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FLORISTIC DATA FOR 96 PALUSTRINE EMERGENT WETLANDS IN PORTLAND, OREGON

SUPPLEMENTARY DATA FOR**:**

Teresa K. Magee [1], Ted L. Ernst [1], Mary E. Kentula [2], and Kathleen A. Dwire[1,3]. 1999. Floristic Comparison of Freshwater Wetlands in an Urbanizing Environment. Wetlands 19(3): 517-534.

*Abstract***:** We evaluated the floristic condition of freshwater palustrine wetlands dominated by wet meadow, emergent marsh, aquatic vegetation, or open water within the rapidly urbanizing area of Portland, Oregon, by (1) characterizing plant species richness (presence/absence) and composition of naturally occurring wetlands (NOWs) and mitigation wetlands (MWs), and (2) identifying relationships between floristic characteristics and variables describing land use, site conditions, and mitigation activities. Data were collected on 45 NOWs and 51 MWs. Overall species richness was high (365 plant taxa), but more than 50% of the species present on both NOWs and MWs were introduced. Only 14 species occurred on more than half the sites and nine of these were invasive nonindigenous species. The mean number of native species per site did not differ between land use categories (ANOVA, p=0.6031), however, wetlands surrounded by agricultural and commercial/industrial/transportation corridor uses had more introduced species per site than wetlands surrounded by undeveloped land ($p \leq 0.05$). Although overlapping in floristic composition, NOWs and MWs had significantly different (MRPP, $p < 0.0001$) species assemblages that were identified using TWINSPAN. MRPP analyses for all sites showed that watershed, land use, HGM class, percent cover of water and MW age were significantly related to the floristic composition of the study wetlands. Canonical correspondence analyses further revealed that the primary gradient for species distribution in NOWs was related to moisture; the secondary gradient was related to land use. The primary gradient also described a strong relationship between percent cover of water and HGM class. For MWs , the primary gradient was related to watershed location and surrounding land use; the secondary gradient was related to percent cover of water and MW age. Most MWs (44 out or 51 sites) were depressions in various settings, so while HGM class separates NOWs from MWs, it does little to distinguish MW assemblages. Our results show wetlands in the urbanizing study area are floristically degraded. Further, current wetland management practices are replacing natural marsh and wet meadow systems with ponds, resulting in changes in the composition of plant species assemblages.

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SUPPLEMENTARY DATA. Ecological status of taxa found in study sites in the Portland, Oregon metropolitan area and the number of naturally occurring wetlands (NOW) or mitigation wetlands (MW) on which they occur. Species are listed as native, introduced, or unknown origin[§]. Each species was assigned to an United States Fish and Wildlife Service Wetland Indicator Category (IND): OBL = obligate wetland, FACW = facultative wetland, FAC = facultative, FACU = facultative upland, UPL = obligate upland, NI = no-indicator, UNK = absent from the indicator list (Reed 1988, 1993). Species that were identified in the literature and through field observation as invasive[†] are indicated by a star (❋); superscript numbers indicate sources for invasive designation. Trees and shrubs of horticultural origin found only on MWs are indicated by a diamond (◆). Nomenclature based on BONAP (1996); Synonyms from regional floras (Hitchcock and Cronquist. 1973 or Hickman 1993) are included in parentheses.

