EO4WI
WETLAND INVENTORIES

CLASSIFICATION CROSS-WALK

V0.2

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by

In Cooperation with:

Ramsar wetland classes crosswalk to IUCN GET and SDG 6.6.1 – EO4WI

How to read this cross-walk:

The left hand-side (until the red column separator) indicates Ramsar classes, including which parameters/characteristics are used to distinguish them (e.g. permanent versus seasonal, lake versus flowing water). On the right hand side are the IUCN classes, from realm to biome to EFG. The columns indicate determinants used to separate them based on the occurrence maps on https://global-ecosystems.org/explore and the functional group definitions.

Highlighted in yellow are classes, which may be different to distinguish in a mosaic context; in orange font on the Ramsar site are classes which are missing a counterpart.

Inland

Ramsar					Functional Group	Comments / determinants				Biome	Realm
Freshwater	Flowing water	Permanent	Rivers, streams, creeks	M Permanent rivers, streams and creeks	F1.1 Permanent upland streams	1st -3rd order		> 0 degrees	Permanent	F1 River and streams	Freshwater
					F1.2 Permanent lowland rivers	4th -9th order	Tropical / temperate, some arid				
					F1.7 Large lowland rivers	Flow > 10.000 m³/s					
					F1.3 Freeze-thaw rivers and streams			< 0 degrees			
			Deltas	L, Permanent inland river deltas	TF1.4 Seasonal floodplain marshes	Unclear where the border is but under IUCN, we would assume that the water course itself (M / N) would fall under F1 and the floodplain under TF1.4/TF1.5					
					TF1.5 Episodic arid floodplains						
			Springs, oases	Y, Freshwater springs, oases	F2.8 Artesian springs and oases				Permanent	F2 Lakes	
		Seasonal/intermittent	Rivers, streams, creeks	N, Seasonal, intermittent, irregular rivers, streams, creeks	F1.4 Seasonal upland rivers	1st -3rd order			Seasonal	F 1 River and streams	
					F1.5 Seasonal lowland rivers	4th -9th order					
					F1.6 Episodic arid rivers				Ephemeral		
					F1.3 Freeze-thaw rivers and streams			< 0 degrees	Seasonal / permanent		
	Lakes and pools	Permanent	> 8 ha	O, Permanent freshwater	F2.1 Large permanent freshwater lakes	> 100 km²		> -10 degrees	Permanent	F 2 Lakes	

		Size	Description	IUCN code	Criteria	Criteria	Permanence		
			lakes (over 8 ha)	F2.2 Small permanent freshwater lakes	< 100 km² – the size criteria is much wider in IUCN GET than Ramsar. Includes "small permanent lakes, ponds and pools"				
				F2.4 Freeze-thaw freshwater lakes		< 0 degrees – separate criteria in IUCN not in Ramsar, includes any lake that freezes.			
		< 8 ha	Tp, permanent freshwater marshes, pools, (ponds (below 8 ha), marshes and swamps on inorganic soils; with emergent vegetation water-logged for at least most of the growing season)	F2.2 Small permanent freshwater lakes	OBS the marsh part of Tp is fully covered by TF1.3, but Tp also includes pools and ponds. By IUCN GET definition, small permanent ponds and pools are explicitly mentioned, with most smaller than 1 km². With EO might be different to separate from TF1.3 pools and ponds.		Permanent		
	Seasonal/intermittent	> 8 ha	P, seasonal, intermittent freshwater lakes (over 8 ha)	F2.3 Seasonal freshwater lakes	< 100 km² (mostly < 5 km²)	> -10 degrees	Seasonal	F 2 Lakes	Freshwater
				F2.5 Ephemeral freshwater lakes	Semi-arid and arid regions / mid-latitudes		Ephemeral		
		< 8 ha	Ts, seasonal, intermittent freshwater marshes, pools	TF1.4 Seasonal floodplain marshes	Seasonal tropics and subhumid temperate regions (% boreal and polar climates)	OBS the marsh part of Tp is fully covered by TF1.4/TF1.5, but Ts also includes pools and ponds.	Seasonal	TF1 Palustrine wetlands	Terrestrial-Freshwater

