

Table S1 Number of end-member samples (n) and goodness-of-fit (R^2) for the Q-C relationships of different flow components across the study watersheds

Watershed	Flow Component	TDN (n, R^2)	NH_4^+ -N (n, R^2)	NO_3^- -N (n, R^2)	DON (n, R^2)
TA	Baseflow	141, 0.50	141, 0.69	141, 0.77	141, 0.29
	Subsurface flow	256, 0.50	256, 0.72	256, 0.62	256, 0.24
	Surface flow	1064, 0.20	1064, 0.39	1064, 0.20	1064, 0.21
IA	Baseflow	37, 0.46	37, 0.41	37, 0.32	37, 0.30
	Subsurface flow	214, 0.21	214, 0.20	214, 0.34	214, 0.21
	Surface flow	1208, 0.48	1208, 0.35	1208, 0.35	1208, 0.29
UR	Baseflow	93, 0.33	93, 0.29	93, 0.27	93, 0.41
	Subsurface flow	256, 0.27	256, 0.33	256, 0.66	256, 0.31
	Surface flow	1103, 0.45	1103, 0.56	1103, 0.47	1103, 0.20

Note: n represents the number of end-member samples used to develop the Q-C relationship; R^2 represents the coefficient of determination for the Q-C model.