Native Species[§]	NOW	MW	IND
Agrostis exarata Trin.	7	6	FACW
Alisma plantago-aquatica L.	8	11	OBL
Alnus rubra Bong.	4	19	FAC
Alopecurus aequalis Sobol.	4	3	OBL
Alopecurus geniculatus L.	6	7	OBL
Amaranthus albus L.	1	0	FACU
Amelanchier alnifolia (Nutt). Nutt ex M. Roen.	0	1	FACU
Argentina egedii Rydb. subsp. *egedii* (*Potentilla pacifica* Howell)	0	2	OBL
Asclepias speciosa Torr.	1	0	FAC
Aster subspicatus Nees	5	3	FACW
Athyrium filix-femina (L.) Roth	4	1	FAC
Azolla filiculoides Lam.	0	1	OBL
Azolla mexicana Schlecht & Cham. ex C. Presl.	1	0	OBL
Azolla sp. Lam.	0	2	OBL
Beckmannia syzigachne (Steud.) Fernald	2	1	OBL
Bidens cernua L.	0	1	FACW
Bidens frondosa L.	4	11	FACW
Boisduvalia densiflora (Lindl.) S. Watson	0	1	FACW
Callitriche palustre L. (*Callitriche verna* L.)	1	4	OBL
Callitriche sp. L.	1	1	OBL
Cardamine occidentalis (S. Watson) ex B.L. Rob Howell	0	1	FACW
Carex amplifolia W. Boott	1	0	FACW
Carex athrostachya Olney	4	0	FACW
Carex cusickii Mack. ex Piper & Beattie	1	1	OBL
Carex densa (L.H. Bailey) L.H. Bailey	10	14	OBL
Carex deweyana Schwein.	1	3	FACU
Carex feta L.H. Bailey	1	4	FACW
Carex laeviculmis Meinsh.	1	0	FACW
Carex lanuginosa Michx.	1	1	OBL
Carex leporina L.	1	1	FACW
Carex obnupta L.H. Bailey	4	7	OBL
Carex pachystachya Cham. ex Steud.	4	7	FAC
Carex scoparia Schkuhr ex Wild.	2	3	FACW

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Native Species[§]	NOW	MW	IND
Carex stipata Muhl. ex Wild.	18	31	OBL
Carex tumulicola Mack.	0	2	FACU
Carex unilateralis Mack.	8	3	FACW
Carex utriculata W. Boott	0	1	OBL
Carex vulpinoidea Michx.	2	1	OBL
Carex sp. L.	6	12	FACW
Anagallis minima (L.) E.H.L. Krause (*Centunculus minimus* L.)	2	3	FACW
Cerastium nutans Raf.	1	0	FACU
Ceratophyllum demersum L.	1	3	OBL
Cirsium hallii (A. Gray) M.E. Jones	11	17	UNK
Conyza canadensis (L.) Cronquist	0	1	FACU
Cornus sericea L. subsp. *sericea* (*Cornus stolonifera* Michx.)	7	19	FACW
Corylus cornuta R.S. Marsh.	6	1	FACU
Crataegus columbiana Howell	0	2	UNK
Crataegus douglasii Lindl.	7	5	FAC
Danthonia californica Bol.	0	1	FACU
Deschampsia cespitosa (L.) P. Beauv.	1	1	FACW
Deschampsia danthonioides (Trin.) Munro	1	0	FACW
Deschampsia elongata (Hook.) Munro	0	1	FACW
Elatine triandra Schkuhr	1	0	OBL
Eleocharis acicularis (L.) Roem.& Schult.	3	1	OBL
Eleocharis ovata (Roth) Roem.& Schult.	10	30	OBL
Eleocharis palustris (L.) Roem.& Schult.	10	23	OBL
Eleocharis sp. R. Br.	1	5	FACW
Elodea canadensis Michx.	3	9	OBL
Epilobium angustifolium L.	1	0	FACU
Epilobium brachycarpum C. Presl. (*Epilobium paniculatum* Nutt.)	1 1	4 4	FACU
Epilobium ciliatum Raf. subsp. *watsonii* (Barbey) Hach. & P.H. Raven (*Epilobium watsonii* Barbey)	20	26	FACW
✻*Equisetum arvense* L.[6, 7]	17	27	FAC
Equisetum hyemale L.	2	1	FACW
Equisetum palustre L.	4	5	FACW
✻*Equisetum telmateia* Ehrh.[6, 7]	11	10	FACW
Equisetum sp. L.	1	2	FAC
Euthamia occidentalis Nutt. (*Solidago occidentalis* (Nutt.) T. & G.)	0	1	FACW
Festuca occidentalis Hook.	0	1	FACU
Fragaria vesca L.	0	1	UPL
Frangula purshiana (D.C.) Cooper (*Rhamnus purshiana* DC.)	1	0	FAC
Fraxinus latifolia Benth.	14	13	FACW