Marshes on inorganic land	Permanence	Vegetation	Code	TF class				Hydrology		
				TF1.5 Episodic arid floodplains	Semi-arid/arid (Connected to F 1.6)		OBS the marsh part of Tp is fully covered by TF1.4/TF1.5, but Ts also includes pools and ponds.	Seasonal / Episodic		
				F2.3 Seasonal freshwater lakes F2.5 Ephemeral freshwater lakes	In IUCN GET, the classes include very small ponds/pools (e.g. playas, depressions, clay pans, pans in F2.5 and in F2.3 rock pools, vernal pools which are most often less than 1 or even 0.1 ha) which would be classified as pools under Ramsar if below 8 ha.				F 2 Lakes	Freshwater
Marshes on **inorganic** land	Permanent	Herb-dominated	**Tp,** permanent freshwater marshes, pools, ponds	TF1.3 Permanent marshes	OBS the marsh part of Tp is fully covered by TF1.3, but Tp also includes pools and ponds.			Permanent		
	Permanent/seasonal/intermittent	Shrub-dominated	**W**, shrub-dominated wetlands	TF1.3 Permanent marshes				Permanent		
				TF1.4 Seasonal floodplain marshes	Seasonal tropics and subhumid temperate regions (% boreal and polar climates)			Seasonal		
		Tree-dominated	**Xf**, Freshwater, tree-dominated wetlands	TF1.1 Tropical flooded forests and peat forests	Peat / inorganic	Tropical	Closed canopy forests	Permanent/Seasonal		
				TF1.2 Subtropical/temperate forested wetlands	Peat / inorganic	Subtropical	Closed tree or shrub	Seasonal		
	Seasonal/intermittent	Herb-dominated	**Ts**, seasonal, intermittent freshwater marshes, pools	TF1.4 Seasonal floodplain marshes	Seasonal tropics and subhumid temperate regions (% boreal and polar climates)		OBS the marsh part of Tp is fully covered by TF1.4/TF1.5, but Ts also includes pools and ponds.	Seasonal		
				TF1.5 Episodic arid floodplains	Semi-arid/arid (Connected to F 1.6)		OBS the marsh part of Tp is fully covered by TF1.4/TF1.5, but Ts also includes pools and ponds.	Seasonal / Episodic		

Marshes on peat soils	Permanent	Non-forested	**U**, Non-forested peatlands (shrub, open bogs, swamps, fens)	TF1.6 Boreal, temperate and montane peat bogs	Peat	Boreal-subarctic latitudes, small areas on tropical mountains and cool, temperate southern latitudes	Dense cover of mosses, graminoids and shrubs	Permanent			
				TF1.7 Boreal and temperate fens	Fens	Boreal-subarctic, cool temperate regions, mountains					
		Forested	Xp, forested peatlands (peat swamp forests) – (OBS not in Crosswalk provided)	TF1.1 Tropical flooded forests and peat forests	Peat / inorganic	Tropical	Closed canopy forests	Waterlogged or periodically inundated			
				TF1.2 Subtropical/temperate forested wetlands	Peat / inorganic	Subtropical	Closed tree or shrub	Periodic flooding			
Marshes on inorganic or peat soils	High altitude (alpine)		Va, alpine meadows (alpine Meadows, temporary waters from snowmelt)	T6.4 Temperate alpine grasslands and shrublands	Alpine meadows not picked up in IUCN GET			Seasonal – snowmelt	T6 Polar/alpine (cryogenic) biome	T Terrestrial	
				F2.4 Freeze-thaw freshwater lakes					F2 Lakes	Freshwater	
				TF1.4 Seasonal floodplain marshes					TF 1 Palustrine wetlands	Terrestrial-Freshwater	
				TF1.6 Boreal, temperate and montane peat bogs	Alpine meadows not picked up in IUCN GET						
				TF1.7 Boreal and temperate fens	Alpine meadows not picked up in IUCN GET						
	Tundra		Vt, tundra pools and temporary water from snowmelt	T6.3 Polar tundra and desesrts	(Arctic/Antarctic Subantarctic)			Frozen permafrost	T6 Polar/alpine (cryogenic) biome	T Terrestrial	
				F2.4 Freeze-thaw freshwater lakes					F2 Lakes	Freshwater	

