

Rand Water
Quarterly Water Quality Status of the Klip River Catchment

01 Jul 2010 - 30 Jun 2011



Sample Points	Sample Point Description	Aluminium	Ammonia	Chemical Oxygen Demand	Chloride	Conductivity	Daphnia Toxicity	Dissolved Oxygen	E.coli	Fluoride	Iron	Magnesium	Manganese	Nitrate	pH	Phosphate	Sodium	Sulphate	Suspended Solids
K1	Klip River @ Lido Hotel S26.326 E27.988	<0.01	1.50		46	62		4.3		0.16	0.13	16	0.28	2.80	7.7	0.70	51	93	
		<0.01	0.51		44	65		5.5		0.18	0.02	12	10.00	2.50	7.3	0.36	42	150	
		0.01	1.90		39	55		4.2		0.24	0.08	14	0.34	1.90	7.1	0.49	38	110	
K10	Klip River @ Everite S26.421 E28.095	<0.01	1.62		38	59		4.9		0.23	0.05	15	0.71	3.02	7.3	0.29	40	121	
		<0.01	1.50		41	62		5.2		0.16	0.10	13	0.29	2.20	7.7	0.72	49	88	
		0.02	0.12		43	62		5.8		0.20	0.03	11	0.37	2.40	7.4	0.33	37	115	
K11	Klip River from Roodepoort @ R41 Bridge S26.169 E27.833	0.01	0.98		38	59		5.6		0.26	0.04	15	0.37	2.10	7.3	0.42	36	110	
		0.01	1.30		39	59		6.1		0.26	0.04	15	0.40	2.86	7.3	0.28	38	113	
		<0.01	0.12		16	37		6.1		0.13	0.07	9	0.44	0.52	7.5	<0.04	25	78	
K14	Klip River from Witpoortjie @ R41 Bridge S26.176 E27.818	0.03	0.12		12	35		6.2		0.23	0.02	9	0.77	0.25	7.0	<0.04	13	93	
		0.02	0.12		14	34		7.2		0.24	0.03	9	0.20	0.63	6.9	<0.04	12	84	
		0.02	0.28		13	27		5.1		0.16	0.13	7	0.33	0.51	6.7	<0.04	14	62	
K18	Klip River Weir @ Henley-On-Klip S26.549 E28.064	<0.01	6.40		23	48		1.7		1.90	4.10	6	1.30	0.62	7.4	<0.04	85	20	
		<0.01	0.12		<10	21		5.4		0.13	0.10	2	0.42	0.10	6.7	0.06	16	45	
		0.04	0.12		10	19		6.0		0.37	0.12	3	0.16	0.26	6.4	<0.04	10	33	
K19	Klip River Weir @ Redan Train Bridge S26.620 E27.981	0.02	0.29		14	34		4.9		2.01	0.71	8	1.24	0.72	6.4	<0.04	21	77	
		<0.01	0.95		58	60		7.8	988	0.19	0.04	16	0.23	3.50	7.7	0.57	59	110	
		<0.01	0.45		54	69		5.7	1,450	0.24	0.01	13	0.33	2.60	7.5	0.43	48	125	
K21	Klip River Weir @ Zwartkopjes Farm S26.380 E28.071	<0.01	0.44		48	65		4.4	5,110	0.31	0.02	18	0.38	2.70	7.3	0.44	44	135	
		<0.01	0.62		49	67		5.6	5,494	0.30	0.02	19	0.30	3.60	7.3	0.25	45	141	
		<0.01	0.91	32	59	71	95	5.2	913	0.19	0.05	17	0.23	3.70	7.6	0.68	56	110	26
K25	Klip River downstream of Rietspruit Confluence S26.456 E28.085	<0.01	0.29	28	53	70	100	5.0	2,870	0.25	0.02	15	0.20	3.10	7.4	0.50	46	130	54
		<0.01	0.33	24	48	68	100	6.8	5,010	0.29	0.02	18	0.19	3.10	7.2	0.50	42	130	36
		0.01	0.80	27	52	67	100	6.9	4,426	0.27	0.04	19	0.25	3.91	7.5	0.28	45	139	39
K3	Harringtonspruit @ Nancefield Industrial Area S26.310 E27.912	<0.01	1.40	33	46	62	100	6.4	3,593	0.56	0.14	13	0.28	2.70	7.7	0.59	45	92	16
		0.01	0.51	34	43	61	100	6.1	13,960	0.20	0.03	11	0.29	2.60	7.2	0.38	39	110	58
		0.02	1.60	28	37	55	100	5.8	20,360	0.23	0.06	13	0.36	1.80	7.2	0.48	34	105	57