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Native Species[§]	NOW	MW	IND
Galium aparine L.	14	12	FACU
Galium trifidum L.	4	1	FACW
Gayophytum diffusum Torr. & A. Gray	1	0	UPL
Geum macrophyllum Willd.	1	2	FACW
Glyceria borealis (Nash) Batch.	2	4	OBL
Glyceria elata (Nash ex Rydb.) M.E. Jones	3	7	FACW
Glyceria grandis S. Watson	2	0	OBL
Glyceria leptostachya Buckley	3	6	OBL
Glyceria occidentalis (Piper) S.C. Nelson	3	4	OBL
Gnaphalium palustre Nutt.	5	4	FAC
Gnaphalium purpurea (L.) Cabrera (*Gnaphalium purpureum* L.)	0	1	NI
Gratiola neglecta Torr.	1	1	OBL
Hordeum brachyantherum Nevski	2	1	FACW
Hydrocotyle ranunculoides L. f.	0	3	OBL
Hypericum anagalloides Chamb.& Schltdl.	1	0	OBL
(*Hypericum formosum* H.B.K.)	1	0	FAC
Impatiens capensis Meerb.	5	4	FACW
Impatiens noli-tangere L.	0	1	FACW
Juncus acuminatus Michx.	3	9	OBL
Juncus articulatus L.	2	1	OBL
Juncus balticus Willd.	0	1	FACW
Juncus bufonius L.	8	21	FACW
✻*Juncus effusus* L. [7, 8]	27	48	FACW
Juncus ensifolius Wikstr.	6	18	FACW
Juncus oxymeris Englem.	1	2	FACW
Juncus patens E. Mey.	4	7	FACW
Juncus tenuis Willd.	11	23	FACW
Juncus sp. L.	1	6	FACW
Leersia oryzoides (L.) Sw.	2	14	OBL
Lemna minor L.	18	36	OBL
Lotus micranthus Benth.	0	1	UPL
Lotus unifoliolatus (Hook.) Benth. var. *unifoliolatus* (*Lotus purshiana* (Benth.) Clements and Clements)	1	2	FACU
Ludwigia palustris (L.) Elliot	10	15	OBL
Lupinus polyphyllus Lindl.	1	1	FAC
Lycopus americanus Muhl. ex W.P.C. Barton	0	1	OBL
Lycopus uniflorus Michx.	1	0	OBL
Lythrum hyssopifolia L.	0	1	OBL
Lysichiton americanus Hultén & E.P. St. John (*Lysichitum americanum* Hultén & St. John)	2	1	OBL
Madia gracilis (Sm.) D.D. Keck & J.C. Classen ex Applegate	0	1	UPL
Madia minima (Gray) D.D. Keck	0	1	UPL
Madia sativa Molina	2	0	UPL

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Native Species[§]	NOW	MW	IND
Madia sp. Molina	1	1	UPL
Mentha arvensis L.	1	1	FACW
Mimulus guttatus DC.	1	1	OBL
Mimulus moschatus Douglas ex Lindl.	0	1	FACW
Montia dichotoma (Nutt.) Howell	1	0	FAC
Myosotis laxa Lehm.	11	8	OBL
Navarretia intertexta (Benth.) Hook.	1	0	FACW
Oemleria cerasiformis (Torr. & A. Gray ex Hook.& Arn.) J.W. Landon	0	1	FACU
Oenanthe sarmentosa C. Presl. ex DC.	4	4	OBL
Osmorhiza sp. Raf.	1	1	UNK
Panicum capillare L.	2	0	FACU
Plagiobothrys scouleri (Hook. & Arn.) I.M. Johnst.	1	0	FACW
Polygonum amphibium L.	2	3	OBL
Polygonum amphibium L. var. *emersum* Michx. (*Polygonum coccineum* Muhl.)	3	2	OBL
Polygonum hydropiperoides Michx.	7	4	OBL
Polygonum lapathifolium L.	1	4	FACW
Polygonum minimum S. Watson	0	1	UPL
Polygonum punctatum Elliot	2	0	OBL
Polygonum sp. L.	1	2	FACW
Polystichum munitum (Kaulf.) C. Presl.	0	3	FACU
Populus balsamifera L. subsp. *trichocarpa* (Torr. & A. Gray ex Hook.) Brayshaw (*Populus trichocarpa* T. & G.)	3	9	FAC
Potamogeton filiformis Pers.	1	2	OBL
Potamogeton foliosus Raf.	4	13	OBL
Potamogeton pectinatus L.	1	5	OBL
Potamogeton pusillus L.	0	2	OBL
Potamogeton pusillus L. var. *tenuissimus* Mert. & W.D.J. Koch (*Potamogeton berchtoldii* Fieb.)	1	2	OBL
Potentilla gracilis Dougl. ex Hook. var. *gracilis*	1	0	FAC
Prunus virginiana L.	0	1	FACU
Pseudotsuga menziesii (Mirb.) Franco	0	1	FACU
Pteridium aquilinum (L.) Kuhn.	0	1	FACU
Ranunculus abortivus L.	1	0	FACW
Ranunculus aquatilis L.	1	0	OBL
Ranunculus flammula L.	1	0	FACW
Ranunculus glaberrimus Hook.	1	1	FAC
Ranunculus occidentalis Nutt. var. *occidentalis*	1	0	FAC
Ranunculus sceleratus L.	1	3	OBL
Ribes sanguineum Pursh	0	1	UNK
Rorippa curvisiliqua (Hook.) Besser ex Britton	4	7	OBL
Rorippa islandica (Oeder) Borbás	1	1	OBL
Rosa gymnocarpa Nutt.	1	0	FACU