Saline, brackish or alkaline water	Lakes	Permanent	Q, Permanent saline, brackish, alkaline lakes	F2.6 Permanent salt and soda lakes	Saline, brackish or alkaline water		Permanent		
		Seasonal/Intermittent	R, seasonal saline, brackish, alkaline lakes and flats	F2.7 Ephemeral salt lakes	Saline, brackish or alkaline water		Seasonal		
	Marshes and pools	Permanent	Sp, Permanent saline, brackish, alkaline marshes/pools	TF1.3 Permanent marshes	Low salinity – may be higher near brackish lagoons	Tropical and temperate	Permanent	TF 1 Palustrine wetlands	Terrestrial-Freshwater
				F2.6 Permanent inland salt lakes	Covers pools in Ramsar – confusion between size and Sp versus Q		Permanent	F2 Lakes	Freshwater
		Seasonal/Intermittent	Ss, Seasonal saline, brackish, alkaline marshes, pools	TF1.4 Seasonal floodplain marshes	Salinity gradient near estuaries	Seasonal tropics and subhumid temperate regions (% boreal and polar climates)	Seasonal	TF 1 Palustrine wetlands	Terrestrial-Freshwater
				F2.7 Ephemeral salt lakes	Covers pools in Ramsar – confusion between size and Ss versus R		Seasonal	F2 Lakes	Freshwater
Fresh, saline, brackish or alkaline water	Geothermal		Zg, geothermal wetlands	F2.9 Geothermal pools and wetlands					
	Subterranean		Zk(b), Karst and other subterranean hydrological systems	F2.10					

Anthropogenic

Ramsar			IUCN	
→	Functional group	←	Biome	Realm
1 --Aquaculture (e.g. fish, shrimp) ponds	F3.4 Freshwater aquafarms	Ponds for species production	F3 Artificial wetlands biome	Freshwater
2 --Ponds	F3.2 Constructed lacustrine wetlands	Small farm dams, wastewater ponds and mine pits		
3 --Irrigated land; includes irrigation channels and rice fields.	F3.3 Rice paddies Rice fields			

Ramsar		Description	Biome	Realm
	F3.5 Canals, ditches and drains			
	T7.1 Cropland	Irrigated land not currently in IUCN GET	T7 Intensive land-use biome	T Terrestrial
4 --Seasonally flooded agricultural land (including intensively managed or grazed wet meadow or pasture).	T7.2 Sown pastures and fields	Not currently in IUCN GET – might be included later, and essentially crop/pasture area subject to riverine or local flooding. T7.2 includes Intermittent flooding if replacing palustrine wetlands		
	TF1.4 Seasonal floodplain marshes	Not currently in IUCN GET – might be included later, and essentially crop/pasture area subject to riverine or local flooding	F3 Artificial wetlands biome	Freshwater
	TF1.5 Episodic arid floodplains	Not currently in IUCN GET – might be included later, and essentially crop/pasture area subject to riverine or local flooding		
5 --Salt exploitation sites; salt pans, salines, etc.	F2.6 Permanent inland salt lakes	Not in IUCN GET – likely salt likes but exploited	F2 Lakes	Freshwater
	F2.7 Ephemeral salt lakes			
6 --Water storage areas; reservoirs/barrages/dams/impoundments (generally over 8 ha).	F3.1 Large reservoirs	> 50 km^2	F3 Artificial wetlands biome	Freshwater
	F3.2 Constructed lacustrine wetlands	Small farm dams, wastewater ponds and mine pits – Quite big size difference between the IUCN GET Large reservoir definition and the Ramsar water storage areas definition.		
7 --Excavations; gravel/brick/clay pits; borrow pits, mining pools.	F3.2 Constructed lacustrine wetlands	Small farm dams, wastewater ponds and mine pits – Quite big size difference between the IUCN GET Large reservoir definition and the Ramsar water storage areas definition.		
8 --Wastewater treatment areas; sewage farms, settling ponds, oxidation basins, etc.	F3.2 Constructed lacustrine wetlands	Small farm dams, wastewater ponds and mine pits – Quite big size difference between the IUCN GET Large reservoir definition and the Ramsar water storage areas definition.		
9 --Canals and drainage channels, ditches.	F3.5 Canals, ditches and drains			
Zk(c) – Karst and other subterranean hydrological systems, human-made				

