

## Supplementary information

Table S1. Corine Land Cover ecosystem typology with crosswalk to MAES (Mapping and Assessment of Ecosystems and their Services) ecosystem typology.

CLC level 1	CLC level 2	CLC level 3	MAES ecosystem type
Artificial surfaces	Urban fabric	111 Continuous urban fabric	Urban
		112 Discontinuous urban fabric	
	Industrial, commercial and transport units	121 Industrial or commercial units	
		122 Road and rail networks and associated land	
		123 Port areas	
		124 Airports	
	Mine, dump and construction sites	131 Mineral extraction sites	
		132 Dump sites	
		133 Construction sites	
	Artificial, non-agricultural vegetated areas	141 Green urban areas	
		142 Sport and leisure facilities	
Agricultural areas	Arable land	211 Non-irrigated arable land	Cropland
		212 Permanently irrigated land	
		213 Rice fields	
	Permanent crops	221 Vineyards	
		222 Fruit trees and berry plantations	
		223 Olive groves	
	Pastures	231 Pastures	
	Heterogeneous agricultural areas	241 Annual crops associated with permanent crops	Cropland
		242 Complex cultivation patterns	
		243 Land principally occupied by agriculture, with significant areas of natural vegetation	
244 Agro-forestry areas			

Forest and semi natural areas	Forests	311 Broad-leaved forest	Woodland and forest
		312 Coniferous forest	
		313 Mixed forest	
	Scrub and/or herbaceous vegetation associations	321 Natural grasslands	Grassland
		322 Moors and heathland	Heathland and shrub
		323 Sclerophyllous vegetation	
		324 Transitional woodland-shrub	Woodland and forest
	Open spaces with little or no vegetation	331 Beaches, dunes, sands	Sparsely vegetated land
		332 Bare rocks	
		333 Sparsely vegetated areas	
		334 Burnt areas	
		335 Glaciers and perpetual snow	
	Wetlands	Inland wetlands	411 Inland marshes
412 Peat bogs			
Maritime wetlands		421 Salt marshes	Marine inlets and transitional waters
		422 Salines	
		423 Intertidal flats	
Water bodies	Inland waters	511 Water courses	Rivers and lakes
		512 Water bodies	
	Marine waters	521 Coastal lagoons	Marine inlets and transitional waters
		522 Estuaries	
		523 Sea and ocean	

Table S2. Natural habitat net change per country by coastal, riparian and inland areas. The accounting table shows the net change defined as consumption (loss) subtract formation (gain) of nature in square kilometres and as a percentage of baseline nature area within the given land-water zone. Figures are divided into changes in nature to/from urban (“u”) and cropland (“c”) land uses.

		Inland nature	Coastal nature	Riparian nature	Total nature
ALB	per year (km2)	-1.1 (u: -1.3; c: 0.2)	-0.5 (u: -0.5; c: 0)	-1.1 (u: -0.6; c: -0.5)	-2.7 (u: -2.4; c: -0.3)
	% of baseline area	-0.1 (u: -0.1; c: 0)	-2.5 (u: -2.6; c: 0.1)	-0.9 (u: -0.5; c: -0.4)	-3.6 (u: -3.2; c: -0.3)
AUT	per year (km2)	-4.1 (u: -4.1; c: 0)	0 (u: 0; c: 0)	-0.9 (u: -0.9; c: 0)	-5 (u: -5.1; c: 0.1)
	% of baseline area	-0.2 (u: -0.2; c: 0)	0 (u: 0; c: 0)	-0.2 (u: -0.2; c: 0)	-0.4 (u: -0.4; c: 0)
BEL	per year (km2)	-0.7 (u: -0.7; c: 0)	-0.2 (u: -0.3; c: 0.1)	-0.1 (u: -0.3; c: 0.2)	-1 (u: -1.2; c: 0.2)
	% of baseline area	-0.1 (u: -0.1; c: 0)	-9 (u: -11.1; c: 2.2)	-0.2 (u: -0.4; c: 0.3)	-9.3 (u: -11.7; c: 2.4)
BGR	per year (km2)	-12 (u: -2.3; c: -9.7)	-0.2 (u: -0.1; c: -0.1)	-1.9 (u: -0.3; c: -1.7)	-14.1 (u: -2.7; c: -11.5)