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Rosa nutkana C. Presl.	1	2	FAC
Rosa pisocarpa A. Gray	11	9	FAC
Rumex salicifolius Weinm.	0	1	FACW
Sagittaria latifolia Willd.	1	3	OBL
Salix fluviatilis Nutt.	0	3	OBL
Salix geyeriana Andersson	0	1	FACW
Salix lasiolepis Benth.	0	1	FACW
Salix lucida Muhl. subsp. *lasiandra* (Benth.) E. Murray (*Salix lasiandra* Benth).	7	22	FACW
Salix hookeriana Barratt ex Hook (*Salix piperi* Bebb)	4	14	FACW
Salix eriocephala Michx. (*Salix rigida* Muhl.)	2	4	OBL
Salix scouleriana Barratt ex Hook	0	2	FAC
Salix sessilifolia Nutt.	3	1	FACW
Salix sitchensis Sanson ex Bong.	7	19	FACW
Salix sp. L.	4	6	FACW
Sanicula bipinnatifida Dougl. ex Hook	0	1	UPL
Scirpus americanus Pers.	0	2	OBL
Scirpus fluviatilis (Torr.) A.Gray	0	2	OBL
Scirpus microcarpus J. Presl. & C. Presl.	14	20	OBL
Scirpus tabernaemontani C.C. Gmel. (*Scirpus validus* Vahl)	2	11	OBL
Sidalcea campestris Greene	0	1	NI
Solidago canadensis L.	0	1	FACU
Sparganium angustifolium Michx. (*Sparganium emersum* Rehmann)	1	2	OBL
Sparganium eurycarpum Engelm. ex A.Gray	1	4	OBL
Sparganium sp. L.	0	3	OBL
Spiraea douglasii Hook.	11	13	FACW
Spirodela polyrrhiza (L.) Schleid.	2	7	OBL
Stachys ciliata Epling (*Stachys cooleyae* Heller)	2	2	FACW
Stachys mexicana Benth.	1	0	FACW
Stachys palustris L. subsp. *pilosa* (Nutt.) Epling (*Stachys rigida* Nutt.)	0	1	FACW
Stellaria crassifolia Ehrh.	1	0	FACW
Stellaria longifolia Muhl. ex Willd.	1	0	FACW
Symphoricarpos albus (L.) S.F. Blake	4	3	FACU
Tellima grandiflora (Pursh) Douglas ex Lindl.	1	0	FACU
Thuja plicata Donn. ex D. Don	0	1	FAC
Tolmiea menziesii (Pursh) Torr. & A. Gray	0	1	FAC
Torreyochloa pallida (Torr.) G.L. Church var. pauciflora (J. Presl.) J.I. Davis (*Puccinellia pauciflora* (Presl.) Munz)	1	0	OBL

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✻*Typha latifolia* L. [1, 8]	14	33	OBL
Veronica americana Schwein. ex Benth.	17	37	OBL
*Veronica peregrin*a L.	1	1	OBL
Veronica scutellata L.	2	0	OBL
Wolffia brasiliensis Wedd. (*Wolffia punctata* Griseb).	1	0	OBL