K4	Klip River @ Olifantsvei Sewage Works S26.337 E27.903	0.01	1.22	27	40	59	100	6.1	22,941	0.23	0.04	15	0.47	3.26	7.4	0.22	39	121	27
		<0.01	1.50		59	69		6.2	2,223	0.21	0.06	15	0.23	3.50	7.6	0.63	52	110	
		<0.01	0.31		55	70		5.1	1,680	0.25	0.02	13	0.27	2.80	7.4	0.34	48	130	
K5	Klipspruit @ Kliptown S26.290 E27.886	0.01	0.82		47	66		5.4	10,080	0.30	0.02	17	0.27	2.50	7.4	0.55	43	130	
		<0.01	1.31		49	67		5.9	52,680	0.27	0.02	18	0.36	2.98	7.4	0.29	46	135	
		<0.01	0.62		51	54		7.2		0.16	0.02	8	0.11	3.20	7.6	0.46	47	49	
K6	Klip River @ Soweto N12 Highway S26.295 E27.837	<0.01	0.33		47	51		6.9		0.17	0.02	7	0.03	3.50	7.4	0.50	42	50	
		0.04	0.12		43	48		7.2		0.15	0.05	9	0.04	3.90	7.1	0.56	37	52	
		0.05	0.33		45	53		4.7		0.16	0.02	9	0.11	3.60	7.5	0.45	45	58	
K9	Stream from Durban Roodepoort Deep S26.179 E27.836	<0.01	0.15		37	60		8.1	3,648	0.17	0.01	13	0.48	3.70	7.6	0.18	40	125	
		<0.01	0.52		34	60		5.4	385	0.20	0.01	11	2.50	2.00	7.3	0.21	34	150	
		<0.01	0.16		28	54		4.7	9,840	0.26	0.02	15	0.62	2.20	7.0	0.18	28	145	
E17	Stream @ Witwatersrand Gold Mine S26.262 E28.222	0.06	1.46		28	56		5.6	11,678	0.30	0.02	14	1.21	2.84	7.2	0.11	30	154	
		<0.01	6.20		33	76		7.4		0.18	<0.01	17	3.10	2.50	6.8	0.16	40	265	
		0.01	8.10		29	78		6.6		0.28	0.01	16	3.70	1.10	6.9	0.19	35	285	
E2	Stream @ Witwatersrand Gold Mine S26.262 E28.222	<0.01	2.70		24	64		6.8		0.26	0.02	16	1.80	2.00	6.6	0.12	26	220	
		0.02	5.69		29	71		5.5		0.34	0.02	19	2.35	2.96	7.2	0.06	30	255	
		<0.01	0.33		24	62		6.3		0.20	0.01	20	0.68	1.60	8.1	0.24	34	110	
E17	Elsburgspruit @ Heidelberg Road S26.250 E28.204	<0.01	2.40		20	61		4.0		0.23	0.01	17	2.80	1.10	7.5	0.40	28	115	
		0.04	0.16		17	44		5.1		0.23	0.04	15	0.46	1.40	7.0	18.00	0.14	110	
		0.03	0.32		19	50		3.8		0.27	0.03	17	0.28	1.92	7.4	0.11	21	120	
E2	Stream @ Witwatersrand Gold Mine S26.262 E28.222	0.01	8.60		29	120		5.6		0.22	0.19	30	6.50	1.60	6.8	0.04	38	570	
		<0.01	13.00		29	100		6.2		0.43	<0.01	28	5.00	2.30	5.5	<0.04	38	530	
E17	Elsburgspruit @ Heidelberg Road S26.250 E28.204	<0.01	3.60		95	105		4.4	1,634	0.34	0.02	27	2.20	2.00	7.8	0.11	70	260	
		<0.01	7.00		88	105		3.7	10,380	0.41	0.02	19	2.90	0.53	7.2	0.27	62	255	
		<0.01	6.40		55	93		2.0	478,470	0.47	0.06	23	2.40	0.16	7.2	0.05	52	265	
E2	Stream @ Witwatersrand Gold Mine S26.262 E28.222	<0.01	6.13		89	101		2.2	191,066	0.80	0.51	27	2.42	0.62	7.2	0.07	66	275	
		0.30	1.00		28	115		6.0		0.20	0.03	9	0.21	1.50	7.8	0.04	34	630	
		0.88	2.70		30	145		4.8		0.30	0.03	6	0.19	0.57	6.9	0.05	45	820	
E2	Stream @ Witwatersrand Gold Mine S26.262 E28.222	0.23	1.70		20	80		3.7		0.26	0.07	6	0.12	0.66	7.0	0.13	22	400	
		0.12	1.48		22	77		6.0		0.26	0.05	7	0.22	1.03	7.1	0.11	24	463	