	% of baseline area	-0.5 (u: -0.1; c: -0.4)	-1.6 (u: -1; c: -0.6)	-0.9 (u: -0.1; c: -0.8)	-2.9 (u: -1.2; c: -1.8)
BIH	per year (km2)	-2.7 (u: -1.5; c: -1.2)	0 (u: 0; c: 0)	-1.2 (u: -0.3; c: -0.9)	-3.9 (u: -1.8; c: -2.1)
	% of baseline area	-0.2 (u: -0.1; c: -0.1)	0 (u: 0; c: 0)	-0.8 (u: -0.2; c: -0.6)	-0.9 (u: -0.3; c: -0.7)
CHE	per year (km2)	-0.2 (u: -0.2; c: 0)	0 (u: 0; c: 0)	0 (u: 0; c: 0)	-0.3 (u: -0.3; c: 0)
	% of baseline area	0 (u: 0; c: 0)	0 (u: 0; c: 0)	0 (u: 0; c: 0)	0 (u: 0; c: 0)
CYP	per year (km2)	-3.7 (u: -2.2; c: -1.5)	-0.1 (u: -0.1; c: 0)	0 (u: 0; c: 0)	-3.8 (u: -2.3; c: -1.5)
	% of baseline area	-1.7 (u: -1; c: -0.7)	-2.9 (u: -2.9; c: 0)	0 (u: 0; c: 0)	-4.5 (u: -3.8; c: -0.7)
CZE	per year (km2)	74.3 (u: -1.1; c: 75.3)	0 (u: 0; c: 0)	3.5 (u: -0.1; c: 3.6)	77.8 (u: -1.2; c: 79)
	% of baseline area	4.1 (u: -0.1; c: 4.2)	0 (u: 0; c: 0)	2.7 (u: -0.1; c: 2.8)	6.8 (u: -0.2; c: 6.9)
DEU	per year (km2)	-35.4 (u: -13.1; c: -22.3)	-1 (u: -0.6; c: -0.5)	-5.7 (u: -1.8; c: -3.8)	-42 (u: -15.5; c: -26.6)
	% of baseline area	-0.4 (u: -0.2; c: -0.3)	-1.2 (u: -0.7; c: -0.6)	-0.4 (u: -0.1; c: -0.3)	-2.1 (u: -0.9; c: -1.1)
DNK	per year (km2)	1 (u: -0.1; c: 1.2)	-0.2 (u: -0.3; c: 0.1)	-0.1 (u: 0; c: 0)	0.8 (u: -0.4; c: 1.2)
	% of baseline area	0.4 (u: 0; c: 0.4)	-0.3 (u: -0.3; c: 0.1)	-0.1 (u: -0.1; c: -0.1)	0 (u: -0.4; c: 0.4)
ESP	per year (km2)	-69.5 (u: -27.2; c: -42.3)	-6.2 (u: -5.8; c: -0.4)	-7.8 (u: -4.7; c: -3.1)	-83.5 (u: -37.8; c: -45.7)
	% of baseline area	-0.6 (u: -0.2; c: -0.3)	-2.6 (u: -2.4; c: -0.2)	-0.5 (u: -0.3; c: -0.2)	-3.6 (u: -2.9; c: -0.7)