Introduced Species[§]	NOW	MW	IND
✻*Agrostis capillaris* [1, 3] (*Agrostis tenuis* Sibth.)	17	36	FAC
✻*Agrostis gigantea*[1, 3] Roth (*Agrostis alba* L.)	24	38	FACW
Aira caryophyllea L.	0	2	UPL
Allium vineale L.	1	0	NI
✻*Alopecurus pratensis* L.[1, 7]	22	25	FACW
Anagallis arvensis L.	0	2	FAC
Anthemis cotula L.	4	0	FACU
Anthoxanthum odoratum L.	1	4	FACU
◆ *Betula* sp. L.	0	3	UNK
Bromus commutatus Schard.	3	4	UPL
Bromus hordeaceus L. subsp. *hordeaceus* (*Bromus mollis* L.)	3	7	UPL
◆ *Buddleja davidii* Franch.	0	1	FAC
Callitriche stagnalis Scop.	18	24	OBL
✻*Calystegia sepium* (L.) R.Br. subsp. *sepium* [2, 3, 9] (*Convolvulus sepium* L.)	4	4	FAC
Centaurium erythraea Rafn (*Centaurium umbellatum* Gilib.)	4	8	FAC
Cerastium glomeratum Thuill. (*Cerastium viscosum* L.)	1	0	UPL
Cerastium fontanum subsp. *vulgare* (Hartman) Greuter & Brudet (*Cerastium vulgatum* L.)	0	1	FACU
Chenopodium album L.	0	1	FAC
Chenopodium ambrosioides L.	1	0	FAC
✻*Leucanthemum vulgare* Lam.[3,4, 5] (*Chrysanthemum leucanthemum* L.)	5	11	FAC
Cichorium intybus L.	1	1	UPL
✻*Cirsium arvense* (L.) Scop.[3, 5, 6]	5	12	FACU
✻*Cirsium vulgare* (Savi) Ten.[3, 5, 6, 9]	15	17	FACU
✻*Conium maculatum* L.[1, 3, 6]	1	2	FAC
✻*Convolvulus arvensis* L.[1, 3, 6, 9]	3	0	UNK
Convolvulus sp. L.	1	0	UNK
Crataegus monogyna Jacq.	2	4	FACU

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Introduced Species[§]	NOW	MW	IND
◆ *Crataegus phaenopyrum* (L.f.) Medik.	0	1	FAC
Crataegus sp. L.	0	4	UNK
Crepis setosa Haller f.	1	1	UPL
Cynosurus cristatus L.	0	2	UPL
❋*Cytisus scoparius* (L.) Link[1, 3, 4, 6, 9]	0	2	UPL
Dactylis glomerata L.	1	4	FACU
❋*Daucus carota* L.[1,2,4, 5, 9]	10	20	FAC
Digitaria sanguinalis (L.) Scop.	1	0	FACU
❋*Dipsacus fullonum* L. subsp. *sylvestris* (Huds.) Clapham [1,3, 7, 9] (*Dipsacus sylvestris* Huds.)	5	15	FAC
Echinochloa crus-galli (L.) P. Beauv.	4	2	FACW
❋*Egeria densa* Plach.[4, 5, 7] (*Elodea densa* (Planch.) Casp.)	1	0	OBL
◆ *Elaeagnus commutata* Bernh. ex Rydb.	0	1	UPL
❋*Elytrigia repens* (L.) Desv. ex B.D. Jacks var. *repens* [1, 6] (*Agropyron repens* (L.) Beauv.)	16	11	FACU
Elymus caninus L. (*Agropyron caninum* (L.) Beauv.)	0	1	FAC
❋*Festuca arundinacea* Schreb.[5, 7]	20	34	FAC
Galium parisiense L.	1	1	UPL
Geranium dissectum L.	14	15	UPL
Geranium molle L.	1	2	UPL
Geranium sp. L.	1	0	UPL
Gnaphalium uliginosum L.	3	1	FAC
❋*Hedera helix* L.[3,5]	0	1	UPL
❋*Holcus lanatus* L . [1, 2, 7]	29	40	FAC
Holcus mollis L.	10	10	FAC
Hordeum marinum Huds. subsp. *gussonianum* (Perl.) Thell. (*Hordeum geniculatum* All.)	0	1	NI
❋*Hypericum perforatum* L.[1,4,6]	3	5	UPL
Hypochaeris radicata L.	8	13	UPL
◆ *Ilex* sp. L.	0	3	UPL
❋*Iris pseudacorus* L.[7]	1	6	OBL
Lactuca serriola L.	1	2	FACU
Lactuca sp. L.	0	2	UNK
Lapsana communis L.	0	4	UPL
Lathyrus sp. L.	0	1	UPL
Leontodon hirtus L. (*Leontodon nudicaulis* (L.) Merat)	5	16	UPL
❋*Leucanthemum vulgare* Lam.[3,4, 5] (*Chrysanthemum leucanthemum* L.)	5	11	FAC
Lolium perenne L. subsp. *multiflorum* Lam. (*Lolium multiflorum* Lam.)	10	14	UNK
Lolium perenne L.	8	10	FACU
Lolium sp. L.	0	1	UNK

