

Environmental Management

Ecological sustainability assessment of water distribution for the maintenance of ecosystems, their services and biodiversity

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Online Resource 3: Crosswalk EWD typology and EUNIS habitat classification with information on water dependence

EWD Code	EWD-Layer	EUNIS Lvl 1*	EUNIS Lvl 2*	EUNIS Lvl 3*	Water dependence** ()= likely water source	Ecosystem group
	Inland surface waters					
41	Lakes	C	C1		w (aq)	wetland
42	Permanent freshwater lakes (>8ha), incl. Floodplain lakes	C	C1	C1.1-C1.6	w (aq)	wetland
43	Seasonal/Intermittent freshwater lakes (>8ha), incl. Floodplain lakes	C	C1, C3	C1.1-C1.4	w (aq)	wetland
44	Permanent saline, brackish or alkaline lakes	C	C1	C1.6, C3	w (aq)	wetland
45	Seasonal/Intermittent saline, brackish or alkaline lakes and flats	C	C1	C1.5	w (aq)	wetland
46	Rivers	C	C2	C1.6, C3, C1.5	w (aq)	wetland
47	Permanent Rivers, streams or creeks, incl. inland delatas	C	C2	\	w (aq)	wetland
48	Freshwater springs, oases	C	C2	C2.2, C2.3, C2.4, C2.6	w (aq)	wetland
49	Seasonal/Intermittent Rivers, streams or creek	C	C2	C2.1	w (aq)	wetland
50	Wetlands (mires, bogs and fens)	D/E/F	\	C2.5	w	wetland

51	Permanent freshwater marshes, pools, marshes and swamps on inorganic soils; with emergent vegetation water-logged for at least most of the growing season (herb dominated)	D	D4, D5			
52	Permanent or seasonal wetlands, incl. Pan, Brackish/Saline/alkaline marshes or pools	D	D6	\	w, (GW)	wetland
53	Seasonal/Intermittent freshwater marshes/pools on inorganic soils, incl. Sloughs, potholes, seasonally flooded meadows, sedge marshes (Herb dominated)	D/E	D4, D5, (E3, E5)	\	w, (GW)	wetland
54	Alpine wetlands, incl. Alpine meadows, temporary waters from snow melt	D/E	D1, D2, D3, D4, D5, E4	\	w, (GW)	wetland
55	Wetland, non-forested bogs, fens and mires, incl. Shrub cover	D/F	D1, D2, D4, D5, F9	\	w, (GW)	wetland
Grasslands						
56	Natural Grass	E	E1, E2, E5	E1.1-E1.C, E2.1-E28, E5.1-E5.3	t-b	wetland
57	Wet grasslands and hydrophilous tall-forb stand, degenerated or drained wetlands	E/F	E3, E5, F4	E3.1-E3.5, E5.4, E5.5, F4.1	w, (GW/U/S)	wetland
58	Alpine grasslands	E	E4	\	t-b	wetland
Heathland, shrub and tundra						
59	Shrub Cover, closed-open, evergreen or deciduous	F	F2-F8	\	t	terrestrial/trees
60	Wetland, regularly flooded with shrub or herbaceous vegetation on organic or inorganic soils	F	F9	F91-F9.3	w	wetland
61	Tundra wetlands, incl. Tundra pools, temporary waters from snow melt	F	F1	\	w	wetland

Woodland, forest and other woodland						
62	Deciduous woodland, closed or open	G	G1	G1.6, G1.7, G1.8, G1.9, G1.A, G1.B, G1.C, (G1.D)	t-w (predominantly dry)	terrestrial/trees
63	Regularly/seasonally flooded woodlands and tree-dominated wetlands, incl. Freshwater swamp forests, wooded swamps on inorganic soils, Forested peatlands, peat swamp forests	G	G1, G3, G4	G1.1, G1.2; G1.3, G3.D, G3.E, (G.1.4, G1.5), G4.1	w	wetland
64	Wetland, regularly flooded, saline water with tree cover	G	G1, G4	G1.1, G1.2, G1.3, G4.1	w t-w	wetland
65	Broadleaved evergreen woodland	G	G2		(predominantly dry)	terrestrial/trees
66	Needle-leaved/coniferous, evergreen or deciduous woodland	G	G3	\	t-w (predominantly dry)	terrestrial/trees
68	Mixed broadleaved and coniferous woodland	G	G4	\	t-w (predominantly dry)	terrestrial/trees
70	Tree Cover burnt	G	G5	G5.8	t	terrestrial/trees
Complexes						
71	Mosaic: Tree cover / Other natural vegetation	G	X09, X10, X13, X14, X15, X16	\	t-w	terrestrial/trees
Other habitats beyond our scope						
72	Alpine mixed	\	\	\	t exclude	terrestrial/trees
73	Built up	J	keine weitere Zuordnung		t exclude	artificial
74	Crop Land	I	keine weitere Zuordnung		t exclude	crop land
75	Extensive Grassland	I	keine weitere Zuordnung		t exclude	terrestrial/trees
76	Intensive Grassland	I	keine weitere Zuordnung		t exclude	terrestrial/trees

77	Karst and other subterranean hydrological systems, inland	H	keine weitere Zuordnung	w exclude	wetland
78	Artificial water bodies, reservoirs, treatment areas, channels, inc. combined with natural water bodies or wetlands or terrestrial habitats	J	J5\ keine weitere Zuordnung		
79	Unvegetated or sparsely vegetated habitats	H	keine weitere Zuordnung	w (anthrop)	wetland
80	Marine or Coastal mixed landscapes (deltas)	A	keine weitere Zuordnung	t exclude	unspecified
81	Human-made wetlands incl. Agricultural landscapes			w (coast)	wetland
				w (anthrop)	wetland

Legend:

	= ecosystem types excluded from further GDE analysis
Water dependence/ water source	w = wet/wetland; t = dry/terrestrial; t-w = dry to wet; (aq) = aquatic ecosystem; (GW) = groundwater dependent; (U) = flooding; (S) = waterlogged; (anthrop) = anthropogenic ecosystem; (coast) = coastal ecosystem

References:

* EEA (2019): EUNIS habitat classification 2007 (Revised descriptions 2012) amended 2019; available at: <https://www.eea.europa.eu/data-and-maps/data/eunis-habitat-classification/habitats/eunis-habitats-complete-with-descriptions.xls>.

EC (2013): Interpretation Manual of the European Habitats EUR 28, European Commission DG Environment; available at: <https://ec.europa.eu/environment/nature/legislation/habitatsdirective/>

** BfN (2006): Wasserrahmenrichtlinie, wasserabhängige Lebensraumtypen nach Anhang I der FFH-Richtlinie; available at: <https://www.bfn.de/themen/natura-2000/management/kooperation-mit-nutzern/grundwassernutzung.html>.

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