

A complete data set with individual sample values of data collected from former studies (1991 to 2014) and data sampled in 2017. The sampling years and months are related to the corresponding stations, distributed in the catchment.

Year	Station	DO % Sat.	FC CFU/mL	pH	BOD mgO ₂ /L	COD mgO ₂ /L	NO ₃ mg/L	PO ₄ mg/L	Delta Tem. °C	Turbidity NTU	TS mg/L
1991	Station 1	42	2.3E+05	7.6	36.0	140.0	6.52	0.07	2.0	72	512.0
1991	Station 2	60	2.3E+06	8.2	24.3	63.7	0.14	0.03	3.0	138	1512.0
1991	Station 3	50	2.4E+04	7.5	3.7	56.0	4.50	0.07	4.0	90	860.0
1991	Station 4	95	1.4E+04	8.6	1.8	1.9	0.04	0.09	5.0	25	45.0
1991	Station 5	98	2.9E+05	7.8	1.3	1.5	0.06	0.08	9.0	10	48.7
1991	Station 6	90	9.3E+04	8.2	0.8	1.2	0.03	0.05	10.0	8	47.0
1997	Station 1	41.5	1.3E+04	7.8	41.9	178.1	6.22	0.02	0.4	16	579.3
1997	Station 1	41.6	8.2E+03	7.7	30.6	319.5	9.57	0.05	0.5	20	1137.1
1997	Station 1	30.9	7.4E+03	7.9	37.5	162.5	9.40	0.01	0.3	21	299.6
1997	Station 2	17	3.2E+06	7.4	26.9	56.5	10.35	10.89	9.7	94	923.4
1997	Station 2	17.9	5.8E+06	7.5	18.8	33.7	8.73	13.01	6.4	120	1599.1
1997	Station 2	13.1	3.9E+06	7.3	23.3	77.7	6.53	14.34	7.0	116	375.5
1997	Station 3	56.3	9.6E+04	7.2	28.3	29.6	0.89	0.16	2.3	395	791.2
1997	Station 3	78.1	5.2E+04	7.1	21.1	21.0	0.86	0.20	2.7	517	371.4
1997	Station 3	69.6	6.8E+04	7.3	22.6	45.9	0.58	0.56	1.8	438	1477.4
1997	Station 4	6	3.5E+04	8.1	0.4	6.9	0.20	0.09	1.1	96	96.3
1997	Station 4	5	3.1E+04	8.2	0.5	5.0	0.15	0.41	1.7	93	94.2
1997	Station 4	7	5.4E+04	7.9	0.4	3.0	0.13	0.19	1.3	75	97.5
1997	Station 5	71.6	6.0E+01	6.0	1.1	1.1	0.46	0.45	10.4	37	102.3
1997	Station 5	92.6	5.5E+01	6.2	0.9	2.3	0.58	0.16	8.3	31	131.3
1997	Station 5	67.4	7.5E+01	6.0	1.3	2.3	0.37	0.13	13.1	28	90.6
1997	Station 6	59.5	1.0E+03	6.9	0.4	0.5	0.08	0.08	0.6	14	45.5
1997	Station 6	68.1	2.0E+03	7.1	0.4	0.9	0.05	0.14	0.7	11	36.7
1997	Station 6	49.4	1.8E+03	6.8	0.3	1.2	0.06	0.05	0.6	14	31.5
2005	Station 1	48	3.8E+06	8.0	79.5	24.1	1.50	24.30	3.1	128	463.9
2005	Station 1	36	2.3E+06	8.0	61.5	7.7	2.92	35.20	0.8	186	580.9
2005	Station 2	18	3.5E+06	8.3	61.1	13.4	0.03	22.99	2.5	130	430.3
2005	Station 3	45	3.2E+06	7.0	23.8	6.7	0.76	1.43	4.5	30.7	85.9
2005	Station 3	36	3.3E+06	6.9	32.0	31.7	1.15	2.27	0.6	35.8	87.8
2005	Station 3	33	1.7E+06	7.1	31.3	20.7	0.52	1.97	5.3	22.5	67.8
2005	Station 4	5	2.5E+07	8.6	2.6	4.0	4.50	1.89	4.0	92	305.0
2005	Station 5	6	5.5E+01	7.6	6.3	1.4	0.07	0.21	11.6	2	9.3
2005	Station 5	5	9.2E+01	7.7	8.1	4.4	0.06	0.31	4.4	4	7.5
2005	Station 6	95.5	1.2E+01	8.9	1.5	2.6	0.05	0.01	15.5	109	271.7
2005	Station 6	123	4.0E+00	8.8	1.9	5.3	0.09	0.01	10.5	75	340.3
2011	Station 1	13	2.1E+06	7.6	62.5	126.6	13.22	13.08	7.4	314.7	1668.1
2011	Station 1	13	3.4E+06	7.8	69.3	79.5	13.81	13.73	5.9	406.3	886.8
2011	Station 1	10	2.1E+06	7.4	50.5	180.8	19.52	15.93	4.7	334.8	422.3
2011	Station 2	49	1.9E+05	7.7	150.5	169.4	0.18	54.84	0.7	115.8	541.5
2011	Station 2	38	3.7E+05	7.6	193.6	303.5	0.16	13.67	0.6	92.1	125.8
2011	Station 2	39	3.3E+05	7.8	147.8	154.1	0.25	22.81	0.5	92.1	316.6
2011	Station 3	18	2.9E+06	7.9	15.8	63.4	0.27	29.51	0.6	151.8	457.3
2011	Station 3	24	5.1E+06	7.8	12.2	32.5	0.39	111.01	0.7	190.2	408.7
2011	Station 4	42	5.2E+04	9.0	2.4	89.0	0.70	9.60	3.9	66	932.0
2011	Station 5	28	2.0E+02	7.6	10.0	12.0	0.18	1.78	4.7	45	79.0
2011	Station 6	67	2.5E+01	8.2	1.6	2.0	0.03	0.12	12.1	4	335.0
2014	Station 1	5	8.7E+06	7.2	214.0	342.8	15.42	35.44	5.0	115	1530.0
2014	Station 2	2.5	7.9E+04	7.9	439.7	283.1	23.51	15.61	4.3	101.3	1612.2
2014	Station 2	3.5	4.7E+04	7.8	339.9	550.7	16.23	58.76	6.3	126.7	511.8
2014	Station 3	2.5	7.3E+04	7.5	30.8	267.7	20.53	62.16	4.3	244.5	1040.9

