

Biophysical controls on organic carbon fluxes in fluvial networks

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In the version of this Progress Article originally published, Table 1 was incorrect and should have been as shown here.

Table 1 Gross primary production (GPP), respiration (R) and net ecosystem production (NEP) in streams, rivers and estuaries as determined from whole-ecosystem metabolism measurements (see Supplementary Information S2), and global estimates of respiration and net heterotrophy.

Ecosystem	GPP (g C m ⁻² d ⁻¹)	R (g C m ⁻² d ⁻¹)	NEP (g C m ⁻² d ⁻¹)	Global R (Pg C y ⁻¹)	Global net heterotrophy (Pg C y ⁻¹)
Streams (n = 62)	0.73 ± 0.14* (0.02–5.62)	1.93 ± 0.19* (0.29–8.16)	–1.20 ± 0.15* (–5.86–2.51)	0.19	0.12
River (n = 37)	0.91 ± 0.10† (0.06–2.28)	1.53 ± 0.15* (0.20–3.54)	–0.66 ± 0.11† (–2.06–1.60)	0.16	0.07
Estuaries (n = 31)	3.14 ± 0.41† (0.72–10.4)	3.51 ± 0.32† (0.83–7.58)	–0.39 ± 0.21† (–2.98–2.86)	1.20	0.13

Given is the mean ± s.e., and the minimum and maximum in brackets. For each metabolic parameter, ecosystems with the same superscript are not statistically different ($\alpha = 0.05$, one-way analysis of variance with a Scheffe post-hoc test, data were log-transformed). Rivers were defined as running waters with a discharge >500 l s⁻¹ or larger than 5th order. Global stream and river surface area were estimated at 0.275 × 10⁶ km² and 0.295 × 10⁶ km², respectively (Wilfred M. Wollheim personal communication); the global surface estimate of 0.94 × 10⁶ km² for estuaries is from ref. 42 (see Supplementary Information S2).

Subsequently, the values of global fluvial respiration and global net heterotrophy reported in the text on page 97 were incorrect.

These errors have been corrected in the HTML and PDF versions.