").

Alnus incana/Betula occidentalis-Salix CPY

ALNINC/BETOCC-SALIX. Palustrine: floodplains, margins of peatlands. BM, BR.

Hansen 1942: 524 ("Margin: mountain alder and willow"); Manning & Padgett 1989: 31 ("Alnus incana/Salix community type").

Alnus incana/Carex CPY

ALNINC/CAREX. Palustrine: streambanks, peatlands, avalanche tracks. Late seral-climax. BM, BR, EC, WC.

Hall 1973: 24 ("Thinleaf alder snowslides"); Seyer 1979: 43 ("Alnus incana/Brachythecium community"); Seyer 1979: 117 ("Alnus incana carr"); Kauffman 1982: 60 ("Alnus incana/Scirpus microcarpus community"); Kauffman 1982: 60 ("Alnus incana/Poa pratensis-mixed forbs community"); Kauffman 1982: 65 ("Alnus incana/sawbeak sedge community"); Kauffman et al. 1985: 17 ("Alnus incana/Poa pratensis community", "Alnus incana/Scirpus microcarpus community"); Kovalchik 1987: 67 ("Mountain alder association"); Kovalchik 1987: 73 ("Mountain alder springs association"); Kovalchik 1987: 137 ("Mountain alder bank association"); Manning & Padgett 1989: 32 ("Alnus incana/mesic forb community type"); Evenden 1990: 33 ("Alnus incana/Poa pratensis community type"); Evenden 1990: 35 ("Alnus incana/Carex lanuginosa community type").

Alnus incana/Cornus stolonifera CPY

ALNINC/CORSTO. Palustrine: streambanks, seeps and ponds. BM, BR, EC, HP.

McNeil 1975: 85 ("Alnus incana/Elymus glaucus habitat type" in part); Ferro et al. 1976: 11 ("Ponds: Alnus incana-Cornus stolonifera-Rhamnus alnifolia-Acer glabrum"); Evans 1989: 10 ("Alnus incana dominance

type" in part); Manning & Padgett 1991: 163 ("Alnus incana/Cornus stolonifera community type").

Alnus incana-Populus trichocarpa/Carex CPY

ALNINC-POPTRI/CAREX. Palustrine: floodplains. BM, BR, EC.

Kovalchik 1987: 136 ("Black cottonwood/mountain alder/ wooly sedge community type").

Alnus incana-Populus trichocarpa/Crataegus douglasii CPY

ALNINC-POPTRI/CRADOU. Palustrine: lower elevation floodplains. BM, BR, EC.

McNeil 1975: 85 ("Alnus incana/Elymus glaucus habitat type" in part); Ferro et al. 1976: 13 ("Riparian: Populus trichocarpa-[mixed conifer]/Alnus incana"); Kauffman 1982: 60 ("Alnus incana-Populus trichocarpa community"); Kauffman 1982: 61 ("Populus trichocarpa/ Alnus incana community"); Kauffman 1982: 61 ("Populus trichocarpa/Alnus incana-Crataegus douglasii/Rosa woodsii community"); Kauffman et al. 1985: 17 ("Populus trichocarpa/Alnus incana/Crataegus douglasii/Rosa woodsii community", "Alnus incana/Populus trichocarpa community"; Populus trichocarpa/Alnus incana community").

Alnus incana/Spiraea douglasii CPY

ALNINC/SPIDOU. Palustrine: floodplains. BM, EC.

Kovalchik 1987: 71 ("Mountain alder-Douglas spiraea association").

Alnus incana/Symphoricarpos albus CPY

ALNINC/SYMALB. Palustrine: floodplains, stream channels. Mid seral-climax. BM, EC.

Padgett 1982: 57 ("Mountain alder riparian dominance type"); Kauffman 1982: 60 ("Alnus incana/Symphoricarpos albus community"); Kauffman et al. 1985: 17 ("Alnus incana/ Symphoricarpos albus community"); Kovalchik 1987: 69 ("Mountain alder-common snowberry association").

Alnus rhombifolia/Salix CPY

ALNRHO/SALIX. Palustrine: riparian. CB.

Evans 1989: 11 ("Alnus rhombifolia dominance type" in part).

Alnus sinuata/Athyrium filix-femina CPX

ALNSIN/ATHFIL. Palustrine: margins of wet meadows, peatlands and seeps. WC.
Seyer 1983: 16 ("Alnus sinuata carr").

Alnus sinuata/Oplopanax horridum CPT

ALNSIN/OPLHOR. Palustrine: avalanche tracks. BM, WC.
Daubenmire & Daubenmire 1968: 50 ("Alnus sinuata scrub"); Ferro et al. 1976: 15 ("Alnus sinuata seepage areas"); Williams & Winward 1976: 40 ("Sitka alder dominated communities"); Cole 1977: 98 ("Alnus sinuata community type"); Williams 1979: 83 ("Alnus sinuata dominated communities"); Cole 1982: 17 ("Alnus sinuata community type"); Hemstrom et al. 1985: 185 ("Alnus sinuata (rocky soils)"); Hemstrom et al. 1985: 187 ("Acer circinatum (rocky soil" in part); Hemstrom et al. 1987: 258 ("Sitka alder (rocky soil)association"); Hemstrom et al. 1987: 262 ("Vine maple (rocky soil)" in part).

Alopecurus saccatus-Plagiobothrys CPE

ALOSAC-PLAGIO. Palustrine: vernal pools. CB, WV Rogue).
Hirsch & Riefler 1981: 9 ("Drying period: Plagiobothrys bracteatus"); Hirsch & Riefler 1981: 10 ("Drying period: Deschampsia danthonioides", "Drying period: Navarretia leucocephala"); Kranz 1982: 1 ("Plagiobothrys bracteatus-Alopecurus saccatus association"); Magee & Meinke 1984: 30 ("Table 1"); Meinke & Magee 1986: 34 ("Table 7"); Kagan 1986: 73 ("Vernal pools" species list in part); Brock 1987: 12 ("Present day pool communities" in part).

Artemisia cana/Carex nebrascensis-Poa cusickii CPM

ARTCAN/CARNEB-POACUS. Palustrine: floodplains, playas. BM, BR, CB, EC, HP, OU.
Moir et al. 1973: LF-13 ("Artemisia cana community"); Christy & Cornelius 1980: plot 9 ("Artemisia cana/Poa pratensis-Carex nebrascensis"); Winward 1980: 7 ("Ecology: Artemisia cana subsp. bolanderi"); Padgett 1982: 58 ("Mountain silver sagebrush riparian dominance type"); Dealy et al. 1981: 40 ("Mountain silver sagebrush/bunchgrass community"); Kovalchik 1987: 65 ("Sagebrush/Cusick bluegrass association").

Artemisia cana/Muhlenbergia richardsonis CPM

ARTCAN/MUHRIC. Palustrine: floodplains, playas. BR.
Dealy 1971: 93 ("Artemisia cana/Muhlenbergia richardsonis ecosystem"); Manning & Padgett 1991: 222 ("Artemisia cana/mesic graminoid community type").

Aster subspicatus-Potentilla pacifica CEF

ASTSUB-POTPAC. Estuarine: high salt marsh. CR, KM.
Eilers 1975: 256 ("High marsh: Aster-Potentilla-Oenanthe community"); Eilers 1975: 258 ("High marsh: Carex-Aster-Oenanthe community"); Eilers 1976: 27 ("Carex-Aster-Oenanthe"); Eilers 1976: 27 ("Aster-Potentilla-Oenanthe community"); Taylor & Frenkel 1979: 78 ("Agrostis alba-Potentilla community"); Taylor 1980: 75 ("Agrostis alba-Potentilla community"); Thomas 1980: 8 ("Agrostis alba-Aster subspicatus-Potentilla pacifica vegetation type"); Mitchell 1981: 112 ("Agrostis-Potentilla-Juncus community"); Mitchell 1981: 113 ("Extratidal: Potentilla-Aster community"); Thomas 1984: 95 ("Brackish emergent marsh with irregular tidal inundation: Aster subspicatus-Potentilla pacifica-Agrostis alba"); Frenkel & Boss 1988: 39 ("Agrostis alba-Potentilla pacifica transition marsh"); Frenkel & Morlan 1990: 47 ("Agrostis alba-Potentilla pacifica community").

Athyrium filix-femina CPKG1

ATHFIL. Palustrine: freshwater marshes. CR.
Christy & Putera 1993: 40 ("Athyrium filix-femina marsh").

Atriplex confertifolia/Distichlis spicata CPM

ATRCO/DISSPI. Palustrine: playas. BR.
Unpublished.

Betula glandulosa CPQ

BETGLA. Palustrine: peatlands and floodplains. WC, EC.
Seyer 1979: 117 ("Betula glandulosa carr").

Betula occidentalis-Populus trichocarpa/Salix CPY

BETOCC-POPTRI/SALIX. Palustrine: floodplains. BM, BR.
Evans 1989: 12 ("Betula occidentalis dominance type" in part); Manning & Padgett 1991: 86 ("Conifer/Betula occidentalis community type" in part); Manning & Padgett 1991: 90 ("Conifer/Cornus sericea community

type" in part); Manning & Padgett 1991: 137
("Populus/ Betula occidentalis community type").

Bidens cernua CPKG2

BIDCER. Palustrine: peatlands, streams, marshes. WV
(Columbia, Willamette).
Christy & Putera 1993: 40 ("Bidens cernua marsh").

Brasenia schreberi CPB

BRASCH. Lacustrine: lakes, sloughs. CR, WV (Rogue).
Unpublished.

Calamagrostis nutkaensis CPKG1

CALNUT. Palustrine: coastal fens. CR.
Baker 1972: 409 ("Calamagrostis/Cyperaceae/Menyanthes
fen").

Caltha biflora-Dodecatheon jeffreyi CPKG5

CALBIF-DODJEF. Palustrine: basins, seeps. BM, EC, WC.
Del Moral 1973: 32 ("wet meadow community" in part);
Hickman 1976: 150 ("Caltha biflora/Carex sitchensis/
Dodecatheon jeffreyi bog association"); Hemstrom et
al. 1985: 198 ("Carex-Juncus-Caltha biflora
community"); Hemstrom et al. 1987: 256 ("Sedge-
twinflower marshmarigold association").

Camassia cusickii CPJ

CAMCUS. Palustrine: seepage slopes on tabular basalt.
BM.
Johnson & Simon 1985: 143 ("Cusick's camas seepage
communities"); Johnson & Simon 1987: 211 ("Cusick's
camas plant community type").

Carex/Philonotis fontana CPKG3

CAREX/PHIFON. Palustrine: springs, perennial seeps on
rock, streamsides. BM, BR, EC.
Unpublished.

Carex amplifolia CPKG3

CARAMP. Palustrine: floodplains, streambanks. BM, CR.
Glad et al. 1987: 261 ("Wet sedge marsh: Carex
amplifolia -Viola palustris"); Larkin 1990: 3
("Carex/Scirpus community").

Carex aperta CPKG2

CARAPE. Palustrine: floodplains. WV (Columbia).

Piper and Beattie 1915: 80 ("Common hay sedge of Columbia River bottoms"); Gorman 1926: 18 ("Extensive meadows on overflow bottomlands in the valley of the Columbia and its tributaries"); Christy & Putera 1993: 40 ("Carex aperta marsh").

Carex aquatilis CPKG3

CARAQU. Palustrine: meadows, floodplains. Late seral-climax. BM, BR, EC.

Hall 1973: 6 ("Wet meadow community" in part); Stuth 1975: 66 ("Carex aquatilis/Hordeum brachyantherum habitat type"); Volland 1976: 20 ("Wet meadow community" in part); Hopkins 1979: 13 ("Sedge-wet meadow association" in part); Kauffman 1982: 59 ("Carex aquatilis-Phleum pratense-Poa pratensis community", "Mixed Carex spp.-Phleum pratense-Poa pratensis community" in part, "Carex aquatilis-Carex stipata-Poa pratensis community", "Carex aquatilis-Scirpus microcarpus community"); Kauffman et al. 1985: 16 ("Carex aquatilis/Scirpus microcarpus community", "Carex aquatilis/Phleum pratense/Poa pratensis community", "Meadow communities: mixed Carex spp./ Phleum pratense/Poa pratensis" in part, "Carex aquatilis/Carex stipata/Poa pratensis community"); Kovalchik 1987: 104 ("Aquatic sedge association"); Johnson & Simon 1987: 225 ("Tufted hairgrass-wet sedge meadows" in part, "Wet sedge meadows" in part); Manning & Padgett 1989: 57 ("Carex aquatilis community type"); Manning & Padgett 1991: 391 ("Carex aquatilis community type").