2014	Station 3	3	4.6E+04	7.4	40.6	181.6	13.55	15.34	5.9	185.9	546.2
2014	Station 3	3.5	4.2E+04	7.6	31.7	403.3	15.08	26.09	3.8	211.6	2057.8
2014	Station 4	8	3.6E+04	7.4	24.3	18.6	4.03	15.05	-3.8	170	676.0
2014	Station 5	10	8.9E+01	8.2	19.1	15.8	2.75	6.29	1.5	105.6	809.1
2014	Station 5	14	1.5E+02	8.2	24.5	8.1	1.90	14.14	1.1	84.4	256.9
2014	Station 6	90	9.4E+01	8.3	8.9	8.7	5.85	0.01	-6.5	23	312.0
2017	Station 1	4.5	4.4E+06	8.0	162.9	434.9	3.79	33.03	7.0	630.2	773.6
2017	Station 1	3.5	6.4E+06	8.1	316.9	629.7	4.73	22.71	8.8	331.8	756.4
2017	Station 2	10.5	2.3E+06	7.9	385.5	455.2	18.15	43.68	7.6	531.3	1031.4
2017	Station 2	13.5	3.8E+06	8.0	198.1	659.1	20.67	30.04	6.0	350	1008.6
2017	Station 3	2.5	6.3E+07	7.1	19.7	424.8	6.93	15.17	5.7	516.1	751.3
2017	Station 3	3.5	3.7E+07	7.0	38.3	615.2	11.79	10.43	7.1	163.9	734.7
2017	Station 4	11	1.5E+05	7.8	49.4	47.3	15.27	39.53	2.1	125.3	979.8
2017	Station 4	13	2.5E+05	7.6	25.3	32.7	9.81	27.19	1.7	394.7	958.2
2017	Station 5	15.6	6.9E+06	7.8	21.7	28.6	6.15	3.53	3.2	68.56	2420.7
2017	Station 5	20.5	4.3E+06	7.9	42.3	41.4	9.35	2.43	2.6	91.44	2475.2
2017	Station 6	17	3.7E+02	7.6	25.1	6.5	0.51	0.20	1.4	47.47	653.2
2017	Station 6	19	6.3E+02	7.7	12.9	9.5	1.21	0.14	1.2	66.53	638.8

NSF-WQI quality rating (qi) and index values (calculated by means of rating equations/curves given in Ott [51] and equation 2)