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Introduced Species[§]	NOW	MW	IND
✻*Lotus corniculatus*L.[3]	9	24	FAC
Lysimachia nummularia L.	6	0	FACW
✻*Lythrum salicaria* L.[3, 5, 6, 7, 9]	3	1	FACW
Melissa officinalis L.	0	1	UPL
✻*Mentha pulegium* L.[7]	1	1	OBL
Mentha X rotundifolia (L.) Huds.	0	1	NI
Mentha spicata L.	1	1	OBL
Mycelis muralis (L.) Dumort. (*Lactuca muralis* L.)	1	0	FAC
Myosotis discolor Pers.	2	0	FACW
Myosotis stricta Link ex Roemer & J.A. Schutles (*Myosotis micrantha* Pall.)	1	0	UPL
✻*Myriophyllum spicatum* L.[4, 5, 6, 7]	0	1	OBL
Nymphaea odorata Aiton	0	1	OBL
✻*Parentucellia viscosa* (L.) Caruel.[2, 3, 7]	3	17	FAC
✻*Phalaris arundinacea* L.[3, 7,8, 9]	45	44	FACW
Phleum pratense L.	9	14	FAC
Plantago lanceolata L.	6	9	FAC
Plantago major L.	9	20	FACU
Plantago sp. L.	3	4	FACU
Poa annua L.	2	1	FAC
Poa palustris L.	9	20	FAC
Poa pratensis L.	3	5	FACU
Poa trivialis L.	9	8	FACW
Polygonum aviculare L.	0	1	FACW
Polygonum hydropiper L.	2	1	OBL
Polygonum persicaria L.	8	6	FACW
✻*Polygonum polystachyum* Wallich ex Meisn.[6]	0	1	FAC
Potamogeton crispus L.	1	3	OBL
Prunella vulgaris L. subsp. *vulgaris*.	5	0	FACU
◆ *Quercus palustris*	0	1	UPL
◆ *Quercus rubra*	0	1	UPL
◆ *Quercus* sp. L.	1	1	UPL
✻*Ranunculus repens* L.[1, 3,7, 9]	21	27	FACW
Raphanus raphanistrum L.	0	1	UPL
Raphanus sativus L.	1	0	UPL
Rorippa nasturtium-aquaticum (L.) Hayek	1	1	OBL
Rosa canina L.	0	1	UPL
Rosa eglanteria L.	7	6	FACW
✻*Rubus discolor* Weihe & Ness[1,3,8]	28	32	FACU
✻*Rubus laciniatus* Willd.[1, 3, 8]	1	1	FACU
Rubus sp. L.	10	10	UNK
Rumex acetosella L.	3	4	FACU
Rumex conglomeratus Murray	10	7	FACW