Carex canescens-Carex muricata CPKG3

CARCAN-CARMUR. Palustrine: depressions. WC.
Seyer 1983: 8 ("Carex canescens-Carex muricata low sedge community").

Carex densa-Eleocharis palustris CPKG2

CARDEN-ELEPAL. Palustrine: depressions. WV
(Willamette).
Boss 1983: 98 ("Carex densa-Eleocharis palustris assemblage").

Carex douglasii-Deschampsia cespitosa CPD

CARDOU-DESCES. Palustrine: low-elevation bottomland prairie. BM.

Unpublished.

Carex eurycarpa CPKG3

CAREUR. Palustrine: floodplains, channels. Late seral-climax. EC.
Volland 1976: 20 ("Wet meadow community" in part);
Kovalchik 1987: 102 ("Widefruit sedge association").

Carex illota-Eleocharis pauciflora CPKG3

CARILL-ELEPAU. Palustrine: peatlands, meadows and floodplains. BM.
Cole 1977: 102 ("Eleocharis pauciflora-Carex scopulorum-Carex illota community type"); Seyer 1981: 4 ff. ("Carex illota/forb community" and variants); Seyer 1981: 17 ff. ("Eleocharis pauciflora-Carex scopulorum-Carex illota community").

Carex interrupta CPKG3

CARINT. Palustrine: subalpine basins and meadows. EC.
Kovalchik 1987: 138 ("Green-fruited sedge association").

Carex lanuginosa CPKG3

CARLAN. Palustrine: streambanks and terraces. Mid-seral-climax. BM, BR, EC.
Griffiths 1902: 47 ("Wooly sedge"); Ganskopp 1979: 33 ("Carex lanuginosa-Carex aquatilis community"); Cornelius 1981: 3 ff. ("Wet sedge meadow" in part); Kovalchik 1987: 98 ("Wooly sedge association"); Manning & Padgett 1989: 61 ("Carex lanuginosa community type"); Evenden 1990: 48 ("Carex lanuginosa community type"); Manning & Padgett 1991: 421 ("Carex lanuginosa community type").

Carex lasiocarpa CPKG3

CARLAS. Palustrine: peaty basins and lakeshores. Climax. EC.
Kovalchik 1987: 108 ("Slender sedge association").

Carex leporinella CPKG3

CARLEP. Palustrine: peatlands. BM.
Seyer 1981: 17 ff. ("Carex leporinella community" and variants).

Carex lyngbyei (freshwater association) CPF

CARLYN (freshwater association). Palustrine: freshwater

tidal marshes. CR, WV (Columbia).
Jefferson 1975: 54 ("Bulrush and sedge marsh: *Scirpus validus* [sic]-*Carex* community" in part); Frenkel & Eilers 1976: 52 ("Intertidal marsh group with *Carex lyngbyei*"); Macdonald 1977: 172 ("*Scirpus validus* [sic]-*Carex*" in part); Frenkel et al. 1978: 103 ("*Carex-Eleocharis* community"); Taylor & Frenkel 1979: 58 ("*Carex lyngbyei* community"); Taylor 1980: 55 ("*Carex lyngbyei* community"); Thomas 1980: 10 ("*Scirpus validus* [sic]-*Typha angustifolia-Carex lyngbyei* vegetation type" in part); Thomas 1980: 55 ("*Carex lyngbyei* vegetation type"); Thomas 1984: 95 ("Fresh water emergent marsh with regular tidal inundation: *Carex lyngbyei*").

Carex lyngbyei-Triglochin maritimum CEC

CARLYN-TRIMAR. Estuarine: mudflats and low salt marsh.
CR, KM.

Jefferson 1975: 49 ("Low silt marsh: *Carex-Triglochin* community"); Jefferson 1975: 52 ("Sedge marsh: *Carex lyngbyei*"); Jefferson 1975: 56 ("Immature high marsh: *Carex-Salicornia-Triglochin maritimum* community"); Eilers 1975: 233 ("Low marsh: *Carex* community"); Eilers 1976: 27 ("*Carex* community"); Stout 1976: 35 ("*Carex lyngbyei* community"); Macdonald 1977: 172 ("*Carex-Salicornia-Triglochin*", "*Carex*", "*Carex-Triglochin*"); Frenkel et al. 1978: 65 ("*Carex lyngbyei-Distichlis spicata* community"); Frenkel et al. 1978: 82 ("*Triglochin maritimum-Carex lyngbyei* community"); Frenkel et al. 1978: 98 ("*Carex lyngbyei-Triglochin maritimum* community"); Frenkel et al. 1978: 103 ("*Carex lyngbyei* community", "*Carex lyngbyei-Scirpus americanus* community", "*Carex-Scirpus-Triglochin* community"); Taylor & Frenkel 1979: 74 ("*Carex lyngbyei* community"); Taylor 1980: 71 ("*Carex lyngbyei* community"); Thomas 1980: 8 ("*Carex lyngbyei* vegetation type, ± 100% cover"); Gallagher & Kibby 1981: 452 ("Stands of *Carex lyngbyei*"); Frenkel & Boss 1988: 39 ("*Carex lyngbei* low marsh"); Frenkel & Boss 1988: 39 ("*Triglochin maritimum-Carex lyngbyei* middle marsh"); Frenkel & Morlan 1990: 47 ("*Carex lyngbyei* community").

Carex lyngbyei-Potentilla pacifica CEF

CARLYN-POTPAC. Estuarine: high salt marsh. CR.

Frenkel & Morlan 1990: 47 ("Carex lyngbyei-Potentilla pacifica community").

Carex nebrascensis CPKG3

CARNEB. Palustrine: wet meadows and streambanks. Early-mid seral. BM, BR, EC.

Griffiths 1902: 47 ("Nebraska sedge"); Reid & Pickford 1946: 9 ("Mountain meadows: fair condition" in part); Hall 1973: 6 ("Wet meadow"); Beguin & Major 1975: 353 ("Caricetum nebrascensis association" in part); Kierstead & Pogson 1976: 1-19 ("Meadow: Carex nebrascensis-Carex praegracilis-Eleocharis palustris"); Hopkins 1979: 13 ("sedge-wet meadow association" in part); Christy & Cornelius 1980: plot 1 ("Phleum pratense-Arnica chamissonis-Carex nebrascensis"); Christy & Cornelius 1980: plot 4 ("Carex nebrascensis-Alopecurus pratensis"); Christy & Cornelius 1980: plot 5 ("Carex nebrascensis-Hordeum brachyantherum-Juncus nevadensis"); Christy & Cornelius 1980: plot 22 ("Carex nebrascensis-Mentha arvensis-Arnica chamissonis"); Christy & Cornelius 1980: plot 23 ("Muhlenbergia richardsonis-Potentilla gracilis-Carex nebrascensis"); Christy & Cornelius 1980: plot 30 ("Carex simulata-Carex nebrascensis-Arnica chamissonis"); Christy & Cornelius 1980: plot 36 ("Carex athrostachya-Carex nebrascensis-Carex vesicaria"); Christy & Cornelius 1980: plot 46 ("Carex nebrascensis-Calamagrostis neglecta"); Ratliff 1982: 8 ("Nebraska sedge meadow class"); Kovalchik 1987: 100 ("Nebraska sedge community type"); Manning & Padgett 1989: 59 ("Carex nebrascensis community type"); Manning & Padgett 1991: 416 ("Carex nebrascensis community type").

Carex nigricans CPKG3

CARNIG. Palustrine: subalpine basins, depressions. Late seral-climax. BM, EC, WC.

Vechten 1960: 66 ("Sedge meadow: Carex nigricans-Carex spectabilis"); Douglas 1972: 150 ("Carex nigricans community"); Campbell 1973: 20 ("Carex nigricans-Polytrichum community"); Campbell 1973: 22 ("Carex nigricans-Aster community"); Cole 1977: 113 ("Carex nigricans community type"); Seyer 1981: 7 ff. ("Carex nigricans community"); Kovalchik 1987: 128 ("Black alpine sedge association").

Carex obnupta CPF

CAROBN. Palustrine: marshes, lakeshores, deflation plains. CR, WV (Willamette).

Peck 1919: 347 ("dense border of *Carex obnupta*");
Wiedemann 1966: 131 ("Marsh community"); Taylor &
Frenkel 1979: 58 ("*Carex obnupta* community"); Taylor
1980: 55 ("*Carex obnupta* community"); Boss 1983: 45,
98 ("Emergent wetland: *Carex obnupta* community");
Marshall 1985: 143 ("Emergent wetland: slough sedge-
rush-cattail community"); Sanville et al. 1986: 127
("*Carex obnupta* community"); Glad et al. 1987: 261
("Driest sedge marsh: *Carex obnupta*-*Lupinus*
polyphyllus-*Aster subspicatus*", "Drier sedge marsh:
Carex obnupta-*Veratrum californicum*").

Carex obnupta-Carex sitchensis CPKG1

CAROBN-CARSIT. Palustrine: coastal freshwater marshes.
CR.
Unpublished.

Carex obnupta-Potentilla pacifica CPKG1

CAROBN-POTPAC. Palustrine: deflation plain marshes. CR.
Wiedemann 1966: 131 ("Marsh community: *Carex obnupta* and
Potentilla anserina," perennially wet deflation
plain, with *Hypericum anagalloides*); Wiedemann et
al. 1974: 34 ("Marsh community" as above); Kunze
1983: 2, 1985: 157 (Perennially wet deflation plain:
Carex obnupta community); Boss 1983: 72 ("*Carex*
obnupta-*Juncus falcatus*-*Potentilla pacifica*
community"); Wiedemann 1984: 54 ("*Carex obnupta*-
Potentilla pacifica").

Carex rostrata CPF

CARROS. Lacustrine, palustrine: meadows, pools,
lakeshores, springs. Late seral-climax. BM, BR,
EC, WC.

Roach 1952: 184 ("*Carex sitchensis* union" in part);
Campbell 1973: 34 ("*Carex rostrata*-*Sphagnum*
community"); Stuth 1975: 71 ("*Carex rostrata* habitat
type"); Cole 1977: 102 ("*Carex rostrata* community
type"); Seyer 1979: 35 ("*Carex rostrata* reedswamp");
Christy & Cornelius 1980: plot 34 ("*Carex*
rostrata"); Cornelius 1981: 3 ff. ("sedge &
spikerush marsh", "beaked sedge marsh"); Padgett
1982: 77 ("Beaked sedge riparian dominance type");
Seyer 1981: 10 ff. ("*Carex rostrata* reedswamp");

Cole 1982: 22 ("Carex rostrata zone"); Kauffman 1982: 59 ("Carex rostrata community"); Ratliff 1982: 5 ("Beaked sedge meadow class"); Kauffman et al. 1985: 16 ("Carex rostrata community"); Frenkel et al. 1986: 33 ("Carex rostrata reedswamp"); Halpern 1986: 11 ("Carex rostrata association"); Kovalchik 1987: 116 ("Inflated sedge association"); Kovalchik 1987: 118 ("Beaked sedge association"); Johnson & Simon 1987: 225 ("Wet sedge meadows" in part, "Tufted hairgrass-wet sedge meadows" in part); Manning & Padgett 1989: 57 ("Carex rostrata community type"); Manning & Padgett 1991: 403 ("Carex rostrata community type").

Carex scopulorum CPKG3

CARSCO. Palustrine: subalpine meadows, floodplains, lakeshores, streambanks. Mid seral-climax. BM, BR, WC.