Coastal

Ramsar			Functional Group		IUCN	
→				←	Biome	Realm
Saline water	Permanent	< 6 m deep	A, permanent shallow marine waters			Marine

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Saline or brackish water		Underwater vegetation	B, marine subtidal aquatic beds					
		Coral reefs	C, coral reefs					
	Shores	Rocky	D, rocky marine shores	MT1.1 Rocky shorelines	Rocky		MT 1 Shorelines	Marine-Terrestrial
		Sand, shingle or pebble	E, sand, shingle or pebble shores	MT1.3 Sandy shorelines	Sand			
				MT1.4 Boulder and cobble shores	Boulder/cobble			
	Intertidal	Flats (mud, sand, salt)	G, intertidal mud, sand and salt flats	MT1.2 Muddy shorelines	Mud			
				MT1.3 Sandy shorelines	Sand – salt flats are missing, although assumed to also be sand flats			
		Marshes	H, Intertidal marshes; includes salt marshes, salt meadows, saltings, raised salt marshes; includes tidal brackish and freshwater marshes	MFT1.3 Coastal saltmarshes and reedbeds	Salt-tolerant grasses and low shrub		MFT 1 Brackish tidal	Marine-Freshwater-Terrestrial
		Forested	I, Intertidal forested wetlands; includes mangrove swamps, nipah swamps and tidal freshwater swamp forests.	MFT1.1 Coastal river deltas	Tidal freshwater swamp forests missing but assumed part of a delta supplied by freshwater with some marine influence			
				MFT1.2 Intertidal forests and shrublands	Mangroves	Tropical, warm temperate		
	Estuarine waters		F, Estuarine waters; permanent water of estuaries and estuarine systems of deltas	MFT1.1 Coastal river deltas				
				FM1.2 Permanently open riverine estuaries and bays	Dominance of saline marine waters		FM 1 Semi-confined transitional waters biome	Freshwater – Marine
				FM1.1 Deepwater coastal inlets	Fjords, lochs … fed by active glaciers			
	Lagoons		J, Coastal brackish/saline lagoons; brackish to saline lagoons with at least one relatively narrow connection to the sea	FM1.3 Intermittently closed and open lakes and lagoons				

Fresh water	Lagoons	K, Coastal freshwater lagoons; includes freshwater delta lagoons	MFT1.1 Coastal river deltas		MFT 1 Brackish tidal	Marine-Freshwater-Terrestrial
			F2.1 Large permanent freshwater lakes	Missing coastal freshwater lagoons and freshwater delta lagoons – would classify as freshwater lakes	F2 Lakes	Freshwater
			F2.2 Small permanent freshwater lakes	Missing coastal freshwater lagoons and freshwater delta lagoons – would classify as freshwater lakes		
Saline, brackish or fresh water	Subterranean	Zk(a)				

IUCN GET based feasibility

🚩 => out of scope and/or not EO feasible

🚩 => Potentially not EO feasible or distinguishable

🚩 => Post-processing necessary and may not be distinguishable from other class, in which case, those will be merged.