EST	per year (km2)	-4.4 (u: -3; c: -1.4)	-0.3 (u: -0.5; c: 0.2)	-1.2 (u: -0.3; c: -0.9)	-5.9 (u: -3.8; c: -2.2)
	% of baseline area	-0.3 (u: -0.2; c: -0.1)	-0.3 (u: -0.6; c: 0.2)	-1 (u: -0.2; c: -0.8)	-1.6 (u: -1; c: -0.7)
FIN	per year (km2)	-38.6 (u: -8.9; c: -29.7)	-1.5 (u: -1.2; c: -0.3)	-2.6 (u: -0.7; c: -1.9)	-42.6 (u: -10.7; c: -31.9)
	% of baseline area	-0.3 (u: -0.1; c: -0.2)	-0.5 (u: -0.4; c: -0.1)	-0.2 (u: -0.1; c: -0.1)	-0.9 (u: -0.5; c: -0.4)
FRA	per year (km2)	-38.5 (u: -25.5; c: -13)	-1.7 (u: -1.7; c: 0)	-3.8 (u: -3.7; c: -0.1)	-44 (u: -30.9; c: -13.1)
	% of baseline area	-0.3 (u: -0.2; c: -0.1)	-1 (u: -1; c: 0)	-0.2 (u: -0.2; c: 0)	-1.5 (u: -1.4; c: -0.1)
GBR	per year (km2)	-22.3 (u: -22.7; c: 0.4)	-1.1 (u: -1.3; c: 0.3)	-1.3 (u: -1.6; c: 0.3)	-24.7 (u: -25.6; c: 0.9)
	% of baseline area	-0.3 (u: -0.3; c: 0)	-0.2 (u: -0.2; c: 0)	-0.1 (u: -0.2; c: 0)	-0.6 (u: -0.7; c: 0.1)
GRC	per year (km2)	-5.4 (u: -4.9; c: -0.5)	-1.1 (u: -1; c: -0.1)	-0.1 (u: -0.3; c: 0.2)	-6.6 (u: -6.2; c: -0.4)
	% of baseline area	-0.2 (u: -0.1; c: 0)	-0.3 (u: -0.2; c: 0)	0 (u: -0.1; c: 0.1)	-0.5 (u: -0.5; c: 0.1)
HRV	per year (km2)	-10.9 (u: -5.8; c: -5.2)	-1.5 (u: -0.8; c: -0.8)	-1.6 (u: -0.7; c: -0.9)	-14 (u: -7.2; c: -6.8)
	% of baseline area	-0.7 (u: -0.4; c: -0.3)	-1 (u: -0.5; c: -0.5)	-0.8 (u: -0.3; c: -0.5)	-2.4 (u: -1.2; c: -1.3)
HUN	per year (km2)	35.3 (u: -1.4; c: 36.7)	0 (u: 0; c: 0)	8.7 (u: -0.6; c: 9.2)	44 (u: -1.9; c: 45.9)
	% of baseline area	2.6 (u: -0.1; c: 2.7)	0 (u: 0; c: 0)	2.3 (u: -0.1; c: 2.4)	4.9 (u: -0.2; c: 5.1)
IRL	per year (km2)	9.8 (u: -6.3; c: 16.1)	0.2 (u: -1.4; c: 1.6)	-0.1 (u: -1.3; c: 1.2)	9.8 (u: -9.1; c: 18.9)