Campbell 1973: 36 ("Carex scopulorum community"); Cole 1977: 102 ("Carex scopulorum community type"); Seyer 1981: 6 ff. ("Carex scopulorum community"); Seyer 1981: 7 ff. ("Carex scopulorum-Carex nigricans-Carex illota-forb"); Seyer 1981: 21 ff. ("Carex scopulorum/Sphagnum-Aulacomnium community"); Seyer 1981: 45 ff. ("Carex scopulorum-Carex nigricans-Deschampsia cespitosa/forb community"); Cole 1982: 22 ("Carex scopulorum zone"); Kovalchik 1987: 130 ("Holm's sedge-black alpine sedge-tufted hairgrass association"); Kovalchik 1987: 132 ("Holm's sedge association"); Johnson & Simon 1987: 225 ("Tufted hairgrass-wet sedge meadows" in part, "Wet sedge meadows" in part); Manning & Padgett 1989: 56 ("Carex scopulorum community type"); Evenden 1990: 44 ("Carex scopulorum community type"); Manning & Padgett 1991: 387 ("Carex scopulorum community type").

Carex simulata CPKG3

CARSIM. Palustrine: meadows, peatlands. Late seral-climax. BM, BR, EC.

Christy & Cornelius 1980: plot 35 ("Carex simulata-Eleocharis"); Kovalchik 1987: 106 ("Short-beaked sedge association"); Manning & Padgett 1989: 59 ("Carex simulata community type"); Manning & Padgett 1991: 395 ("Carex simulata community type").

Carex sitchensis CPF

CARSIT. Palustrine: basins, floodplains, lakeshores.
Climax. CR, EC, WC.

Roach 1952: 184 ("Carex sitchensis union"); Campbell
1973: 41 ("Carex sitchensis community"); Seyer 1979:
40 ("Carex sitchensis community" and variants);
Seyer 1983: 12 ("Carex sitchensis community" and
variants); Hemstrom et al. 1985: 200 ("Carex-Scirpus
(hydric) community"); Hemstrom et al. 1987: 255
("Sedge-common bulrush association"); Frenkel et al.
1986: 33 ("Carex sitchensis fen"); Wilson 1986: 19
("Carex sitchensis fen"); Kovalchik 1987: 114
("Sitka sedge association").

Carex unilateralis-Hordeum brachyantherum CPKG2

CARUNI-HORBRA. Palustrine: bottomland prairie. WV
(Willamette).

Moir & Mika 1972: 12 (Hordeum brachyantherum swales");
Kagan 1983: 12 ("sedge-meadow barley community");
Savonen 1988: 5 ("sedge-meadow barley prairie
community").

Carex vesicaria CPF

CARVES. Palustrine: meadows, pools, springs. Late
seral- climax. BM, BR, EC, WC.

Christy & Cornelius 1980: plot 29 ("Carex vesicaria-
Arnica chamissonis-Sium suave"); Christy & Cornelius
1980: plot 40 ("Carex vesicaria"); Christy &
Cornelius 1980: plot 44 ("Carex vesicaria-Carex
nebrascensis-Juncus balticus"); Henderson &
McAllister 1983: 2 ("Aquatic: mats of Carex
vesicaria"); Manning & Padgett 1991: 452 ("Carex
vesicaria communities").

Ceratophyllum demersum CPB

CERDEM. Lacustrine, riverine: lakes, ponds, tidal
sloughs. CR, WC, WV (Rogue).
Unpublished.

Chamaecyparis lawsoniana/Rhododendron occidentale/Darlingtonia
californica CPU

CHALAW/RHOCC/DARCAL. Palustrine: lower elevation seeps,
fens and streamsides on ultramafic soils. KM.
Hawk 1977: 157 ("Chamaecyparis lawsoniana/ultramafic
meadow community"); Copeland 1978: 9 ("Forest
communities: Chamaecyparis lawsoniana/Rhododendron

occidentale/Darlingtonia-rush-sedge community"); Becking et al. 1982: 9 ("Streamside Darlingtonia bogs within alluvial floodplain of perennial stream"; "Higher elevation Darlingtonia bogs"); Zobel et al. 1985: 34 ("Meadow community").

Chamaecyparis nootkatensis/Oplopanax horridum CPX
CHANOO/OPLHOR. Palustrine: snowbed seepage. Climax.
WC.
Dyrness et al. 1974: 50 ("Abies amabilis zone: Chamaecyparis nootkatensis/Oplopanax horridum association"); Zobel et al. 1976: 137 ("Chamaecyparis nootkatensis/Oplopanax horridum community").

Chiloscyphus polyanthos CPB
CHIPOL. Palustrine: springs and streams. CR, WC.
Unpublished.

Cornus stolonifera-Salix sitchensis CPQF3
CORSTO-SALSIT. Palustrine: riparian. CR, WV
(Columbia).
Frenkel & Eilers 1976: 52 ("Shrub thicket dominated by Salix spp."); Thomas 1980: 7 ("Salix sitchensis scrub"); Thomas 1984: 96 ("Fresh-water shrub-dominated wetlands with irregular tidal inundation: Salix sitchensis shrub-swamp"); Christy & Putera 1993: 40 ("Cornus stolonifera-Salix sitchensis shrub swamp").

Danthonia californica-Juncus tenuis CPJ
DANCAL-JUNTEN. Palustrine: seepage slopes on tabular basalt. BM.
Strickler 1966: 29 ("Grassland soils: western rush-California danthonia-thin bentgrass").

Danthonia unispicata-Deschampsia danthonioides CPE
DANUNI-DESDAN. Palustrine: vernal pools. BM.
Johnson & Simon 1985: 108 ("Sandberg's bluegrass-onespike oatgrass plant association: vernal pools"); Johnson & Simon 1987: 145 ("Sandberg's bluegrass-onespike oatgrass plant association: vernal pools").

Darlingtonia californica CPC
DARCAL. Palustrine: hillslope seeps on ultramafic soils.

KM.

Copeland 1978: 10 ("Hillslope bog: *Darlingtonia californica*-sedge-rush-forb community"); Becking et al. 1982: 6 ("Open meadow sloping *Darlingtonia* bogs on serpentine or peridotite").

Deschampsia cespitosa (interior valley association) CPKG2
DESCES (interior valley association). Palustrine: low-elevation bottomland prairie. WV (Willamette).
Lippert & Jameson 1964: 190 ("Grassland-composite stage"); Moir & Mika 1972: 12 ("*Deschampsia cespitosa* prairie community"); Kagan 1983: 12 ("tufted hairgrass valley grassland community"); Marshall 1985: 143 ("Emergent wetland: pear and apple-hawthorn/meadow barley-tufted hairgrass community"); Savonen 1988: 5 ("Tufted hairgrass valley prairie community: *Deschampsia cespitosa*"); Kauffman & Connelly 1988: 2 ("*Deschampsia cespitosa*-*Danthonia californica* community"); Connelly 1989: 21 ("*Deschampsia cespitosa*-*Danthonia californica* community"); Connelly & Kauffman 1991: 9 ("*Deschampsia cespitosa*-*Danthonia californica* community").

Deschampsia cespitosa (montane association) CPKG6
DESCES (montane association). Palustrine: Montane-subalpine meadows, peatlands, lake shores. Mid seral-climax. BM, BR, EC, WC.
Griffiths 1902: 46 ("Oregon clover"); Reid & Pickford 1946: 5 ("Mountain meadows: good condition"); Strickler 1966: 30 ("Grassland soils: tufted hairgrass"); Hall 1973: 5 ("Moist meadow community"); Stuth 1975: 68 ("*Deschampsia cespitosa*/*Carex aquatilis* habitat type"); Stuth 1975: 69 ("*Deschampsia cespitosa*/*Carex microptera*-*Carex athrostachya* habitat type"); Stuth 1975: 70 ("*Deschampsia cespitosa*/*Carex microptera* habitat type"); Volland 1976: 20 ("Wet meadow community" in part); Volland 1976: 21 ("Moist (hairgrass) meadow"); Cole 1977: 100, 103 ("*Deschampsia cespitosa* community type"); Mairs 1977: 128 ("*Deschampsia cespitosa* community"); Hopkins 1979: 12 ("Hairgrass-sedge-moist meadow association"); Hopkins 1979: 13 ("Sedge-wet meadow association" in part); Christy & Cornelius 1980: plot 2 ("*Deschampsia cespitosa*-*Carex simulata*-*Carex*

nebrascensis"); Christy & Cornelius 1980: plot 3 ("Haplopappus lanceolatus-Deschampsia cespitosa-Juncus nevadensis"); Christy & Cornelius 1980: plot 15 ("Agrostis exarata-Carex athrostachya-Ranunculus alismaefolius"); Christy & Cornelius 1980: plot 28 ("Arnica chamissonis-Carex simulata-Deschampsia cespitosa"); Christy & Cornelius 1980: plot 53 ("Arnica chamissonis-Eleocharis palustris-Machaerocarpus californicus"); Cornelius 1981: 3 ff. ("tufted hairgrass meadow complex"); Padgett 1982: 77 ("Beaked sedge riparian dominance type" in part); Kauffman 1982: 59 ("Arnica chamissonis-Poa pratensis-Juncus balticus community"); Cole 1982: 22 ("Deschampsia cespitosa community"); Ratliff 1982: 7 ("Tufted hairgrass meadow class"); Boss 1983: 173 ("Deschampsia cespitosa community"); Boss 1983: 148 ("Potentilla anserina-Agrostis scabra community"); Kauffman et al. 1985: 16 ("Arnica chamissonis/Poa pratensis/Juncus balticus community"); Sanville et al. 1986: 127 ("Potentilla anserina-Agrostis scabra community"); Kovalchik 1987: 95 ("Tufted hairgrass association"); Kovalchik 1987: 104 ("Aquatic sedge association"); Kovalchik 1987: 136 ("Lodgepole pine/tufted hairgrass association" in part); Johnson & Simon 1987: 224 ("Tufted hairgrass-moist sedge meadows"); Johnson & Simon 1987: 225 ("Tufted hairgrass-wet sedge meadows" in part, "Wet sedge meadows" in part); Manning & Padgett 1989: 60 ("Deschampsia cespitosa community type"); Manning & Padgett 1991: 408 ("Deschampsia cespitosa community type"); Manning & Padgett 1991: 412 ("Deschampsia cespitosa-Carex nebrascensis community type").

Deschampsia cespitosa-Juncus balticus CEF

DESCES-JUNBAL. Estuarine: high salt marsh. CR, KM.
 Jefferson 1975: 49 ("Low silt marsh: Deschampsia-Carex-Triglochin community"); Eilers 1975: 240 ("Low marsh: Triglochin-Deschampsia community"); Eilers 1975: 244 ("Low marsh: Carex-Deschampsia-Triglochin community"); Eilers 1975: 248 ("Low marsh: Carex-Deschampsia-Triglochin-Agrostis community"); Eilers 1975: 250 ("Juncus-Agrostis community"); Eilers 1975: 254 ("High marsh: Juncus-Agrostis-Festuca community"); Eilers 1976: 27 ("Juncus-Agrostis-Festuca community", "Juncus-Agrostis community", "Triglochin-Deschampsia community", "Carex-

Triglochin-Deschampsia-Agrostis community", "Carex-Triglochin-Deschampsia community"); Macdonald 1977: 172 ("Deschampsia-Carex-Triglochin"); Frenkel et al. 1978: 65 ("Deschampsia cespitosa-Atriplex patula community"); Taylor & Frenkel 1979: 74 ("Deschampsia-Juncus balticus-Triglochin community"); Taylor & Frenkel 1979: 78 ("Juncus balticus-Agrostis alba-Potentilla-Festuca rubra community", "Jucus balticus-Agrostis alba-Potentilla-Festuca community"); Taylor 1980: 71 ("Deschampsia-Juncus balticus-Triglochin community"); Taylor 1980: 75 ("Juncus balticus-Agrostis alba-Potentilla-Festuca rubra community"); Frenkel et al. 1981: 200, 201 ("high marsh: Deschampsia cespitosa-Agrostis alba-Juncus balticus"); Mitchell 1981: 111 ("Transitional, low marsh: Juncus-Distichlis-Deschampsia"); Mitchell 1981: 112 ("Transitional: Juncus-Deschampsia-Hordeum community", "Transitional: Deschampsia-Salicornia community"); Mitchell 1981: 113 ("Transitional, high salt marsh: Juncus-Deschampsia community"); Frenkel & Boss 1988: 39 ("Deschampsia cespitosa-Scirpus maritimus middle marsh", "Deschampsia cespitosa-Carex lyngbyei middle marsh", "Juncus balticus-Distichlis spicata high marsh"); Frenkel & Morlan 1990: 47 ("Juncus balticus-Deschampsia cespitosa community").

