

Supplementary data

Table S1. Differences in Manning n coefficient and water levels for each community tested at each discharge.

Discharges	<i>C. flacca</i>	<i>T. vulgare</i>	<i>F. arundinacea</i>	<i>P. arundinacea</i>	CTF	CTFP	ANOVA
Manning n Coefficient ($s\ m^{-1/3}$)							
Q1 = 2 L.s ⁻¹ .m ⁻¹	0.274 (± 0.077) ^a	0.322 (± 0.053) ^a	0.933 (± 0.08) ^b	0.257 (± 0.112) ^a	0.28 (± 0.02) ^a	0.231 (± 0.068) ^a	42.31***
Q2 = 4 L.s ⁻¹ .m ⁻¹	0.259 (± 0.054) ^a	0.253 (± 0.04) ^a	0.838 (± 0.068) ^b	0.241 (± 0.099) ^a	0.275 (± 0.023) ^a	0.212 (± 0.045) ^a	52.24***
Q3 = 8 L.s ⁻¹ .m ⁻¹	0.224 (± 0.045) ^a	0.173 (± 0.027) ^a	0.652 (± 0.061) ^b	0.207 (± 0.073) ^a	0.231 (± 0.024) ^a	0.183 (± 0.048) ^a	45.63***
Q4 = 11 L.s ⁻¹ .m ⁻¹	0.206 (± 0.039) ^a	0.142 (± 0.021) ^a	0.588 (± 0.038) ^b	0.194 (± 0.071) ^a	0.212 (± 0.029) ^a	0.172 (± 0.041) ^a	50.41***
Water level (m)							
Q1 = 2 L.s ⁻¹ .m ⁻¹	0.027 (± 0.005) ^a	0.031 (± 0.003) ^a	0.06 (± 0.004) ^b	0.027 (± 0.007) ^a	0.028 (± 0.001) ^a	0.025 (± 0.005) ^a	26.45***
Q2 = 4 L.s ⁻¹ .m ⁻¹	0.041 (± 0.006) ^a	0.041 (± 0.004) ^a	0.088 (± 0.005) ^b	0.039 (± 0.01) ^a	0.043 (± 0.002) ^a	0.037 (± 0.005) ^a	36.21***
Q3 = 8 L.s ⁻¹ .m ⁻¹	0.06 (± 0.008) ^a	0.051 (± 0.005) ^a	0.122 (± 0.008) ^b	0.057 (± 0.012) ^a	0.062 (± 0.004) ^a	0.053 (± 0.009) ^a	35.29***
Q4 = 11 L.s ⁻¹ .m ⁻¹	0.071 (± 0.009) ^a	0.056 (± 0.005) ^a	0.144 (± 0.008) ^b	0.068 (± 0.016) ^a	0.073 (± 0.007) ^a	0.063 (± 0.01) ^a	37.15***

The data are mean values (\pm standard deviation) and results of F from ANOVA statistical tests. CTF – *Carex flacca* + *Tanacetum vulgare* + *Festuca arundinacea*; CTFP – *Carex flacca* + *Tanacetum vulgare* + *Festuca arundinacea* + *Phalaris arundinacea*. The letters represent the significant differences between each community, according to the Tukey post-hoc tests. Significance levels: *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$; ns = not significant.