	% of baseline area	0.4 (u: -0.2; c: 0.6)	0.1 (u: -0.6; c: 0.7)	0 (u: -0.5; c: 0.4)	0.4 (u: -1.3; c: 1.7)
ISL	per year (km2)	-2.9 (u: -2.4; c: -0.5)	-1 (u: -1; c: 0)	-0.4 (u: -0.3; c: -0.1)	-4.3 (u: -3.7; c: -0.6)
	% of baseline area	-0.1 (u: -0.1; c: 0)	-0.4 (u: -0.4; c: 0)	-0.1 (u: -0.1; c: 0)	-0.5 (u: -0.5; c: 0)
ITA	per year (km2)	-4.1 (u: -2.5; c: -1.6)	-0.3 (u: -0.5; c: 0.1)	-3.4 (u: -0.5; c: -2.9)	-7.8 (u: -3.5; c: -4.3)
	% of baseline area	-0.1 (u: 0; c: 0)	-0.3 (u: -0.4; c: 0.1)	-0.4 (u: -0.1; c: -0.3)	-0.7 (u: -0.4; c: -0.2)
LIE	per year (km2)	0 (u: 0; c: 0)	0 (u: 0; c: 0)	0 (u: 0; c: 0)	0 (u: 0; c: 0)
	% of baseline area	-0.1 (u: -0.1; c: 0)	0 (u: 0; c: 0)	0 (u: 0; c: 0)	-0.1 (u: -0.1; c: 0)
LTU	per year (km2)	-20.2 (u: -0.8; c: -19.5)	0 (u: 0; c: 0)	-1.8 (u: -0.1; c: -1.7)	-22 (u: -0.9; c: -21.1)
	% of baseline area	-1.4 (u: -0.1; c: -1.4)	-0.4 (u: -0.3; c: -0.1)	-1.2 (u: -0.1; c: -1.1)	-3 (u: -0.4; c: -2.6)
LUX	per year (km2)	-0.3 (u: -0.2; c: -0.1)	0 (u: 0; c: 0)	0 (u: 0; c: 0)	-0.3 (u: -0.2; c: -0.1)
	% of baseline area	-0.4 (u: -0.3; c: -0.1)	0 (u: 0; c: 0)	-0.2 (u: -0.2; c: 0)	-0.6 (u: -0.5; c: -0.1)
LVA	per year (km2)	-33.9 (u: -1.4; c: -32.5)	-0.3 (u: 0; c: -0.3)	-4.9 (u: -0.4; c: -4.4)	-39.1 (u: -1.9; c: -37.2)
	% of baseline area	-1.6 (u: -0.1; c: -1.5)	-1.2 (u: -0.1; c: -1.1)	-2.1 (u: -0.2; c: -2)	-4.9 (u: -0.3; c: -4.6)
MKD	per year (km2)	-0.2 (u: -0.7; c: 0.5)	0 (u: 0; c: 0)	0 (u: 0; c: 0.1)	-0.2 (u: -0.7; c: 0.6)
	% of baseline area	0 (u: -0.1; c: 0.1)	0 (u: 0; c: 0)	0 (u: 0; c: 0.1)	0 (u: -0.1; c: 0.1)
MLT	per year (km2)	0 (u: 0; c: 0)	0 (u: 0; c: 0)	0 (u: 0; c: 0)	0 (u: 0; c: 0)