Deschampsia cespitosa-Potentilla pacifica CEF

DESCES-POTPAC. Estuarine: high salt marsh. CR, KM.
 Jefferson 1975: 58 ("Immature high marsh: Deschampsia-Potentilla-Trifolium-Juncus community"); Jefferson 1975: 60 ("Mature high marsh: Potentilla-Deschampsia community"); Stout 1976: 37 ("Deschampsia-Potentilla-Trifolium-Juncus community"); Macdonald 1977: 172 ("Deschampsia-Potentilla-Trifolium-Juncus lesueurii"); Frenkel et al. 1978: 89 ("Deschampsia cespitosa-Potentilla pacifica-Juncus balticus-Agrostis alba").

Distichlis spicata (interior alkaline association) CPD

DISSPI (interior alkaline association). Palustrine: playas. BR, HP.
 Griffiths 1902: 12 ("Level desert bottoms: Distichlis spicata zone"); Daubenmire 1970: 50 ("Distichlis stricta habitat type"); Saul 1974: 7 ("Saltgrass

community"); Copeland 1979a: 12 ("Vernal ponds: Distichlis stricta-Spartina gracilis association"); Easterday & Mamone 1980: 10, 13 ("Distichlis stricta community"); Easterday & Mamone 1980: 13 ("Distichlis stricta-Juncus balticus community", "Distichlis stricta-Nitrophila occidentalis-Puccinellia nuttalliana association"); .

Distichlis spicata-Elymus cinereus CPD

DISSPI-ELYCIN. Palustrine: playas, bottomlands. BM, CB, HP.

Poulton 1955: 70 ("Elymus-Distichlis association"); Daubenmire 1970: 50 ("Elymus cinereus-Distichlis stricta habitat type").

Distichlis spicata-Scirpus nevadensis CPD

DISSPI-SCINEV. Palustrine: alkaline marshes, springs and pools. BR, HP.

Harris 1954: 405 ("Saltgrass-Nevada club rush zone"); Daubenmire 1970: 77 ("Distichlis stricta-Scirpus nevadensis zone"); Kierstead & Pogson 1976: 1-12 ("Springs: Distichlis stricta-Scirpus nevadensis"); Copeland 1979b: HL-14 ("Alkali saltgrass-Nevada bulrush mosaic"); Copeland & Greene 1982: SL-5 ("Alkali saltgrass-Nevada bulrush community").

Distichlis spicata-Salicornia virginica CEC

DISSPI-SALVIR. Estuarine: intertidal sand and mud flats. CR, KM.

Thum 1972: 22 ("Patches of Salicornia virginica"); Jefferson 1975: 44 ("Low sand marsh: Distichlis-Cladophora-Salicornia", "Low sand marsh: Jaumea-Salicornia-Distichlis community"); Jefferson 1975: 45 ("Low sand marsh: Jaumea-Salicornia-Triglochin maritimum-Distichlis community", "Low sand marsh: Jaumea-Salicornia-Triglochin concinnum-Triglochin maritimum-Distichlis community"); Jefferson 1975: 48 ("Low silt marsh: Salicornia-Triglochin community"); Jefferson 1975: 55 ("Immature high marsh: Distichlis-Deschampsia-Carex community"); Jefferson 1975: 56 ("Immature high marsh: Distichlis community", "Immature high marsh: Distichlis-Salicornia community"); Jefferson 1975: 57 ("Immature high marsh: Salicornia-Distichlis-Triglochin community", "Immature high marsh: Salicornia-Distichlis-Plantago-Scirpus americanus-

Glaux-Spergularia marina community"); Jefferson 1975: 60 ("Mature high marsh: Salicornia-Distichlis-Juncus community"); Eilers 1975: 229 ("Low marsh: Triglochin community"); Eilers 1976: 27 ("Triglochin community"); Stout 1976: 35 ("Salicornia-Triglochin community", "Salicornia-Distichlis-Triglochin community", "Jaumea-Salicornia-Distichlis community", "Salicornia-Distichlis- Plantago-Scirpus americanus-Glaux-Spergularia community", "Distichlis-Cladophora- Salicornia community", "Salicornia-Distichlis community"); Macdonald 1977: 172 ("Distichlis- Deschampsia-Carex", "Salicornia-Triglochin", "Distichlis-Cladophora-Salicornia", "Salicornia-Distichlis- Plantago-Scirpus americanus-Glaux-Spergularia canadensis", "Salicornia-Distichlis-Juncus", "Salicornia-Distichlis-Triglochin", "Jaumea-Salicornia-Triglochin concinnum-Triglochin maritimum-Distichlis", "Jaumea-Salicornia-Distichlis-Triglochin maritimum"); Frenkel et al. 1978: 75 ("Triglochin maritimum-Salicornia virginiana-Distichlis spicata-Jaumea carnososa community"); Frenkel et al. 1978: 82 ("Distichlis spicata-Salicornia virginiana community with Carex lyngbei"); Frenkel et al. 1978: 89 ("Salicornia virginica-Jaumea carnososa-Plantago maritima-Distichlis spicata community"); Taylor & Frenkel 1979: 70 ("Salicornia community"); Taylor 1980: 67 ("Salicornia community"); Mitchell 1981: 111 ("Intertidal: Salicornia community", "Intertidal: Salicornia-Distichlis community", "Transitional: Distichlis-Salicornia community"); Frenkel et al. 1981: 200 ("low marsh: Distichlis spicata-Salicornia virginica-Jaumea carnososa"); Liverman 1982: 63 ("Emergent halophyte community" in part); Frenkel & Boss 1988: 39 ("Distichlis spicata-Salicornia virginiana panne"); Frenkel & Morlan 1990: 47 ("Salicornia virginica-Distichlis spicata community").

Downingia-Eleocharis CPE

DOWNINGIA-ELEOCHARIS. Palustrine: vernal pools. EC, WV (Willamette).

Lippert & Jameson 1964: 193 ("Dried bed stage: shallow dried beds"); Christy & Cornelius 1980: plot 7 ("Downingia yina-Navarretia minima-Eleocharis acicularis"); Kagan 1983: 12 ("sedge-meadow barley

community" in part).

Dulichium arundinaceum CPF

DULARU. Lacustrine, palustrine: peatlands, ponds and lakes. CR, EC, WC.
Unpublished.

Eleocharis acicularis CPKG4

ELEACI. Palustrine: meadows, marshes and mudflats. EC.
Christy & Cornelius 1980: plot 37 ("Eleocharis acicularis-Juncus balticus"); Christy & Cornelius 1980: plot 41 ("Eleocharis acicularis-Arnica chamissonis-Carex vesicaria"); Boss 1983: 147 ("Eleocharis acicularis community"); Sanville et al. 1986: 127 ("Eleocharis acicularis community").

Eleocharis palustris CPF

ELEPAL. Lacustrine, palustrine: marshes, ponds, lakes, channels, streambanks. BM, BR, CB, CR, EC, HP, WV (Rogue).

Griffiths 1902: 46 ("Creeping spike rush"); Harris 1954: 406 ("Creeping spike rush"); Lippert & Jameson 1964: 189 ("Sedge meadow stage"); Kierstead & Pogson 1976: 1-14 ("Marsh: Eleocharis palustris"); Bork 1978: 69 ("Eleocharis palustris dominates..."); Taylor & Frenkel 1979: 53 ("Eleocharis-Agrostis alba community"); Easterday & Mamone 1980: 15 "Eleocharis palustris-Alisma gramineum association"); Easterday & Mamone 1980: 16 ("Eleocharis palustris-Carex spp.-Berula erecta association"); Taylor & Frenkel 1979: 53 ("Eleocharis-Juncus effusus var. pacificus-Jussiaea community"); Taylor 1980: 50 ("Eleocharis-Juncus effusus var. pacificus-Jussiaea community"); Taylor 1980: 50 ("Eleocharis-Agrostis alba community"); Thomas 1980: 5 ("Juncus oxymeris-Eleocharis palustris vegetation type"); Christy & Cornelius 1980: plots 10 & 12 ("Eleocharis palustris"); Christy & Cornelius 1980: plot 31 ("Eleocharis palustris-Senecio hydrophilus"); Padgett 1982: 79 ("Eleocharis palustris community"); Mitchell 1981: 57 ("Agrostis alba-Eleocharis palustris community"); Seyer 1981: 21 ff. ("Eleocharis palustris community"); Henderson & McAllister 1983: 2 ("Aquatic: Eleocharis palustris"); Boss 1983: 67 ("Eleocharis palustris community"); Boss 1983: 94 ("Eleocharis palustris-

Mentha arvensis community"); Marshall 1985: 143 ("Emergent wetland: spike rush-mint community", "Emergent wetland: spike rush-one sided sedge community"); Kovalchik 1987: 120 ("Creeping spikerush association"); Manning & Padgett 1989: 56 ("Eleocharis palustris community type"); Evenden 1990: 45 (Eleocharis palustris community type); Manning & Padgett 1991: 384 (Eleocharis palustris community type").

Eleocharis pauciflora/Hamatocaulis vernicosus CPKG4

ELEPAU/HAMVER. Palustrine: meadows, pools and peatlands. BM, BR, EC, WC.

Campbell 1973: 36 ("Eleocharis-Aulacomnium community"); Cole 1977: 102 ("Eleocharis pauciflora community type"); Seyer 1979: 37 ("Eleocharis pauciflora/ Carex limosa community"); Seyer 1979: 38 ("Eleocharis pauciflora/bryophyte community: Meesia triquetra phase" in part, "Eleocharis pauciflora/ bryophyte community: Philonotis fontana phase"); Seyer 1981: 7 ("Eleocharis pauciflora community"); Cole 1982: 22 ("Eleocharis pauciflora zone"); Seyer 1983: 8 ("Carex limosa/Menyanthes community"); Seyer 1983: 9 ("Carex limosa-Sphagnum low sedge/moss mat community"); Ratliff 1982: 8 ("Fewflowered spikerush meadow class"); Wilson 1986: 19 ("Eleocharis pauciflora-Drepanocladus vernicosus fen" in part); Wilson 1986: 20 ("Carex limosa-Menyanthes trifoliata-Meesia triquetra fen"); Kovalchik 1987: 45 ("Lodgepole pine-Engelmann spruce/few-flowered spikerush association" in part); Kovalchik 1987: 110 ("Few-flowered spikerush association"); Manning & Padgett 1989: 58 ("Eleocharis pauciflora community type"); Manning & Padgett 1991: 399 ("Eleocharis pauciflora community type").

Eleocharis rostellata CPKG4

ELEROS. Palustrine: springs, marshes. BR.
Kierstead & Pogson 1976: 1-12 ("Springs: Eleocharis rostellata").

Elodea canadensis CPB

ELOCAN. Lacustrine, palustrine, riverine: lakes, ponds, sloughs, streams. CR, WV (Rogue, Willamette).
Lippert & Jameson 1964: 187 ("Submerged-floating stage" in part).

Elymus triticoides-Juncus balticus CPD

ELYTRI-JUNBAL. Palustrine: playas, springs, marshes.
BR.

Kierstead & Pogson 1976: 1-12 ("Springs: Juncus balticus-Triglochin concinnum"); Easterday & Mamone 1980: 14 ("Elymus triticoides-Distichlis stricta community", "Elymus triticoides-Juncus balticus association", "Elymus triticoides-Juncus balticus-Triglochin maritimum community").

Elymus triticoides-Poa juncifolia CPD

ELYTRI-POAJUN. Palustrine: playas. BR.
Unpublished.

Equisetum fluviatile CPF

EQUFLU. Lacustrine, palustrine: lakeshores, channels.
CR, WC.

Thomas 1980: 5 ("...replaced by Equisetum fluviatile"); Seyer 1983: 7 ("Aquatic communities: drainage channels"); Christy & Putera 1993: 40 ("Equisetum fluviatile marsh").

