

Table S2. Water-related environmental background conditions (nutrient concentrations, DOC concentrations and temperature) measured at the outlet of mesocosms and in the header tank. Given are means \pm standard deviation and sample size n. Concentrations of inorganic nutrients and dissolved organic carbon were measured twice a week, temperature was recorded continuously. Concentrations of PO₄-P were mostly below detection limits ($< 3 \mu\text{g l}^{-1}$) and are not reported.

	header tank	Height of bedforms in the mesocosms – heterogeneity treatment					
		no bedforms	2 cm	4 cm	6 cm	8 cm	10 cm
NO ₃ -N (mg l ⁻¹)	0.57 ± 0.24 (n=22)	0.53 ± 0.26 (n=17)	0.54 ± 0.27 (n=17)	0.51 ± 0.28 (n=17)	0.52 ± 0.26 (n=17)	0.51 ± 0.28 (n=17)	0.53 ± 0.27 (n=17)
NH ₄ -N ($\mu\text{g l}^{-1}$)	4.4 ± 4.25 (n=24)	4.38 ± 4.38 (n=18)	4.53 ± 5.93 (n=18)	3.56 ± 3.83 (n=18)	4.06 ± 5.04 (n=18)	3.24 ± 3.61 (n=18)	4.02 ± 4.99 (n=18)
DOC (mg l ⁻¹)	1.49 ± 0.52 (n=39)	1.2 ± 0.37 (n=29)	1.22 ± 0.35 (n=32)	1.29 ± 0.35 (n=31)	1.18 ± 0.34 (n=30)	1.28 ± 0.38 (n=27)	1.19 ± 0.36 (n=33)
Temp. (°C)	9.06 ± 1.31	9.3 ± 1.37	9.27 ± 1.34	9.26 ± 1.36	9.29 ± 1.34	9.29 ± 1.35	9.3 ± 1.35