Annex VI. Results of variation partitioning with environmental and spatial data (F and p are for both ordination axes and 999 permutations; $R^2_{adj.}$ determined by Ezekiel's adjustment; P variables for sample subsets are denoted by group numbers in subscript). A. Only P coordinates for specified pool subset in addition to XY, B. P coordinates for entire set of pools in addition to XY, C. P coordinates for entire set of pools and all subsets, 1 + 3 excepted, in addition to XY.

analysis	variables included (p ≤ 0.05)	F, p	R^2	$R^2_{adj.}$	% of explained part
all sites (N = 49, 219 taxa)					
A, environment + spatial		3.0, 0.001	0.44	0.30	100.0
environment marginal	ALK, FISH, OPEN, TN, O_2%	4.0, 0.001	0.32	0.24	81.1
spatial configuration marginal	Y, P2, P8, P9, P23	3.1, 0.001	0.27	0.18	60.8
environment unique	covariables: spatial	2.4, 0.001	0.18	0.12	40.5
spatial configuration unique	covariables: environment	1.7, 0.002	0.12	0.06	20.3
interaction			0.15	0.12	40.5
unexplained variation			55.7 %	70.4 %	
groups 2 + 4 (N = 33, 185 taxa)					
A, environment + spatial		2.5, 0.001	0.36	0.22	100.0
environment marginal	ALK, OPEN, TN	3.0, 0.001	0.24	0.16	74.4
spatial configuration marginal	Y, $P_{24}1$, $P_{24}9$	2.1, 0.001	0.18	0.09	41.9
environment unique	covariables: spatial	2.5, 0.001	0.19	0.13	58.1
spatial configuration unique	covariables: environment	1.7, 0.002	0.13	0.06	25.6
interaction			0.05	0.04	16.3
unexplained variation			63.8 %	78.5 %	
B, environment + spatial		2.2, 0.001	0.42	0.22	100.0
environment marginal	ALK, OPEN, TN	3.0, 0.001	0.24	0.16	71.7
spatial configuration marginal	P2, P4, P9, P12, P22	2.1, 0.001	0.28	0.15	66.4
environment unique		1.9, 0.001	0.14	0.08	33.6
spatial configuration unique		1.5, 0.004	0.18	0.06	28.3
interaction			0.10	0.09	38.1
unexplained variation			58.3 %	77.7 %	
C, environment + spatial		2.2, 0.001	0.54	0.33	100.0
environment marginal	ALK, OPEN, TN	3.0, 0.001	0.24	0.16	48.5
spatial configuration marginal	P2, P4, P9, P22, P23, $P_{24}9$, $P_4 17$	2.2, 0.001	0.38	0.20	60.6
environment unique	covariables: spatial	1.9, 0.001	0.13	0.13	39.4
spatial configuration unique	covariables: environment	1.7, 0.001	0.27	0.20	60.6
interaction			0.11	0.04	12.1
unexplained variation			49.4 %	67.5 %	

Annex IV – Results of variation partitioning with environmental and spatial data on phytobenthos communities

analysis	variables included ($p \leq 0.05$)	F, p	R^2	$R^2_{adj.}$	% of explained part
group 4 (N = 28, 175 taxa)					
A, environment + spatial		1.9, 0.001	0.36	0.17	100.0
environment marginal	ALK, OPEN, TN, SLUDGE	2.3, 0.001	0.29	0.16	94.1
spatial configuration marginal	Y, P_48	2.2, 0.003	0.15	0.08	47.1
environment unique	covariables: spatial	1.7, 0.002	0.20	0.09	52.9
spatial configuration unique	covariables: environment	1.1, 0.3	0.7	0.01	5.9
interaction			0.8	0.07	41.2
unexplained variation			64.5 %	83.3 %	
B, environment + spatial		2.1, 0.001	0.47	0.25	100.0
environment marginal	ALK, OPEN, TN, SLUDGE	2.3, 0.001	0.29	0.16	65.0
spatial configuration marginal	Y, P12, P22, P23	2.2, 0.001	0.27	0.15	59.8
environment unique	covariables: spatial	1.7, 0.002	0.19	0.10	40.2
spatial configuration unique	covariables: environment	1.6, 0.005	0.18	0.09	35.0
interaction			0.09	0.06	24.8
unexplained variation			53.3 %	75.4 %	
C, environment + spatial		2.1, 0.001	66.5	0.35	100.0
environment marginal	ALK, OPEN, TN, SLUDGE	2.3, 0.001	28.7	0.16	46.3
spatial configuration marginal	Y, P2, P14, P22, P23, $P_{24}9$, P_43, P_415, P_417	2.3, 0.001	53.6	0.30	86.9
environment unique	covariables: spatial	1.3, 0.05	12.9	0.05	14.3
spatial configuration unique	covariables: environment	1.8, 0.001	37.8	0.19	54.6
interaction			15.8	0.11	32.3
unexplained variation			33.5 %	64.6 %	