Fontinalis antipyretica CPB

FONANT. Lacustrine, palustrine, riverine: lakeshores, streams and pools. CR, WC, WV (Willamette).

Kienholz 1931: 645 ("Shallow water: great masses of Fontinalis antipyretica gigantea"); Seyer 1979: 45 ("Stream community: Fontinalis antipyretica"); Seyer 1979: 46 ("Deep pool communities: Fontinalis"); Pearsons 1989: 12 ff. ("Fontinalis antipyretica"); Markle et al. 1991: 288 ("Fontinalis antipyretica").

Fraxinus latifolia/Carex obnupta CPW

FRALAT/CAROBN. Palustrine: floodplains. Early seral.
WV (Willamette).

Heinitz 1982: 20 ("Carex obnupta community"); Marshall 1985: 142 ("Forested wetland: Oregon ash/slough sedge-water parsley community", "Forested wetland: willow-Oregon ash/slough sedge-reed canary grass community", "Scrub-shrub wetland: Oregon ash/rose/slough sedge-water parsley community", "Scrub-shrub wetland: Oregon ash/rose/hardhack/slough sedge-rush community"); Frenkel & Heinitz 1987: 208 ("Fraxinus latifolia/Carex obnupta community").

Fraxinus latifolia-Populus trichocarpa/Cornus stolonifera/
Urtica dioica CPW

FRALAT-POPTRI/CORSTO/URTDIO. Palustrine: riparian. CR,
WV (Columbia, Willamette).

Smith & Smith 1976: 115 ("Black cottonwood/creek
dogwood/equisetum"); Smith & Smith 1976: 145 ("Black
cottonwood-Pacific willow/reed canarygrass"); Smith
& Smith 1976: 159 ("Black cottonwood-Pacific willow-
Oregon ash/creek dogwood/reed canarygrass"); Smith &
Smith 1976: 183 ("Pacific willow-black
cottonwood/creek dogwood/reed canarygrass");
Hinschberger 1978: 6 ("Segment 3: black
cottonwood/Pacific willow"); Hinschberger 1978: 6
("Segment 3: [Populus balsamifera-Salix lasiandra]
reed canary grass codominant").

Fraxinus latifolia-Populus trichocarpa/Symphoricarpos albus/
Urtica dioica CPW

FRALAT-POPTRI/SYMBOLB/URTDIO. Palustrine: floodplains.
Late seral. WV (Columbia, Rogue, Willamette).

Smith & Smith 1976: 165 ("Oregon ash-black cottonwood/
snowberry/bentgrass"); Kranz & Richter 1980: 47
("Riparian community: Salix scouleriana
association"); Heinitz 1982: 20 ("Symphoricarpos
albus community"); Frenkel & Heinitz 1987: 208
("Fraxinus latifolia/ Symphoricarpos albus
community").

Fraxinus latifolia/Urtica dioica CPW

FRALAT/URTDIO. Palustrine: floodplains. WV (Columbia).
Christy & Putera 1993: 41 ("Fraxinus latifolia/Urtica
dioica woodland").

Glyceria borealis CPKG6

GLYBOR. Lacustrine, palustrine: shallow water and
mudflats. BR, EC.

Boss 1983: 146 ("Glyceria borealis assemblage");
Sanville et al. 1986: 127 ("Glyceria borealis
community"); Manning & Padgett 1991: 452 ("Glyceria
striata communities").

Glyceria elata-Juncus balticus CPKG6

GLYELA-JUNBAL. Palustrine: floodplains. BM.

Kauffman 1982: 59 ("Glyceria elata-Juncus balticus community"); Kauffman et al. 1985: 16 ("Glyceria elata/Juncus balticus community").

Glyceria grandis-Mimulus guttatus CPKG6

GLYGRA-MIMGUT. Palustrine: streambanks and terraces. BR.

Evenden 1990: 45 ("Glyceria grandis/mesic forb community type").

Glyceria striata CPKG6

GLYSTR. Palustrine: streambanks. BM.

Strickler 1966: 30 ("Grassland soils: fowl mannagrass-alpine timothy").

Juncus balticus CPF

JUNBAL. Palustrine: marshes, streambanks and grassland Early-mid seral. BM, BR, CR, EC, WV (Willamette).

Reid & Pickford 1946: 9 ("Mountain meadows: fair condition" in part); Volland 1976: 20 ("Wet meadow"); Kierstead & Pogson 1976: 1-13 ("Ponds: Juncus balticus"); Taylor & Frenkel 1979: 60 ("Juncus balticus community"); Easterday & Mamone 1980: 15 ("Juncus balticus-Eleocharis palustris-Carex spp. association", "Juncus balticus-Potentilla anserina-Eleocharis palustris association", "Juncus balticus-Poa nevadensis association"); Taylor 1980: 57 ("Juncus balticus community"); Padgett 1982: 73 ("Baltic rush riparian dominance type"); Boss 1983: 148 ("Juncus balticus-Phalaris arundinacea community"); Henderson & McAllister 1983: 2 ("Aquatic: Juncus balticus"); Kovalchik 1987: 138 ("Baltic rush community type"); Manning & Padgett 1989: 61 ("Juncus balticus community type"); Evenden 1990: 47 ("Juncus balticus community type"); Larkin 1990: 3 ("Juncus/Agrostis community"); Manning & Padgett 1991: 436 ("Juncus balticus community type").

Juncus balticus-Potentilla pacifica CEF

JUNBAL-POTPAC. Estuarine: high salt marsh. CR.

Frenkel et al. 1978: 57 ("Juncus balticus-Potentilla pacifica community"); Frenkel et al. 1978: 75 ("Potentilla pacifica-Agrostis alba-Juncus balticus community"); Frenkel et al. 1978: 82 ("Juncus balticus-Potentilla pacifica-Aster subspicatus

community"); Frenkel et al. 1978: 99 ("Juncus balticus-Potentilla pacifica-Agrostis alba community"); Mitchell 1981: 112 ("Transitional: Juncus-Potentilla-Carex community"); Frenkel et al. 1981: 200 ("high marsh: Potentilla pacifica-Juncus balticus-Agrostis alba"); Mitchell 1981: 113 ("Transitional, high salt marsh: Juncus-Potentilla-Agrostis community", "Transitional, high salt marsh: Potentilla-Juncus community"); Frenkel & Boss 1988: 39 ("Potentilla pacifica-Juncus balticus high marsh"); Frenkel & Morlan 1990: 47 ("Potentilla pacifica-Juncus balticus community").

Juncus balticus-Scirpus nevadensis CPD

JUNBAL-SCINEV. Palustrine: springs, marshes. BR.
Kierstead & Pogson 1976: 1-12 ("Springs: Scirpus nevadensis-Juncus balticus").

Juncus falcatus-Juncus nevadensis CPKG1

JUNFAL-JUNNEV. Palustrine: coastal deflation plains. CR.
Wiedemann 1966: 127 ("Rush meadow community"); Wiedemann 1984: 54 ("Juncus falcatus-Trifolium wormskjoldii community").

Juncus nevadensis CPF

JUNNEV. Palustrine: coastal deflation plains, marshes and lakeshores. CR, EC, WV.
Christy & Cornelius 1980: plot 6 ("Juncus nevadensis-Juncus balticus-Carex nebrascensis"); Christy & Cornelius 1980: plot 24 ("Juncus nevadensis-Eleocharis acicularis-Ranunculus flammula"); Kovalchik 1987: 138 ("Nevada rush association"); Connelly 1989: 22 ("Rosa nutkana/Deschampsia cespitosa-Juncus nevadensis community") in part; Manning & Padgett 1991: 453 ("Juncus nevadensis communities").

Kalmia microphylla CPQF4

KALMIC. Palustrine: montane peatlands, edges of ponds and lakes. BM, EC, WC.
Hansen 1942: 525 ("Zone of sedge, purple marshlocks and bog laurel"); Cole 1977: 104 ("Kalmia microphylla-Gaultheria humifusa community type"); Cole 1982: 22 ("Kalmia microphylla-Gaultheria humifusa zone"); Frenkel et al. 1986: 33 ("Kalmia microphylla/Sphagnum bog").

Ledum glandulosum/Darlingtonia californica/Sphagnum CPQF2
LEDGLA/DARCAL/SPHAGN. Palustrine: coastal peatlands. CR,
KM.

Egler 1934: 33 ("Bog habitat" with *Darlingtonia californica*, *Drosera rotundifolia*, *Lysichiton americanum*); Christy 1979: 51 ff. ("Darlingtonia bog").

Ledum glandulosum/Sphagnum CPQF2

LEDGLA/SPHAGN. Palustrine: coastal peatlands. CR, KM.
Burt-Davy 1902: 53 ("Sphagnum and peat swamps"); Rigg
1933: 535 ("Ledum columbianum-Carex"); Hansen 1941a:
12 ("Sphagnum area: Labrador tea-huckleberry-
cranberry" in part); Hansen 1941b: 207 ("Labrador
tea-bog laurel associates" in part); Hansen 1943: 335
("Bandon bog" species list, in part); Hansen 1944:
628 ("Sphagnum type" species list, in part); Wade
1965: 28 ("Ledum groenlandicum-Sphagnum capillaceum
association" in part); Cordes 1972: 301 ("Treeless
bog type: *Ledum groenlandicum*-*Kalmia polifolia*-
Vaccinium uliginosum/ *Carex*/ *Sphagnum*" in part);
Christy 1979: 21 ff. ("Sphagnum bog"); Hebda & Biggs
1981: 6 ("Heathland" in part).

Ledum glandulosum-Myrica gale CPQF2

LEDGLA-MYRGAL. Palustrine: coastal peatlands. CR.
Wade 1965: 37 ("*Pinus contorta*-*Sphagnum capillaceum*-
Myrica gale variant" in part).

Lemna minor CPB

LEMMIN. Palustrine: aquatic bed. BM, BR, CB, CR, HP,
WC, WV (all).
Unpublished.

Lilaeopsis occidentalis-Tillaea aquatica CPF

LILOCC-TILAU. Palustrine: freshwater marshes with
tidal or seasonal inundation. CR, WV (Columbia).
Thomas 1980: 7 ("mud bank community"); Christy & Putera
1993: 40 ("*Lilaeopsis occidentalis*-*Tillaea aquatica*
marsh").

Ludwigia palustris-Polygonum hydropiperoides CPKG2

LUDPAL-POLHYD. Palustrine: seasonal pools and ponds. WV

(Columbia, Rogue, Willamette).

Lippert & Jameson 1964: 192 ("Dried bed stage: deep dried bed"); Christy & Putera 1993: 40 ("Ludwigia palustris-Polygonum hydropiperoides marsh").

Luetkea pectinata-Saxifraga tolmiei CPKG5

LUEPEC-SAXTOL. Palustrine: subalpine snowbed seepage. EC, WC.

Douglas 1972: 153 ("Rawmark meadow habitat: Saxifraga tolmiei community").

Menyanthes trifoliata CPF

MENTRI. Palustrine: marshes, fens, bogs. CR, WC, WV (Willamette).

Unpublished.

Mertensia paniculata-Urtica dioica CPJ

MERPAN-URTDIO. Palustrine: seepage at base of avalanche slopes. BM.

Cole 1977: 95 ("Avalanche slope community type"); Cole 1982: 17 ("Avalanche slope community type").

Mimulus-Saxifraga/moss CPJ

MIMULUS-SAXIFRAGA/MOSS. Palustrine: seepage on rock outcrops. BM, EC, WC.

Hickman 1976: 153 ("Mimulus guttatus/Lewisia triphylla/Allium amplexans seep association"); Ferro et al. 1976: 6 ("Mimulus guttatus vertical bog"); Hemstrom et al. 1985: 183 ("Vertical mesic rock garden"); Hemstrom et al. 1987: 253 ("Rock garden: steep, moist").

Myosurus minimus-Plagiobothrys CPE

MYOMIN-PLAGIO. Palustrine: vernal pools. WV (Rogue).

Bork 1978: 73 ("Plagiobothrys species and Myosurus minimus dominant").

Myrica californica-Salix hookeriana CPQF2

MYRCAL-SALHOO. Palustrine: coastal lakes, dune slacks and deflation plains. CR.