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Introduced Species[§]	NOW	MW	IND
Rumex crispus L.	17	24	FACW
Sagina apetala Ard.	1	0	NI
◆ *Salix babylonica* L.	1	2	FAC
❋*Senecio jacobaea* L.[3, 6, 9]	4	13	FACU
Senecio vulgaris L.	1	1	FACU
❋*Solanum dulcamara* L.[1, 2, 3, 8, 9]	23	25	FAC
Sonchus asper (L.) Hill.	2	3	FAC
Sonchus oleraceus L.	1	0	UPL
Sonchus sp. L.	6	8	UNK
Spergularia rubra (L.) J. Presl & C. Presl.	2	0	FAC
Symphytum officinale L.	0	1	UNK
Tanacetum vulgare L.	1	4	NI
❋*Taraxacum officinale* Weber[3, 5, 9]	10	18	FACU
❋*Trifolium dubium* Sibth.[1,3]	6	12	UPL
Trifolium hybridum L.	3	5	FAC
Trifolium pratense L.	5	25	FACU
❋*Trifolium repens* L.[1,3]	10	31	FAC
Trifolium sp. L.	1	4	FACU
Typha angustifolia L.	0	3	OBL
Urtica dioica L.	3	1	FAC
Vallisneria americana Michx.	2	2	OBL
Verbascum blattaria L.	1	1	UPL
Verbascum sp. L.	0	1	UPL
Veronica serpyllifolia L.	1	1	FAC
Veronica sp. L.	1	0	FAC
Vicia cracca L.	4	3	UNK
Vicia hirsuta (L.) Gray	2	3	UPL
❋*Vicia sativa* L.[1,3]	8	14	UPL
Vicia tetrasperma (L.) Schreb.	17	25	UPL
Vicia villosa Roth	0	1	UPL
Vicia sp. L.	2	1	UPL
Vulpia bromoides (L.) Gray	2	2	FACU
Vulpia myuros (L.) C.C. Gmel.	1	6	FAC

Taxa of Unknown Introduced/Native Status	NOW	MW	IND
Agrostis sp. L.	3	5	UNK
Algae	10	32	OBL
Alopecurus sp. L.	2	0	UNK
Bidens sp. L.	0	1	UNK
Bromus sp. L.	2	0	UNK
Bryophytes	18	28	UNK

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Taxa of Unknown Introduced/Native Status	NOW	MW	IND
Chara sp. Valliant	2	1	OBL
Cirsium sp. Mill.	8	5	UNK
Cyperus sp. L.	0	1	UNK
Festuca rubra L.	1	10	FAC
Festuca sp. L.	1	2	UNK
Fungi	1	3	UNK
Galium sp. L.	1	0	UNK
Hordeum sp. L.	0	1	UNK
Lichen	1	1	UNK
Lindernia dubium (L.) Pennell	2	0	OBL
Lupinus sp. L.	0	1	UNK
Mentha sp. L.	1	1	UNK
Myosotis sp. L.	0	1	UNK
Poa sp. L.	7	10	UNK
Poaceae	11	12	UNK
Potamogeton sp. L.	1	2	OBL
Prunus sp. L.	0	2	UNK
Ranunculus sp. L.	5	3	UNK
Ribes sp. L.	1	0	UNK
Rosa sp. L.	0	1	UNK
Rumex sp. L.	5	7	UNK
UNKNOWN TREE	0	1	UNK
UNKNOWN FORB	18	18	UNK
UNKNOWN GRAMINOID	1	1	UNK
UNKNOWN SHRUB	0	3	UNK

[§]Determination of native/introduced status for vascular taxa was based on Hitchcock & Cronquist (1973), with the exception of *Phalaris arundinacea* and *Festuca rubra*. *Phalaris arundinacea* has historically been considered to have some native genotypes, however, currently much of its extent on the landscape is believed to be represented by aggressively spreading cultivars introduced for forage and erosion control (Guard 1995, Naglich 1994). In the study area, *Festuca rubra* is represented by a complex of native and introduced varieties (personal communication Barbara Wilson, Oregon State University) so, here, its native/introduced status is listed as unknown. For taxa identified only to genus, native or introduced status was usually listed as unknown. However, if a particular specimen could be identified to one of a small group of species known to be either introduced or native, it was assigned the appropriate status.

[†]Plant species characterized as invasive or noxious weeds were identified using information from local floras, and noxious weed lists or floras describing widespread introduced species: [1]Hitchcock & Cronquist (1973), [2]Hawkes et al. (1989), [3]Taylor (1990), [4]Washington State Department of Agriculture (1992), [5]U.S. Congress, Office of Technology Assessment (1993), [6]Oregon State Department of Agriculture (1994), [7]Guard (1995), [8]Houck (1996) and [9]Whitson et al. (1996).

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