

Table S1. Catchment characteristics, PO₄-P concentrations, and invertebrate abundance and taxon richness of study sites.

Site	Code	Elevation (m.a.s.l)	Catchment area (km ²)	PO ₄ -P (μg l ⁻¹)	Abundance (N m ⁻²)	Taxon richness
Kedung Logan	KL	202	0.50	7	12645	11
Mrogo	MG	206	0.60	8	2112	18
Danau Bandem	DB	53	1.41	8	2587	9
Pengasih	PE	154	13.03	2	336	17
Wadas	WA	102	5.27	12	363	16
Banjarsari	BA	148	10.19	11	1829	13
Kali Bawang	KB	174	3.65	44	17765	9
Tunggularum	TU	573	1.66	72	3621	25
Kretek	KT	475	2.64	67	2965	20
Kali Aji	KA	398	2.31	44	2005	10
Kedung Kuning	KK	347	1.12	30	2427	12
Brayut	BR	248	6.25	58	1563	13
Rejodani	RJ	249	0.67	51	2155	17
Tirta Amarta	TA	181	0.94	166	603	12
Krakungan	KR	173	1.96	132	2635	14
Wedo	WE	168	17.28	90	1776	15
Modinan	MD	123	2.09	110	1035	23
Tlogorejo	TG	118	1.87	138	2021	18
Widuri	WD	118	0.56	110	896	18
Kali Buntung	BU	133	0.77	99	1952	13
Mongisidi	MN	130	0.25	97	2240	17
Mbelir	MB	120	2.72	67	896	22
Selokan Mataram	SM	142	3.18	106	507	12