Wiedemann 1966: 133 ("Low shrub community"); Wiedemann 1966: 134 & 1990: 183 ("Tall shrub community" in seasonally flooded deflation plain and troughs, with Gaultheria shallon and Vaccinium ovatum on drier sites, succeeding to Pinus contorta); Wiedemann 1984: 55 (Salix hookeriana-Myrica californica).

Myriophyllum hippuroides CPB

MYRHIP. Palustrine: ponds and lakes, some with seasonal inundation. WV (Columbia, Willamette).
Christy & Putera 1993: 39 ("Myriophyllum hippuroides aquatic bed").

Navarretia intertexta-Polygonum kelloggii CPE

NAVINT-POLKEL. Palustrine: vernal pools. BM.
Johnson & Simon 1987: 224 ("Ridgetop meadows").

Nuphar polysepalum CPB

NUPPOL. Lacustrine, palustrine: lakes, ponds, sloughs. BM, CR, EC, WC.
Peck 1919: 347 ("Colony of Nymphaea polysepala");
Hansen 1942: 525 ("Floating sere of yellow pondlily", "Zone of pondlily and bulrush"); Seyer 1979: 46 ("Nuphar polysepalum community"); Seyer 1981: 10 ff. ("Aquatic community: Nuphar polysepalum"); Seyer 1983: 7 ("Beaver ponds: Nuphar polysepalum-Sparganium minimum-Chara" in part).

Oenanthe sarmentosa CPF

OENSAR. Palustrine: brackish and freshwater marshes, floodplains. CR, WV (Columbia, Willamette).
Frenkel et al. 1978: 99 ("Oenanthe sarmentosa-Galium trifidum-Galium triflorum community"); Taylor & Frenkel 1979: 54 ("Oenanthe-Juncus effusus var. pacificus-Agrostis alba community"); Taylor 1980: 51 ("Oenanthe-Juncus effusus var. pacificus-Agrostis alba community"); Mitchell 1981: 114 ("Extratidal: Oenanthe-Scirpus community"); Boss 1983: 107 ("Glyceria grandis community"); Frenkel & Morlan 1990: 47 ("Oenanthe sarmentosa-Potentilla pacifica community", "Oenanthe sarmentosa-Scirpus microcarpus community").

Paspalum distichum CPKG2

PASDIS. Palustrine: freshwater marshes with tidal or seasonal inundation. WV (Columbia).
Christy & Putera 1993: 40 ("Paspalum distichum marsh").

Phragmites australis CPF

PHRAUS. Palustrine: streambanks, margins of lakes. CB, OU.

Myhre & Clements 1972: 4 ("Island #4: 25-30% Scirpus, up to 70% Phragmites).

Picea engelmannii/Carex eurycarpa CPX

PICENG/CAREUR. Palustrine: floodplains, peatlands. Late seral-climax. EC.

Kovalchik 1987: 55 ("Engelmann spruce/widefruit sedge association").

Picea engelmannii/Vaccinium occidentale CPX

PICENG/VACOCC. Palustrine: peatlands. EC.

Kovalchik 1987: 51 ("Engelmann spruce/bog blueberry/ forb association"); Kovalchik 1987: 53 ("Engelmann spruce/ bog blueberry/widefruit sedge association").

Picea sitchensis/Cornus stolonifera CPV

PICSIT/CORSTO. Palustrine: riverbanks, floodplains, upper salt marsh. CR.

Eilers 1975: 261 ("High salt marsh: Picea-Salix community"); Hirschberger 1978: 5 ("Segment 2: Sitka spruce, black cottonwood, and tall, dense shrub communities"); Frenkel et al. 1978: 99 ("Picea sitchensis-Salix hookeriana-Oenanthe sarmentosa community"); Thomas 1980: 8 ("Picea sitchensis-dominated forest"); Boss 1983: 83 ("Lysichitum americanum community"); Thomas 1984: 95 ("Brackish water shrub/scrub wetland with irregular tidal inundation: Salix hookeriana-Lonicera involucrata-Rubus spectabilis-Picea sitchensis-Alnus rubra"); Thomas 1984: 97 ("Fresh-water forested wetlands with irregular tidal inundation: Picea sitchensis swamp").

Picea sitchensis/Rubus spectabilis/Lysichitum americanum CPV

PICSIT/RUBSPE/LYSAME. Palustrine: coastal swamps. CR.

Henderson 1970: 42 ("Alnus rubra/Rubus spectabilis associates") in part; Cordes 1972: 176 ("Picea sitchensis- Carex obnupta forest type"); Cordes 1972: 416 ("Alluvial Sitka spruce forest: Picea sitchensis-Lysichitum americanum forest type"); Smith & Smith 1976: 112 ("Sitka spruce-red alder/salmonberry/ mosses"); Smith & Smith 1976: 129 ("Sitka spruce/ salmonberry-snowberry/skunk cabbage"); Frenkel et al. 1978: 59 ("Picea sitchensis forest with moist understory"); Henderson 1979: 200 ("Alnus rubra/Rubus spectabilis habitat

type") in part.

Pinus contorta/Carex CPX

PINCON/CAREX. Palustrine: floodplains, margins of lakes, meadows and ponds. Mid seral-climax. BM, EC.

Volland 1976: 32 ("Lodgepole pine/sedge-grass wetland community", "Lodgepole pine/sedge-grass wetland"); Kovalchik 1987: 41 ("Lodgepole pine/widefruit sedge association"); Kovalchik 1987: 43 ("Lodgepole pine/aquatic sedge association").

Pinus contorta/Carex obnupta CPV

PINCON/CAROBN. Palustrine: depressions on marine terraces with iron-cemented hardpan. CR.

Egler 1934: 29 ("Subclimax pine forest": small depressions in lodgepole forest, with *Carex obnupta*); Wiedemann 1966: 139 ("Forest community," open *Pinus contorta* on marshy ground with thick monotypic understory of *Carex obnupta*); Martin & Frenkel 1978: 19 ("*Pinus contorta*/ *Rhododendron macrophyllum*-*Ledum glandulosum* community" in part); Christy 1979: 55 ff. ("Closed vernal pool community"); Wiedemann 1984: 56 ("*Pinus contorta*/*Carex obnupta* community").

Pinus contorta-Populus tremuloides/Spiraea douglasii CPX

PINCON(POPTRE)/SPIDOU. Palustrine: basins, floodplains. Late seral-climax. EC.

Johnson 1961: 27 ("*Pinus*/*Populus* association"); Volland 1976: 33 ("Lodgepole pine/blueberry/forb wetland community" in part, "Lodgepole pine/blueberry/forb wetland community" in part); Hopkins 1979: 23 ("Lodgepole pine-quaking aspen/strawberry association"); Kovalchik 1987: 33 ("Lodgepole pine/Douglas spiraea/forb association"); Kovalchik 1987: 35 ("Lodgepole pine/Douglas spiraea/widefruit sedge association"); Kovalchik 1987: 63 ("Quaking aspen-lodgepole pine/Douglas spiraea/widefruit sedge community type"); Kovalchik 1987: 136 ("Quaking aspen-lodgepole pine/Douglas spiraea/forb community type").

Pinus contorta/Vaccinium occidentale CPX

PINCON/VACOCC. Palustrine: floodplains, basins,

meadows and peatlands. Late seral-climax. EC, WC.
Volland 1976: 33 ("Lodgepole pine/blueberry/forb
wetland community" in part, "Lodgepole pine/
blueberry/ forb wetland community" in part); Seyer
1979: 117 ("Shrub/ invading conifer thicket:
Vaccinium/Carex sitchensis/Pinus contorta");
Kovalchik 1987: 37 ("Lodgepole pine/bog blueberry/
forb association"); Kovalchik 1987: 39 ("Lodgepole
pine/bog blueberry/ widefruit sedge association").

Pinus contorta-Thuja plicata/Ledum glandulosum CPV
PINCON-THUPLI/LEDGLA. Palustrine: coastal swamps. CR.
Orloci 1961: 75 ("Moor forest types: Pineto-Ledetum");
Cordes 1972: 300 ("Pine bog forest type: Pinus
contorta-Chamaecyparis nootkatensis-Thuja plicata/
Gaultheria shallon-Ledum groenlandicum/ Sphagnum
recurvum"); Hebda & Biggs 1981: 8 ("Pine woodland");
Wiedemann 1984: 56 ("Thuja plicata/Ledum glandulosum
community").

Plagiobothrys-Veronica peregrina CPE
PLAGIO-VERPER. Palustrine: vernal pools. CB.
Magee & Meinke 1984: 30 ("Table 1: Summary of vernal
pool data").

Poa cusickii CPKG6
POACUS. Palustrine: meadows, floodplains and terraces.
Early seral-climax. BM, BR, EC.
Reid & Pickford 1946: 9 ("Mountain meadows: fair
condition" in part); Stuth 1975: 71 ("Poa
cusickii/Carex microptera habitat type"); Volland
1976: 23 ("Dry meadow community"); Cornelius 1981: 3
ff. ("Cusick's bluegrass meadow"); Kovalchik 1987:
90 ("Cusick bluegrass association"); Manning &
Padgett 1991: 453 ("Poa cusickii communities").

Poa nevadensis CPKG6
POANEV. Palustrine: meadows, floodplains. BM, BR, EC.
Christy & Cornelius 1980: plot 20 ("Poa nevadensis-
Danthonia unispicata-Carex nebrascensis"); Christy &
Cornelius 1980: plot 26 ("Iris missouriensis-Poa
nevadensis-Carex praegracilis"); Christy & Cornelius
1980: plot 27 ("Poa nevadensis-Ranunculus
alismaefolius"); Christy & Cornelius 1980: plot 38
("Elymus cinereus-Poa nevadensis-Carex
praegracilis"); Christy & Cornelius 1980: plot 55

("Poa nevadensis-Antennaria microphylla-Carex praeegracilis"); Christy & Cornelius 1980: plot 56 ("Poa nevadensis-Elymus triticoides-Carex douglasii"); Boss 1983: 173 ("Poa nevadensis-Ranunculus glaberrimus community"); Manning & Padgett 1991: 379 ("Iris missouriensis/dry graminoid community type" in part); Manning & Padgett 1991: 445 ("Poa nevadensis community type").

Poa nevadensis-Puccinellia lemmonii CPD
POANEV-PUCLEM. Palustrine: playas. BR.
Unpublished.

Polygonum amphibium CPKG2
POLAMP. Palustrine: marshes. WV (Columbia, Willamette).
Christy & Putera 1993: 40 ("Polygonum amphibium
marsh").

Polygonum bistortoides-Ranunculus macounii CPKG5
POLBIS-RANMAC. Palustrine: stream terraces. BM, BR.
Evdenden 1990: 50 ("Ranunculus macounii/Polygonum
bistortoides community type").

Polytrichum commune CPE
POLCOM. Palustrine: snowbed depressions. EC, WC
Unpublished.

Populus tremuloides/Salix scouleriana CPY
POPTRE/SALSCO. Palustrine: streambanks and terraces.
BR.
Evdenden 1990: 18 ("Populus tremuloides/Salix scouleriana
community type"); Manning & Padgett 1991: 112
("Populus tremuloides/Betula occidentalis community
type" in part); Manning & Padgett 1991: Populus
tremuloides/ Cornus sericea community type" in
part); Manning & Padgett 1991: 118 ("Populus
tremuloides/Salix community type" in part).

Populus trichocarpa/Carex eurycarpa CPY
POPTRI/CAREUR. Palustrine: floodplains. EC.
Kovalchik 1987: 136 ("Black cottonwood/widefruit sedge
community type").

Populus trichocarpa/Cornus stolonifera CPY
POPTRI/CORSTO. Palustrine: riverbanks, floodplains. BM,
BR, CB, HP.

Manning & Padgett 1991: 145 ("Populus/Cornus sericea community type").

Populus trichocarpa/Cornus stolonifera/Impatiens capensis CPW
POPTRI/CORSTO/IMPCAP. Palustrine: riverbanks,
floodplains. CR, WV (Columbia).
Christy & Putera 1993: 41 ("Populus trichocarpa/Cornus
stolonifera/Impatiens capensis swamp").