	% of baseline area	0 (u: 0; c: 0)	-0.7 (u: -0.7; c: 0)	0 (u: 0; c: 0)	-0.7 (u: -0.7; c: 0)
MNE	per year (km2)	-0.7 (u: -0.6; c: -0.1)	-0.2 (u: -0.2; c: 0)	-0.2 (u: -0.2; c: 0)	-1.1 (u: -0.9; c: -0.2)
	% of baseline area	-0.1 (u: -0.1; c: 0)	-1.5 (u: -1.5; c: 0)	-0.4 (u: -0.3; c: -0.1)	-2 (u: -1.9; c: -0.1)
NLD	per year (km2)	-3 (u: -7; c: 4)	-0.3 (u: -0.8; c: 0.5)	-2.9 (u: -5.6; c: 2.7)	-6.1 (u: -13.3; c: 7.2)
	% of baseline area	-0.5 (u: -1.3; c: 0.7)	-0.8 (u: -2.6; c: 1.7)	-1.2 (u: -2.3; c: 1.1)	-2.5 (u: -6.1; c: 3.6)
NOR	per year (km2)	-11.2 (u: -10.2; c: -1)	-3.1 (u: -2.9; c: -0.1)	-2.2 (u: -1.8; c: -0.4)	-16.5 (u: -14.9; c: -1.6)
	% of baseline area	-0.1 (u: -0.1; c: 0)	-0.2 (u: -0.2; c: 0)	-0.2 (u: -0.1; c: 0)	-0.4 (u: -0.4; c: -0.1)
POL	per year (km2)	14.3 (u: -9.5; c: 23.8)	-0.1 (u: -0.1; c: 0)	-1.1 (u: -1.6; c: 0.5)	13.1 (u: -11.2; c: 24.3)
	% of baseline area	0.2 (u: -0.2; c: 0.4)	-0.4 (u: -0.4; c: 0)	-0.1 (u: -0.2; c: 0.1)	-0.3 (u: -0.7; c: 0.4)
PRT	per year (km2)	0.2 (u: -12.6; c: 12.8)	-1.5 (u: -1.1; c: -0.3)	-0.7 (u: -1; c: 0.4)	-2 (u: -14.8; c: 12.8)
	% of baseline area	0 (u: -0.6; c: 0.6)	-1.7 (u: -1.3; c: -0.4)	-0.2 (u: -0.3; c: 0.1)	-1.9 (u: -2.2; c: 0.3)
ROU	per year (km2)	-12.7 (u: -3.7; c: -9)	-0.5 (u: -0.1; c: -0.4)	-6.5 (u: -1; c: -5.4)	-19.7 (u: -4.8; c: -14.9)
	% of baseline area	-0.2 (u: -0.1; c: -0.2)	-2.9 (u: -0.4; c: -2.4)	-0.9 (u: -0.1; c: -0.7)	-4 (u: -0.6; c: -3.3)
SRB	per year (km2)	-1.4 (u: -0.5; c: -0.9)	0 (u: 0; c: 0)	-3.6 (u: -0.4; c: -3.2)	-5 (u: -0.9; c: -4.1)
	% of baseline area	-0.1 (u: 0; c: -0.1)	0 (u: 0; c: 0)	-1.4 (u: -0.2; c: -1.2)	-1.4 (u: -0.2; c: -1.3)
SVK	per year (km2)	0.3 (u: -0.7; c: 1)	0 (u: 0; c: 0)	0 (u: -0.1; c: 0.1)	0.3 (u: -0.8; c: 1.1)
	% of baseline area	0 (u: -0.1; c: 0.1)	0 (u: 0; c: 0)	0 (u: -0.1; c: 0.1)	0 (u: -0.2; c: 0.1)
SVN	per year (km2)	-0.6 (u: -0.6; c: 0)	0 (u: 0; c: 0)	0 (u: -0.1; c: 0)	-0.6 (u: -0.7; c: 0.1)
	% of baseline area	-0.1 (u: -0.1; c: 0)	-1.7 (u: -1.8; c: 0.1)	-0.1 (u: -0.1; c: 0)	-1.8 (u: -2; c: 0.2)
SWE	per year (km2)	-11 (u: -11.6; c: 0.5)	-1.1 (u: -1.2; c: 0.1)	-1.1 (u: -1.4; c: 0.3)	-13.2 (u: -14.1; c: 0.9)
	% of baseline area	-0.1 (u: -0.1; c: 0)	-0.3 (u: -0.3; c: 0)	-0.1 (u: -0.1; c: 0)	-0.4 (u: -0.4; c: 0)
TUR	per year (km2)	-115.2 (u: -66.9; c: -48.3)	-4.4 (u: -4; c: -0.4)	-6.9 (u: -6.1; c: -0.8)	-126.5 (u: -77; c: -49.5)
	% of baseline area	-0.5 (u: -0.3; c: -0.2)	-1.9 (u: -1.8; c: -0.2)	-0.7 (u: -0.6; c: -0.1)	-3.1 (u: -2.7; c: -0.5)