🚩 => Post-processing necessary – if not feasible, will be mapped but merged with other class

🚩 => Mappable with EO (note that some of the green flagged classes might include smaller classes in the final solution).

Freshwater – F

IUCN	🚩 EO flag	Comment
F1 River and streams		
F1.1 Permanent upland streams (1st-3rd order rivers)	🚩	Postprocessing including river order information will be necessary, which has limited accuracy to separate F1.1 and F1.2 (and maybe F1.7)
F1.2 Permanent lowland rivers (stream order 4-9)	🚩	Postprocessing including river order information will be necessary, which has limited accuracy to separate F1.1 and F1.2 (and maybe F1.7)
F1.3 Freeze-thaw rivers and streams	🚩	Postprocessing including temperature information will be necessary
F1.4 Seasonal upland streams	🚩	Postprocessing including river order information will be necessary, which has limited accuracy to separate F1.4, F1.5 and F1.6
F1.5 Seasonal lowland rivers	🚩	Postprocessing including river order information will be necessary, which has limited accuracy
F1.6 Episodic arid rivers	🚩	Information available from SWF map
F1.7 Large lowland rivers	🚩	Postprocessing including river order information will be necessary, which has limited accuracy to separate F1.1 and F1.2 (and maybe F1.7)
F2 Lakes	🚩	
F2.1 Large permanent freshwater lakes	🚩	Might be difficult to distinguish freshwater from salt/soda
F2.2 Small permanent freshwater lakes	🚩	Might be difficult to distinguish freshwater from salt/soda
F2.3 Seasonal freshwater lakes	🚩	Might be difficult to distinguish freshwater from salt/soda
F2.4 Freeze-thaw freshwater lakes	🚩	Postprocessing including temperature information will be necessary
F2.5 Ephemeral freshwater lakes	🚩	Might be difficult to distinguish freshwater from salt/soda

IUCN	EO flag	Comment
F2.6 Permanent salt and soda lakes	🟨	Might be difficult to distinguish freshwater from salt/soda
F2.7 Ephemeral salt lakes	🟨	Might be difficult to distinguish freshwater from salt/soda
F2.8 Artesian springs and oases	🟩	EO feasibility expected
F2.9 Geothermal pools and wetlands	🟨	Further analysis will be necessary on relevant post-processing / labels / EO feasibility
F2.10 Subglacial lakes	🟥	Not visible from EO
F3 Artificial wetlands biome[2]		
F3.1 Large reservoirs	🟩	Methodology tried and tested e.g. in Cambodia, Nigeria, Nile basin… robust especially for larger reservoirs.
F3.2 Constructed lacustrine wetlands	🟨	There is sensitivity to smaller ponds etc. but might be difficult to separate from aquafarms
F3.3 Rice paddies	🟩	Training data being compiled for improved global classification, note some confusion with TF1.3 Permanent marsh in some regions.
F3.4 Freshwater aquafarms	🟩	There is sensitivity to smaller ponds etc. but might be difficult to separate from F3.2
F3.5 Canals, ditches, and drains	🟨 / 🟨	Difficult to separate from natural rivers – might also be too narrow to map

Freshwater-Marine – FM

IUCN	🚩 EO flag	Comment
FM 1 Semi-confined transitional waters		
FM 1.1 Deepwater coastal inlets	🟥 / 🟨	Fjords/lochs – not an inland wetland by Ramsar definition on their own especially if underwater and marine (Ramsar A); although the shores might be.
FM 1.2 Permanently open riverine estuaries and bays	🟨	Could be possible with post-processing to separate lakes/lagoons close to the cost line from other freshwater bodies but possible confusion with other classes.
FM 1.3 Intermittently closed and open lakes and lagoons	🟨	Could be possible with post-processing to separate lakes/lagoons close to the cost line from other freshwater bodies but possible confusion with F2.