Populus trichocarpa/Salix exigua CPY
POPTRI/SALEXI. Palustrine: streambanks and terraces. BM,
BR, CB, HP.
Poulton 1955: 87 ("Populus trichocarpa community:
Artemisia zone"); Manning & Padgett 1991: 141
("Populus/Salix community type").

Populus trichocarpa/Symphoricarpos albus CPY
POPTRI/SYMALB. Palustrine: floodplains and terraces.
BM, CB, HP.
Poulton 1955: 87 ("Populus trichocarpa community:
Agropyron-Poa zone"); Kauffman 1982: 61 ("Populus
trichocarpa/ Symphoricarpos albus-Rosa woodsii
community"); Kauffman et al. 1985: 17 ("Populus
trichocarpa/Symphoricarpos albus/Rosa woodsii
community"); Kovalchik 1987: 136 ("Black cottonwood/
common snowberry/Kentucky bluegrass community
type").

Potamogeton natans CPB
POTNAT. Lacustrine, palustrine: lakes, ponds. CR, WC.
Peck 1919: 347 ("Colony of Potamogeton natans").

Pyrus fusca-Salix hookeriana/Carex obnupta CPQF2
PYRFUS-SALHOO/CAROBN. Palustrine: coastal swamps. CR.
Christy 1980: 521 ("Salix hookeriana-Pyrus fusca/Carex
obnupta carr"); Boss 1983: 51 ("Scrub-shrub wetland:
Salix hookeriana"); Christy 1985: 24 ("Salix
hookeriana- Pyrus fusca/Carex obnupta shrub-carr");
Sanville et al. 1986: 127 ("Salix hookeriana
community"); Christy & Putera 1993: 40 ("Pyrus
fusca-Salix hookeriana/Carex obnupta shrub swamp").

Rhododendron occidentale/Camassia quamash CPO
RHOCC/CAMQUA-CAREX-JUNCUS. Palustrine: meadows on
ultramafic soils. KM.
Copeland 1978: 10 (Wet meadow: Rhododendron occidentale/

rush-sedge community").

Rosa nutkana/Oenanthe sarmentosa CPQF3

ROSNUT/OENSAR. Palustrine: floodplains. WV
(Willamette).

Marshall 1985: 142 ("Emergent wetland: rose/water parsley
community").

Rosa nutkana/Deschampsia cespitosa CPQF3

ROSNUT/DESCES. Palustrine: bottomland prairie. WV
(Willamette).

Boss 1983: 98 ("Rosa nutkana community"); Kauffman &
Connelly 1988: 2 ("Rosa nutkana/Anthoxanthum
odoratum community"); Kauffman & Connelly 1988: 3
("Rosa nutkana/Juncus oxymetris-Deschampsia cespitosa
community"); Connelly 1989: 21 ("Rosa nutkana/
Anthoxanthum odoratum community"); Connelly 1989:
22 ("Rosa nutkana/Deschampsia cespitosa-Juncus
nevadensis community"); Connelly & Kauffman 1991: 9
("Rosa nutkana/ Anthoxanthum odoratum community").

Ruppia maritima (estuarine association) CEC

RUPMAR (estuarine association). Estuarine: subtidal-
intertidal mudflats and channels. CR, KM.

Jefferson 1975: 46 ("Low sand marsh: Ruppia community");
Eilers 1975: 220 ("Ruppia maritima").

Ruppia maritima (interior alkaline association) CPA

RUPMAR (interior alkaline association). Palustrine:
alkaline ponds. BR, HP.

Harris 1954: 406 ("Sago pondweed-coontail-water milfoil
zone" in part); Kierstead & Pogson 1976: 1-13
("Springs: Ruppia maritima", "Ponds: Ruppia
maritima-Ranunculus aquatilis").

Sagittaria latifolia CPKG2

SAGLAT. Palustrine: seasonal ponds. WV (Columbia,
Willamette).

Smith 1976: 1 ff. ("Wapato"); Christy & Putera 1993: 40
("Sagittaria latifolia marsh").

Salix amygdaloides-Salix exigua CPS

SALAMY-SALEXI. Palustrine: riverbanks and floodplains.
CB, HP.

Hinschberger 1978: 8 ("Segment 5: peach-leaf willow,

slender willow and Columbia River willow...")

Salix boothii-Salix drummondiana CPQF4
SALBOO-SALDRU. Palustrine: subalpine peatlands. BR.
Unpublished.

Salix boothii-Salix eastwoodiae CPQF4
SALBOO-SALEAS. Palustrine: subalpine floodplains. EC.
Kovalchik 1987: 137 ("Eastwood willow-Booth willow/ black
alpine sedge association").

Salix boothii-Salix geyeriana CPQF4
SALBOO-SALGEY. Palustrine: peatlands, floodplains. BM,
EC.
Kovalchik 1987: 78 ("Willow/widefruit sedge
association"); Kovalchik 1987: 84 ("Willow/beaked
sedge association").

Salix boothii-Salix lemmonii CPQF4
SALBOO-SALLEM. Palustrine: floodplains. BM, EC.
Kovalchik 1987: 76 ("Willow/wooly sedge association");
Kovalchik 1987: 80 ("Willow/aquatic sedge
association"); Kovalchik 1987: 137 ("Willow/
monkshood association"); Manning & Padgett 1991: 262
("Salix lemmonii/mesic graminoid community type");
Manning & Padgett 1991: 265 ("Salix lemmonii/mesic
forb community type"); Manning & Padgett 1991: 341
("Salix/mesic graminoid community type" in part).

Salix commutata-Salix eastwoodiae CPQF4
SALCOM-SALEAS. Palustrine: peatlands, floodplains.
BM, EC.
Seyer 1981: 8 ("Salix commutata/sedges/Sphagnum fen");
Seyer 1983: 11 ("Low shrub thickets: Salix
commutata"); Kovalchik 1987: 137 ("Eastwood willow-
undergreen willow association", "Eastwood willow-
undergreen willow/Holm's sedge association").

Salix drummondiana CPQF4
SALDRU. Palustrine: subalpine peatlands. BM, BR.
Manning & Padgett 1991: 321 ("Salix drummondiana
community type").

Salix exigua CPS
SALEXI. Palustrine: low elevation streams and

floodplains. Early seral. BM, BR, CB, OU.
Myhre & Clements 1972: 6 ff ("Island #7: 80-82% willow, mostly *Salix exigua*"); Huschle 1975: 231 ("Coyote willow-horsetail community"); Huschle 1975: 232 ("Coyote willow-sedge community"); Huschle 1975: 233 ("Coyote willow-tule bulrush community" in part); Miller 1976: 130 ("*Salix exigua* community-type"); Padgett 1982: 61 ("Coyote willow riparian dominance type"); Kovalchik 1987: 137 ("Coyote willow association"); Manning & Padgett 1989: 49 ("*Salix exigua*/mesic forb community type", "*Salix exigua*-*Salix exigua* community type"); Evenden 1990: 41 ("*Salix exigua*/mixed graminoid-forb community type").

Salix exigua-*Salix lasiandra* CPS

SALEXI-SALLAS. Palustrine: floodplains. BM, BR, CB, HP, OU.
Myhre & Clements 1972: 5 ("Delta: 80-90% willows" in part).

Salix fluviatilis-*Salix lasiandra* CPQF3

SALFLU-SALLAS. Palustrine: sandbars, floodplains. WV (Columbia, Willamette).
Hinschberger 1978: 6 ("Segment 3: Columbia River willow and Pacific willow", "Segment 4: Pacific willow, Columbia River willow, peach-leaf willow..."); Marshall 1985: 143 ("Emergent wetland: willow/reed canary grass-slough sedge community"); Christy & Putera 1993: 40 ("*Salix fluviatilis*-*Salix lasiandra* riparian").

Salix geyeriana CPQF4

SALGEY. Palustrine: meadows, stream terraces, gravel bars and banks. BM, BR, EC.
Padgett 1982: 65 ("Geyer willow meadow riparian dominance type"); Padgett 1982: 66 ("Geyer willow stream riparian dominance type"); Wilson 1986: 22 ("*Salix geyeriana* carr"); Manning & Padgett 1989: 43 ("*Salix geyeriana*/*Carex rostrata* community type"); Evenden 1990: 37 ("*Salix geyeriana*/mesic graminoid-forb community type").

Salix geyeriana-*Salix lemmonii* CPQF4

SALGEY-SALLEM. Palustrine: floodplains. EC.
Kovalchik 1987: 74 ("Willow/Kentucky bluegrass community

type"); Kovalchik 1987: 82 ("Willow/ Sitka sedge association").

Salix geyeriana-Salix piperi CPQF3
SALGEY-SALPIP. Palustrine: peatlands. WV Willamette).
Unpublished.

Salix geyeriana-Salix rigida CPQF4
SALGEY-SALRIG. Palustrine: floodplains. BM.
Unpublished.

Salix hookeriana-Spiraea douglasii CPQF2
SALHOO-SPIDOU. Palustrine: floodplains. CR.
Christy & Putera 1993: 40 ("Salix hookeriana-Spiraea
douglasii").

Salix lasiandra/Urtica dioica CPQF3
SALLAS/ URTDIO. Palustrine: floodplains. WV (Columbia)
Christy & Putera 1993: 41 ("Salix lasiandra/Urtica
dioica riparian").

Salix lasiandra-Rosa woodsii CPS
SALLAS/ROSWOO. Palustrine: floodplains. BR, CB.
Evenden 1990: 37 ("Salix lasiandra/mesic graminoid-forb
community type"); Evenden 1990: 38 ("Salix
lasiandra/ Rosa woodsii community type"); Evenden
1990: 39 ("Salix lasiandra/Poa pratensis community
type"); Manning & Padgett 1991: 300 ("Salix
lasiandra/bench community type" in part).

Salix lemmonii-Vaccinium occidentale CPQF4
SALLEM-VACOCC. Palustrine: stream terraces, fens. BM,
BR.
Padgett 1982: 68 ("Lemmon's willow riparian dominance
type"); Seyer 1983: 11 ("Low shrub thickets: Salix
lemmonii", "Low shrub thickets: Salix lemmonii-
Vaccinium occidentale-Spiraea douglasii"); Evenden
1990: 35 ("Salix lemmonii/mesic graminoid-forb
community type").

Salix piperi CPQF3
SALPIP. Palustrine: floodplains, marshes. WV (Columbia,
Willamette).
Unpublished.

Salix piperi-Salix sitchensis CPQF3

SALPIP-SALSIT. Palustrine: peatlands. WV (Willamette).
Christy & Putera 1993: 41 ("Salix piperi-Salix
sitchensis shrub swamp").

Salix rigida-Ribes aureum CPS

SALRIG-RIBAUR. Palustrine: floodplains. BM, BR, OU.
Dean 1960: 16 ("Salix/Ribes/Rosa association"); Padgett
1982: 62 ("Mackenzie willow riparian dominance
type"); Evenden 1990: 40 ("Salix lutea/mesic
graminoid community type"); Evenden 1990: 41 ("Salix
lutea/Rosa woodsii community type"); Manning &
Padgett 1991: 122 ("Populus tremuloides/Rosa woodsii
community type" in part); Manning & Padgett 1991:
276 ("Salix lutea/Rosa woodsii community type" in
part); Manning & Padgett 1991: 333 ("Saix/Rosa
woodsii community type" in part).

Sarcobatus vermiculatus/Distichlis spicata CPM

SARVER/DISSPI. Palustrine: playas, alkaline lakes and
ponds. BR, HP.

Griffiths 1902: 12 ("Level desert bottoms: Sarcobatus
vermiculatus" in part); Poulton 1955: 71
("Sarcobatus-Distichlis association"); Daubenmire
1970: 50 ("Sarcobatus vermiculatus-Distichlis
stricta habitat type"); Copeland 1979b: HL-14
("black greasewood/alkali saltgrass community");
Easterday & Mamone 1980: 9 ("Sarcobatus
vermiculatus/Distichlis stricta community");
Easterday & Mamone 1980: 10 ("Sarcobatus
vermiculatus/Distichlis stricta-Puccinellia
nuttalliana- Elymus triticoides community"); Saul
1974: 7 ("Greasewood community"); Saul 1974: 8
("Saltgrass-greasewood community"); Dealy et al.
1981: 49 ("Black greasewood/grass community");
Copeland & Greene 1982: SL-5 ("Black
greasewood/alkali saltgrass community").

