

SUPPLEMENTARY MATERIAL

Variability of concentrations of phosphorus forms under the conditions of weir renovation – The Głuszynka river-lake system case study

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Table S1. The concentration of physico-chemical indicators at the analysed points in the hydrological year 2022

Parameter		Value in sampling point			
		P1	P2	P3	P4
DO (mg dm ⁻³)	range	0.98–14.86	1.77–13.96	0.53–11.84	0.69–11.25
	mean	7.55	7.62	6.60	4.64
	<i>SD</i>	3.93	4.11	3.99	4.12
	Var	52.01	53.92	60.41	88.75
BOD ₅ (mg dm ⁻³)	range	0.27–10.03	0.69–6.80	0.37–9.85	0.48–7.18
	mean	3.43	3.24	3.67	3.78
	<i>SD</i>	3.19	2.26	3.17	3.56
	Var	93.05	69.88	86.53	94.23
COD (mg dm ⁻³)	range	27.00–148.00	57.00–132.00	54.00–161.00	37.00–164.00
	mean	71.33	70.40	77.20	81.33
	<i>SD</i>	38.96	22.46	35.05	39.12
	Var	54.62	31.90	45.41	48.09
Temperature (°C)	range	4.00–24.60	1.90–25.20	1.90–23.4	3.00–22.40
	mean	14.71	12.50	11.95	13.02
	<i>SD</i>	7.91	8.67	7.81	6.86
	Var	53.79	69.37	65.33	52.65

Parameter		Value in sampling point			
		P1	P2	P3	P4
EC ($\mu\text{S cm}^{-1}$)	range	428.00–627.00	460.00–605.00	410.00–600.00	441.00–845.00
	mean	537.50	536.83	545.33	610.50
	SD	72.27	48.77	65.84	107.14
	Var	13.45	9.09	12.07	17.55
pH (-)	range	7.24–9.28	7.20–9.17	7.16–8.84	7.34–8.88
	mean	8.26	8.40	8.07	7.98
	SD	0.74	0.63	0.53	0.47
	Var	8.92	7.47	6.61	5.91
Cl ⁻ (mg dm^{-3})	range	31.98–69.78	30.38–66.75	31.28–66.14	20.35–65.53
	mean	44.30	43.24	47.04	42.45
	SD	11.13	9.88	12.83	12.73
	Var	25.13	22.86	27.28	30.00
H-CO ₃ ⁻ (mg dm^{-3})	range	106.80–214.00	101.60–242.80	102.50–239.10	101.00–409.90
	mean	153.20	160.24	167.45	191.04
	SD	53.28	47.94	51.27	95.06
	Var	34.77	29.92	30.62	49.76
P (mg dm^{-3})	range	0.02–.52	0.09–1.60	0.06–1.19	0.04–3.04
	mean	0.33	0.37	0.32	0.87
	SD	0.45	0.46	0.33	1.03
	Var	136.36	124.32	103.13	118.39
OP (mg dm^{-3})	range	0.01–0.65	0.02–0.28	0.03–0.40	0.03–2.89
	mean	0.18	0.13	0.16	0.69
	SD	0.21	0.08	0.13	0.95
	Var	116.67	61.54	81.25	137.68
NO ₃ -N (mg dm^{-3})	range	0.47–1.63	0.05–2.18	0.05–2.17	0.45–2.46
	mean	0.98	0.75	0.64	1.04
	SD	0.54	0.65	0.67	0.72
	Var	54.58	86.03	103.78	68.81
NO ₂ -N (mg dm^{-3})	range	0.01–0.02	0.01–0.02	0.01–0.02	0.01–0.02
	mean	0.01	0.00	0.01	0.01
	SD	0.01	0.01	0.01	0.01
	Var	75.35	121.61	94.62	93.89
NH ₄ -N (mg dm^{-3})	range	0.13–1.13	0.10–1.22	0.08–0.87	0.08–2.07
	mean	0.38	0.50	0.39	0.44
	SD	0.34	0.45	0.28	0.55
	Var	90.24	88.70	71.63	124.39

Parameter		Value in sampling point			
		P1	P2	P3	P4
N (mg dm ⁻³)	range	2.10–8.27	1.47–8.29	1.34–10.98	1.25–16.11
	mean	4.53	3.90	4.74	4.40
	<i>SD</i>	2.05	2.06	3.26	4.61
	Var	45.12	52.88	68.80	104.93
Fe (mg dm ⁻³)	range	0.19–0.42	0.16–0.45	0.12–0.56	0.18–1.30
	mean	0.24	0.23	0.23	0.40
	<i>SD</i>	0.13	0.12	0.16	0.43
	Var	53.65	53.03	69.89	106.12
SO ₄ ²⁻ (mg dm ⁻³)	range	72.42–222.60	66.67–170.80	68.31–65.80	90.53–167.1
	mean	108.78	120.30	126.06	114.41
	<i>SD</i>	62.25	55.71	55.36	52.64
	Var	57.23	46.31	43.91	46.01

Explanation: DO = dissolved oxygen, BOD₅ = biological oxygen demand, COD = chemical oxygen demand, EC = electrical conductivity, OP = orthophosphate (V), *SD* = standard deviation, Var = variation.

Source: own study.