Year	Station	q _{DO}	q _{FS}	q _{pH}	q _{BOD}	q _{NO3}	q _{NO4}	q _{Tem}	q _{Turb}	q _{TS}	NSF-QWI
1991	Station 1	33	2	92	2	62	86	86	28	20	43.2
1991	Station 2	58	2	77	8	94	101	81	5	20	48.9
1991	Station 3	43	7	93	64	69	86	76	21	20	52.0
1991	Station 4	99	9	63	78	94	82	71	56	86	69.1
1991	Station 5	99	2	88	82	94	84	51	77	87	70.9
1991	Station 6	97	2	77	87	94	92	46	80	87	70.4
1997	Station 1	28	20	88	2	56	103	93	63	20	49.4
1997	Station 2	10	2	95	9	55	2	57	5	20	26.6
1997	Station 3	71	3	92	8	89	61	85	5	20	48.7
1997	Station 4	4	5	80	90	93	66	89	22	85	52.7
1997	Station 5	85	51	56	84	91	65	43	50	84	67.8
1997	Station 6	57	18	85	90	94	82	92	72	86	70.3
2005	Station 1	33	2	83	2	81	2	86	5	20	33.9
2005	Station 2	11	2	74	2	94	2	84	5	41	31.7
2005	Station 3	28	2	87	5	89	70	79	57	86	49.6
2005	Station 4	4	2	63	72	69	30	76	20	58	39.1
2005	Station 5	4	49	92	45	94	64	56	91	82	57.9
2005	Station 6	95	71	53	79	94	119	34	20	58	72.4
2011	Station 1	7	2	92	2	42	2	66	5	20	24.6
2011	Station 2	33	2	90	2	93	2	92	17	55	39.9
2011	Station 3	13	2	85	22	92	2	92	5	41	36.2
2011	Station 4	33	4	49	74	90	3	77	31	20	40.5
2011	Station 5	18	37	92	34	93	31	73	41	86	51.9
2011	Station 6	69	61	77	80	94	77	37	88	55	70.5
2014	Station 1	4	2	92	2	42	2	71	5	20	24.5
2014	Station 2	3	3	85	2	36	2	69	5	20	23.2
2014	Station 3	3	4	93	2	40	2	73	5	20	24.9
2014	Station 4	5	6	95	8	72	2	79	5	20	30.1
2014	Station 5	7	43	77	10	80	2	89	19	20	37.7
2014	Station 6	97	46	77	38	64	119	69	58	57	70.3
2017	Station 1	3	2	83	2	70	2	56	5	20	24.9
2017	Station 2	7	2	85	2	37	2	62	5	20	23.0
2017	Station 3	3	2	90	5	53	2	64	5	20	24.9
2017	Station 4	7	2	88	2	46	2	86	5	20	26.7
2017	Station 5	11	2	88	2	58	23	82	25	20	31.6
2017	Station 6	11	27	92	77	87	71	89	35	20	53.6

IPI quality rating (Xi) and index values (calculated by means of equations in Table 3 and equation 3)

Year	Station	X ₁	X ₂	X ₃	X ₄	sum	IPI
1991	Station 1	4.8	24.0	14.0	1.4	44.1	11.0
1991	Station 2	3.2	16.2	6.4	0.1	25.9	6.5
1991	Station 3	4.0	2.5	5.6	1.1	13.1	3.3
1991	Station 4	0.4	1.2	0.2	0.1	1.8	0.5
1991	Station 5	0.2	0.9	0.2	0.1	1.2	0.3
1991	Station 6	0.8	0.5	0.1	0.0	1.5	0.4
1997	Station 1	5.2	24.5	22.0	1.6	53.3	13.3
1997	Station 2	8.7	15.3	5.6	1.6	31.3	7.8
1997	Station 3	2.6	16.0	3.2	0.4	22.1	5.5
1997	Station 4	10.8	0.3	0.5	0.1	11.7	2.9
1997	Station 5	1.8	0.7	0.2	0.3	2.9	0.7
1997	Station 6	3.3	0.3	0.1	0.1	3.7	0.9
2005	Station 1	4.8	47.0	1.6	0.7	54.1	13.5
2005	Station 2	8.3	40.7	1.3	0.0	50.4	12.6
2005	Station 3	5.2	19.3	2.0	0.4	26.9	6.7
2005	Station 4	11.1	1.7	0.4	1.1	14.3	3.6
2005	Station 5	10.8	4.8	0.3	0.1	16.0	4.0
2005	Station 6	0.8	1.1	0.5	0.1	2.5	0.6
2011	Station 1	9.5	40.5	12.9	2.4	65.3	16.3
2011	Station 2	4.8	109.3	20.9	0.2	135.2	33.8
2011	Station 3	7.8	9.3	4.8	0.2	22.1	5.5
2011	Station 4	4.8	1.6	8.9	0.3	15.6	3.9
2011	Station 5	6.6	6.7	1.2	0.1	14.6	3.7
2011	Station 6	2.6	1.1	0.2	0.0	4.0	1.0
2014	Station 1	11.1	142.7	34.3	2.3	190.4	47.6
2014	Station 2	11.5	259.9	41.7	2.8	315.8	79.0
2014	Station 3	11.5	22.9	28.4	2.4	65.3	16.3
2014	Station 4	10.4	16.2	1.9	1.0	29.4	7.4
2014	Station 5	9.5	14.5	1.2	0.7	26.0	6.5
2014	Station 6	0.8	5.9	0.9	1.3	8.9	2.2
2017	Station 1	11.3	159.9	53.2	1.0	225.5	56.4
2017	Station 2	9.5	194.5	55.7	2.7	262.5	65.6
2017	Station 3	11.5	19.3	52.0	1.7	84.6	21.1
2017	Station 4	9.5	24.9	4.0	2.1	40.5	10.1
2017	Station 5	8.3	21.3	3.5	1.5	34.7	8.7
2017	Station 6	8.3	1.3	0.8	0.5	10.9	2.7