Sarcobatus vermiculatus/Suaeda nigra CPM

SARVER/SUENIG. Palustrine: playas, margins of alkaline
lakes and ponds. BR.

Copeland & Greene 1982: SL-5 ("Black greasewood/sea
blite community"); Copeland 1979b: HL-14 ("Black
greasewood/sea blite community").

Scirpus acutus CPF

SCIACU. Lacustrine, palustrine: ponds, marshes. BM, BR, CR, EC, KM, WV (Columbia, Willamette).

Griffiths 1902: 46 ("tule"); Jefferson 1975: 54 ("Bulrush and sedge marsh: *Scirpus validus* [sic]-*Carex* community" in part); Kierstead & Pogson 1976: 1-13, 1-14 ("Ponds and marshes: *Scirpus acutus*"); Macdonald 1977: 172 ("*Scirpus validus* [sic]-*Carex*" in part); Copeland 1979a: 12 ("Central marsh: *Scirpus acutus*-*Typha latifolia* association" in part); Copeland 1979b: HL-14 ("Bulrush community" in part); Christy & Cornelius 1980: plot 13 ("*Scirpus acutus*"); Thomas 1980: 10 ("*Scirpus validus* [sic]-*Typha angustifolia*-*Carex lyngbyei* vegetation type" in part).

Scirpus americanus (estuarine association) CEC

SCIAME (estuarine association). Estuarine: intertidal mud and sand flats. CR, KM.

Jefferson 1975: 46 ("Low sand marsh: *Scirpus americanus* community"); Stout 1976: 35 ("*Scirpus americanus* community"); Macdonald 1977: 172 ("*Scirpus americanus*"); Frenkel et al. 1978: 57, 89, 103 ("*Scirpus americanus* community", "*Scirpus americanus*-*Scirpus cernuus* community"); Thomas 1980: 8 ("*Scirpus americanus* vegetation type"); Liverman 1982: 63 ("Submergent halophyte community" in part); Thomas 1984: 95 ("Brackish marshes below mean higher high water: *Scirpus americanus*-*Carex lyngbyei*").

Scirpus americanus (interior alkaline association) CPD

SCIAME (interior alkaline association). Palustrine: alkaline springs, marshes and ponds. BR, CR.

Kierstead & Pogson 1976: 1-12 ("Springs: *Scirpus americanus*", "Springs: *Scirpus olneyi*"); Kierstead & Pogson 1976: 1-13 ("Ponds: *Scirpus americanus*-*Bidens cernua*-*Polygonum persicaria*"); Copeland 1979b: HL-14 ("Bulrush community" in part).

Scirpus americanus (freshwater association) CPF

SCIAME (freshwater association). Palustrine: freshwater tidal marshes. CR, WV (Columbia).

Christy & Putera 1993: 40 ("*Scirpus americanus* freshwater marsh").

Scirpus maritimus (estuarine association) CEC

SCIMAR (estuarine association). Estuarine: intertidal

silt and clay flats. CR, KM.
Jefferson 1975: 50 ("Low silt marshes: *Scirpus maritimus* community"); Eilers 1975: 225 ("Low marsh: *Scirpus* community"); Eilers 1976: 27 ("*Scirpus* community"); Macdonald 1977: 172 ("*Scirpus maritimus*").

Scirpus maritimus (interior alkaline association) CPD
SCIMAR (interior alkaline association). Palustrine:
alkaline playas, margins of lakes. BR.
Griffiths 1902: 47 ("prairie bulrush"); Copeland 1979b:
HL-14 ("Bulrush community" in part).

Scirpus microcarpus CPF
SCIMIC. Palustrine: streambanks, floodplains. BM, BR,
CR, EC, WV (Willamette).
Frenkel et al. 1978: 82 ("*Scirpus microcarpus*-*Carex*
obnupta-*Oenanthe sarmentosa* community"); Ganskopp
1979: 39 ("*Scirpus microcarpus* community"); Boss
1983: 113 ("*Scirpus microcarpus* community"); Glad et
al. 1987: 261 ("Wet sedge marsh: *Scirpus*
microcarpus-*Ranunculus repens*"); Kovalchik 1987: 112
("Small-fruit bulrush (bigleaf sedge) association");
Evdenden 1990: 44 ("*Scirpus microcarpus* community
type").

Scirpus subterminalis CPB
SCISUB. Palustrine: lakes and ponds. CR.
Unpublished.

Scirpus validus CPF
SCIVAL. Lacustrine, palustrine: ponds, marshes. BM, BR,
CR, EC, KM, WV (Columbia, Willamette).
Jefferson 1975: 54 ("Bulrush and sedge marsh: *Scirpus*
validus community"); Smith & Smith 1976: 132
("Softstem bulrush"); Macdonald 1977: 172 ("*Scirpus*
validus"); Thomas 1980: 6 ("*Scirpus validus*
vegetation type"); Boss 1983: 126, 146 ("*Scirpus*
validus community"); Sanville et al. 1986: 127
("*Scirpus validus* community").

Senecio triangularis-*Veratrum californicum* CPKG5
SENTRI-VERCAL. Palustrine: meadows, peatlands. BM, BR,
EC, WC.
Hickman 1976: 150 ("*Veratrum viride*/ *Valeriana*
sitchensis/ *Senecio triangularis* wet meadow"); Cole

1977: 77 ("Picea engelmannii/Senecio triangularis community type"); Cole 1977: 104 ("Saussuria americana community type"); Hemstrom et al. 1985: 196 ("Veratrum-Senecio community"); Hemstrom et al. 1987: 251 ("False hellebore- common cowparsnip association"); Kovalchik 1987: 57 ("Engelmann spruce/common horsetail-twistedstalk association"); Kovalchik 1987: 124 ("Arrowleaf groundsel association"); Manning & Padgett 1991: 95 ("Conifer/mesic forb community type" in part); Manning & Padgett 1991: 365 ("Veratrum californicum community type"); Manning & Padgett 1991: 373 ("Lupinus polyphyllus-Senecio triangularis community type").

Sparganium emersum CPF

SPAEME. Palustrine, lacustrine: marshes. BR, WV (Columbia).

Christy & Putera 1993: 40 ("Sparganium emersum marsh").

Sparganium eurycarpum CPF

SPAEUR. Palustrine, lacustrine: marshes. CR, WV (Rogue).

Unpublished.

Spiraea douglasii CPQF1

SPIDOU. Palustrine: peatlands, basins, intermittent streambeds. CR, EC, WC, WV (Willamette).

Thomas 1980: 7 ("dominated by Spiraea douglasii"); Seyer 1983: 11 ("Low shrub thickets: Spiraea douglasii"); Wiedemann 1984: 54 ("Spiraea douglasii/ Typha latifolia community"); Hemstrom et al. 1985: 194 ("Spiraea-Vaccinium/sedge-forb community"); Hemstrom et al. 1985: 195 ("Spiraea/Carex community"); Glad et al. 1987: 261 ("Riparian tree/shrub: Spiraea douglasii"); Kovalchik 1987: 137 ("Douglas spiraea association"); Hemstrom et al. 1987: 250 ("Douglas spiraea-bog blueberry/sedge (hydric) association"); Hemstrom et al. 1987: 259 ("Spiraea-willow/sedge association").

Thuja plicata/Lysichitum americanum CPW

THUPLI/LYSAME. Palustrine: swamps and streambanks. CR, WC, WV (Willamette).

Franklin 1966: 87 ("Alnus rubra/Lysichitum community"); Glad et al. 1987: 261 ("Riparian

tree/shrub: *Alnus rubra*-conifer/*Lysichitum americanum*"); Henderson 1970: 42 ("*Alnus rubra*/*Rubus spectabilis* associates"); Henderson 1979: 200 ("*Alnus rubra*/*Rubus spectabilis* habitat type").

Triglochin maritimum CEC

TRIMAR. Estuarine: intertidal mud flats. CR, KM
Unpublished.

Tsuga heterophylla/Acer circinatum/Lysichitum americanum CPX

TSUHET/ACECIR/LYSAME. Palustrine: alluvial terraces, seeps. CR, WC.

Halverson et al. 1986: 68 ("Western hemlock/skunk cabbage association"); Topik et al. 1986: 70 ("Western hemlock/skunk-cabbage association").

Typha angustifolia-Typha latifolia CPKG1

TYPANG-TYPLAT. Palustrine: freshwater tidal marshes. CR.
Thomas 1980: 10 ("*Scirpus validus* [sic]-*Typha angustifolia*-*Carex lyngbyei* vegetation type" in part); Christy & Putera 1993: 40 ("*Typha angustifolia*-*Typha latifolia* marsh").

Typha latifolia CPF

TYPLAT. Lacustrine, palustrine: marshes, margins of ponds and lakes. BM, CR.

Lippert & Jameson 1964: 188 ("Reed swamp stage"); Copeland 1979a: 12 ("Central marsh: *Scirpus acutus*-*Typha latifolia* association" in part); Boss 1983: 51, 98 ("Emergent wetland: *Typha latifolia* community"); Sanville et al. 1986: 127 ("*Typha latifolia* community").

Vaccinium caespitosum CPQF3

VACCAE. Palustrine: bottomland prairie. WV
(Willamette).

Kauffman & Connelly 1988: 2 ("*Vaccinium caespitosum* community"); Connelly 1989: 21 ("*Vaccinium caespitosum* community"); Connelly & Kauffman 1991: 9 ("*Vaccinium caespitosum* community").

Vaccinium occidentale/Carex sitchensis CPQF4

VACOCC/CARSIT. Palustrine: peatlands. Climax. EC, WC.

Roach 1952: 184 ("*Vaccinium occidentale*/*Carex sitchensis* association"); Seyer 1979: 41 ("*Vaccinium occidentale*/ *Aulacomnium palustre* community"); Seyer 1979: 42 ("*Vaccinium occidentale*/*Carex sitchensis*-

Eleocharis/ bryophyte phase", "Vaccinium occidentale/Carex sitchensis community"); Seyer 1983: 10 ("Moss mound communities: Aulacomnium palustre-low shrub"); Frenkel et al. 1986: 33 ("Vaccinium occidentale/Trifolium longipes"); Wilson 1986: 21 ("Vaccinium occidentale carr", "Vaccinium occidentale-Betula glandulosa carr"); Kovalchik 1987: 86 (Bog blueberry/Sitka sedge association"); Kovalchik 1987: 88 ("Bog blueberry/few-flowered spikerush association").

Vaccinium occidentale/Deschampsia cespitosa CPQF4
VACOCC/DESCES. Palustrine: meadows and peatlands. EC, WC.
Hemstrom et al. 1985: 193 ("Vaccinium-Spiraea/grass community"); Hemstrom et al. 1987: 247 ("Blueberry-alpine spirea/grass association").

Vaccinium occidentale/Eleocharis pauciflora CPQF4
VACOCC/ELEPAU. Palustrine: peatlands. EC, WC.
Unpublished.

Vaccinium occidentale/Sphagnum fuscum CPQF4
VACOCC/SPHFUS. Palustrine: peatlands. WC.
Unpublished.

Vaccinium uliginosum/Deschampsia cespitosa CPQF2
VACULI/DESCES. Palustrine: depressions in stabilized dunes, on iron-cemented hardpan. CR, KM.
Martin & Frenkel 1978: 19 ("Vaccinium uliginosum/Carex obnupta- Sanguisorba menziesii community").

Zostera marina CEA
ZOSMAR. Estuarine: subtidal-intertidal sand and mudflats, channels. CR, KM.
Thum 1972: 22 ("Bed of Zostera marina"); Jefferson 1975: 46 ("Low sand marsh: Zostera community"); Eilers 1975: 220 ("Zostera marina"); Stout 1976: 19 ("Zostera marina"); Gonor et al. 1979: 51 ("Zostera bed"); Bayer 1979: 149 ("Zostera marina zone"); Thomas 1980: 2 ("Zostera marina community"); Thomas 1984: 97 ("Intertidal flats and subtidal areas: Zostera marina"); Kentula & McIntire 1986: 189 ("Zostera bed").

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