Marine-Freshwater-Terrestrial – MFT

IUCN	🚩 EO flag	Comment
MFT1 Brackish tidal		
MFT1.1 Coastal river deltas	🟨	Might be possible
MFT1.2 Intertidal forests and shrublands (mangroves)	🟩	Mangroves on their own are possible

MFT1.3 Coastal saltmarshes and reedbeds	🚩	Saltmarshes currently classified

Terrestrial-Freshwater – TF

IUCN	🚩 EO flag	Comment
TF1 Palustrine wetlands		
TF 1.1 Tropical flooded forests and peat forests	🚩	Likely possible with latitude post-processing to separate from TF1.2
TF 1.2 Subtropical/temperate forested wetlands	🚩	Likely possible with latitude post-processing to separate from TF1.1
TF 1.3 Permanent marshes	🚩	Saltmarshes currently classified, note some confusion with F3.3 Rice paddies.
TF 1.4 Seasonal floodplain marshes	🚩	Currently mapped
TF 1.5 Episodic arid floodplains	🚩	Might be missed in very arid regions
TF 1.6 Boreal, temperate and montane peat bogs	🚩	Not sure we can separate TF1.6 and TF1.7
TF 1.7 Boreal and temperate fens	🚩	Not sure we can separate TF1.6 and TF1.7

Marine-Terrestrial

IUCN	🚩 EO flag	Comment
MT 1 Shorelines		
MT 1.1 Rocky shorelines	🚩	Rock currently mapped
MT 1.2 Muddy shorelines	🚩	Mudflats currently mapped
MT 1.3 Sandy shorelines	🚩	Sand shores currently mapped
MT 1.4 Boulder and cobble shores	🚩	Dependent on training data, might be difficult to separate from MT1.1

EO4WI preliminary classes

Freshwater – F

IUCN	Current label (in grey are not yet encountered within test countries)	Comment
F1 River and streams	**Rivers and streams**	
F1.1 Permanent upland streams (1st-3rd order rivers)	Permanent	Postprocessing including river order information will be necessary, which has limited accuracy to separate F1.1 and F1.2 (and maybe F1.7)
F1.2 Permanent lowland rivers (stream order 4-9)	Permanent	Postprocessing including river order information will be necessary, which has limited accuracy to separate F1.1 and F1.2 (and maybe F1.7)
F1.3 Freeze-thaw rivers and streams	Freeze-thaw	Postprocessing including temperature information will be necessary
F1.4 Seasonal upland streams	Seasonal	Postprocessing including river order information will be necessary, which has limited accuracy to separate F1.4, F1.5 and F1.6
F1.5 Seasonal lowland rivers	Seasonal	Postprocessing including river order information will be necessary, which has limited accuracy
F1.6 Episodic arid rivers	Episodic	Information available from SWF map
F1.7 Large lowland rivers	Permanent	Postprocessing including river order information will be necessary, which has limited accuracy to separate F1.1 and F1.2 (and maybe F1.7)
F2 Lakes	**Lakes**	
F2.1 Large permanent freshwater lakes	Large, permanent	Might be difficult to distinguish freshwater from salt/soda
F2.2 Small permanent freshwater lakes	Small, permanent	Might be difficult to distinguish freshwater from salt/soda
F2.3 Seasonal freshwater lakes	Seasonal	Might be difficult to distinguish freshwater from salt/soda
F2.4 Freeze-thaw freshwater lakes	Freeze-thaw	Postprocessing including temperature information will be necessary
F2.5 Ephemeral freshwater lakes	Ephemeral	Might be difficult to distinguish freshwater from salt/soda
F2.6 Permanent salt and soda lakes	Permanent	Might be difficult to distinguish freshwater from salt/soda
F2.7 Ephemeral salt lakes	Ephemeral	Might be difficult to distinguish freshwater from salt/soda and might not be visible within time of EO record