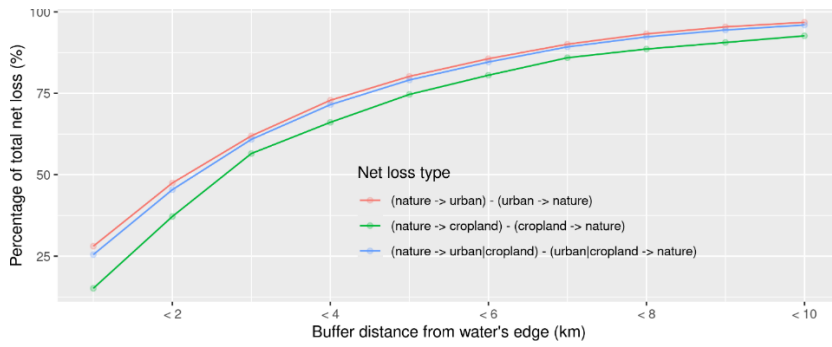


Figure S1. Net loss area percentages of total net loss within buffer distances from the water's edge. Separate lines are plotted for types of net loss including net loss from urban expansion, net loss from cropland expansion, and the combination of the two.

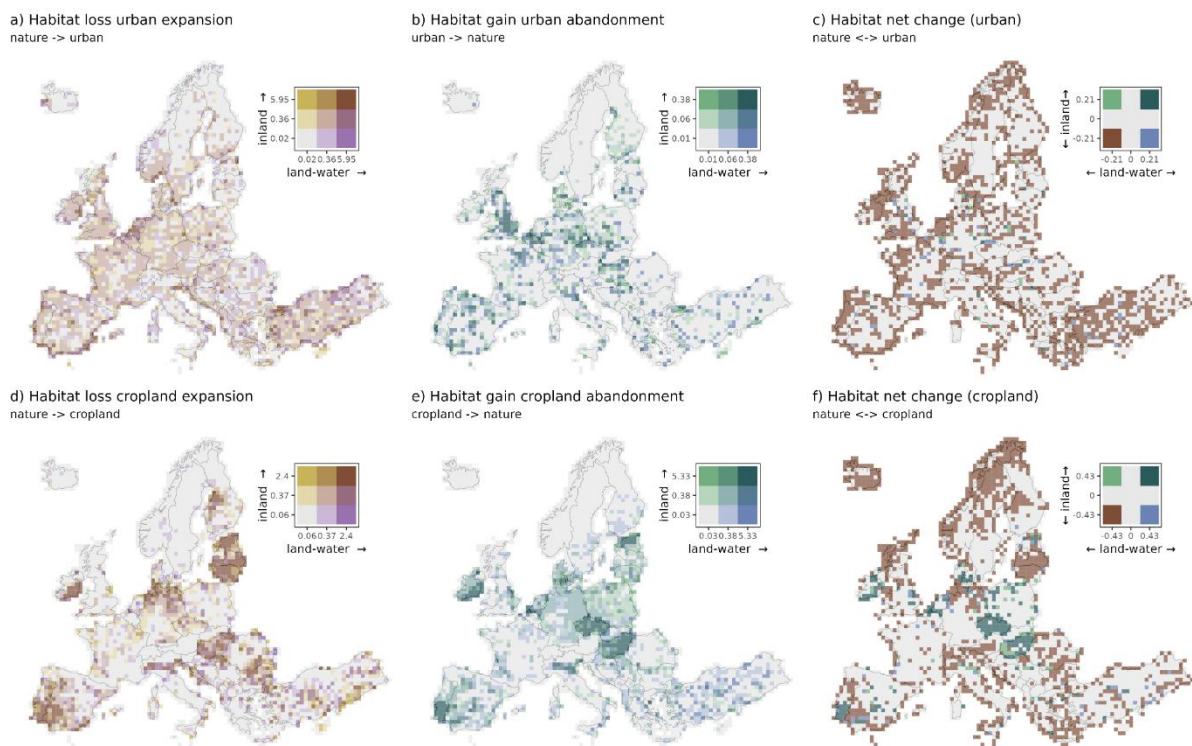


Figure S2. Natural habitat loss (a, d), recovery (b, e) and net change (c, f) from urban and cropland expansion and abandonment patterns. Mapped values represent the area change between 2000 and 2018 as a percentage of baseline natural habitat area per 50km grid cell. Bivariate colour ramps distinguish natural habitat changes within (“land-water”) and outside (“inland”) the riparian/coastal zones for each grid cell. Colour ramps are scaled differently between each plot to highlight spatial hotspots, but not for making magnitudes comparable across maps.