F2.8 Artesian springs and oases	Artesian springs and oases 🟩	EO feasibility expected
F2.9 Geothermal pools and wetlands	Geothermal pools and wetlands 🟨	Further analysis will be necessary on relevant post-processing / labels / EO feasibility
F3 Artificial wetlands biome[2]		
F3.1 Large reservoirs	Reservoirs 🟩	Methodology tried and tested e.g. in Cambodia, Nigeria, Nile basin… robust especially for larger reservoirs.
F3.2 Constructed lacustrine wetlands	Small ponds/reservoirs 🟩	There is sensitivity to smaller ponds etc. but might be difficult to separate from aquafarms
F3.3 Rice paddies	Rice paddies 🟩	Training data being compiled for improved global classification, note some confusion with TF1.3 Permanent marsh in some regions.
F3.4 Freshwater aquafarms	Aquafarms 🟩	There is sensitivity to smaller ponds etc. but might be difficult to separate from F3.2
F3.5 Canals, ditches, and drains	Canals 🟨	Difficult to separate from natural rivers – might also be too narrow to map

Freshwater-Marine – FM

IUCN	Current EO4WI class	Comment
FM 1 Semi-confined transitional waters	-	
FM 1.1 Deepwater coastal inlets	🟨	Fjords/lochs – not an inland wetland by Ramsar definition on their own especially if underwater and marine (Ramsar A); although the shores might be.
FM 1.2 Permanently open riverine estuaries and bays	🟨	Could be possible with post-processing to separate lakes/lagoons close to the cost line from other freshwater bodies but possible confusion with other classes.
FM 1.3 Intermittently closed and open lakes and lagoons	🟨	Could be possible with post-processing to separate lakes/lagoons close to the cost line from other freshwater bodies but possible confusion with F2.

Marine-Freshwater-Terrestrial – MFT

IUCN	Current EO4WI class	Comment
MFT1 Brackish tidal		
MFT1.1 Coastal river deltas	Coastal river delta 🟩	Might be possible

MFT1.2 Intertidal forests and shrublands (mangroves)	Intertidal forests and shrublands	Mangroves on their own are possible
MFT1.3 Coastal saltmarshes and reedbeds	Coastal saltmarshes and reedbeds	Saltmarshes currently classified

Terrestrial-Freshwater – TF

IUCN	Current EO4WI class	Comment
TF1 Palustrine wetlands		
TF 1.1 Tropical flooded forests and peat forests	Flooded forests and peat forests	Likely possible with latitude post-processing to separate from TF1.2
TF 1.2 Subtropical/temperate forested wetlands	Flooded forests and peat forests	Likely possible with latitude post-processing to separate from TF1.1
TF 1.3 Permanent marshes	Permanent marshes	Saltmarshes currently classified, note some confusion with F3.3 Rice paddies.
TF 1.4 Seasonal floodplain marshes	Seasonal marshes	Currently mapped
TF 1.5 Episodic arid floodplains	Episodic marshes	Might be missed in very arid regions
TF 1.6 Boreal, temperate and montane peat bogs	Bogs	Not sure we can separate TF1.6 and TF1.7
TF 1.7 Boreal and temperate fens	Fens	Not sure we can separate TF1.6 and TF1.7

Marine-Terrestrial

IUCN	Current EO4WI class	Comment
MT 1 Shorelines		
MT 1.1 Rocky shorelines	Rocky shores	Rock currently mapped
MT 1.2 Muddy shorelines	Muddy shores	Mudflats currently mapped
MT 1.3 Sandy shorelines	Sandy shores	Sand shores currently mapped
MT 1.4 Boulder and cobble shores		Dependent on training data, might be difficult to separate from MT1.1
	Artificial shores	