Rand Water
Quarterly Water Quality Status of the Klip River Catchment

01 Jul 2010 - 30 Jun 2011



Sample Points	Sample Point Description	Aluminium	Ammonia	Chemical Oxygen Demand	Chloride	Conductivity	Daphnia Toxicity	Dissolved Oxygen	E.coli	Fluoride	Iron	Magnesium	Manganese	Nitrate	pH	Phosphate	Sodium	Sulphate	Suspended Solids
E7	Elsburgspruit @ Elsburg Town S26.250 E28.204	0.01	7.30		56	110		6.2		0.25	0.02	29	3.20	1.50	7.2	0.04	46	370	
		0.02	11.00		53	100		3.5		0.38	0.07	17	2.30	0.44	7.0	0.23	36	255	
		0.02	6.10		48	92		2.9		0.37	0.04	22	2.20	1.00	7.1	0.14	42	300	
		0.01	6.30		47	92		4.5		0.38	0.05	25	3.30	1.45	7.0	0.04	38	336	
E8	Stream @ Elspark S26.262 E28.222	<0.01	0.17		78	135		7.0		0.30	0.02	87	0.50	0.37	7.9	<0.04	72	860	
		0.02	0.21		45	100		7.3		0.39	0.05	47	0.61	0.30	6.9	0.04	42	520	
		0.04	0.16		17	44		5.1		0.23	0.04	15	0.46	1.40	7.0	18.00	0.14	110	
		0.01	0.24		91	193		7.0		0.33	0.01	121	0.63	1.02	7.3	<0.04	104	1083	
N4	Natalspruit from Simmer and Jack Mine S26.240 E28.124	9.80	3.10		290	215		6.2		1.40	17.00	81	19.00	0.57	3.3	<0.04	22	720	
		15.00	1.80		230	220		2.8		1.30	47.00	73	35.00	0.38	3.5	<0.04	31	1040	
		1.40	1.70		110	125		5.2		1.70	13.00	42	12.00	1.20	4.6	<0.04	28	510	
		5.35	1.83		144	143		5.4		0.67	18.00	59	4.68	1.52	3.7	<0.04	34	739	
N7	Natalspruit @ Alrode S26.298 E28.144	0.02	3.50		49	80		7.3	21,255	0.36	<0.01	24	3.80	1.50	7.0	<0.04	30	300	
		0.02	2.60		33	66		5.0	28,320	0.52	0.78	16	3.40	0.91	6.5	<0.04	20	315	
		0.04	0.92		32	62		4.8	15,070	0.33	0.47	18	3.30	1.50	6.3	<0.04	21	295	
		0.02	1.75		41	82		5.7	4,543	0.34	0.09	28	4.68	1.77	6.5	<0.04	29	305	
N8	Natalspruit @ Heidelberg Road S26.426 E28.165	<0.01	3.80	27	79	80	100	5.9	36,840	0.25	0.08	20	0.37	2.40	7.4	0.65	59	130	<10
		<0.01	2.10	23	74	77	100	5.5	4,640	0.32	0.01	16	0.42	2.50	7.0	0.41	50	145	15
		0.01	1.90	19	59	71	100	5.6	30,570	0.36	0.02	19	0.37	2.10	7.4	0.35	43	150	14
		0.01	3.32	24	69	75	100	5.7	15,211	0.34	0.03	21	0.37	2.73	7.4	0.26	49	156	13
R1	Rietspruit from Sallies S26.305 E28.336																		
		<0.01	0.12		83	155		4.3		0.20	0.06	44	0.30	0.75	6.5	<0.04	99	880	
		<0.01	1.48		86	149		6.1		0.38	0.02	50	0.31	0.39	7.0	0.20	99	685	
R2	Withokspruit Tributary S26.324 E28.338	<0.01	0.12		32	54		6.5		0.23	0.03	20	0.39	0.22	8.1	<0.04	31	50	
		0.07	0.22		17	44		4.8		0.36	0.04	14	0.52	0.40	7.2	0.05	19	56	
		0.17	0.45		29	46		5.2		0.31	0.10	14	0.12	0.79	7.2	0.06	24	48	
		0.02	0.46		32	52		7.0		0.34	0.02	16	0.64	1.37	7.6	0.04	26	79	
R3	Tributary @ Van Dyk Consolidated S26.259 E28.321	0.01	0.33		20	39		7.4		0.26	0.04	12	0.41	0.46	7.9	0.04	24	42	
		0.01	0.12		12	56		5.8		0.44	0.04	8.1	0.08	0.39	7.2	0.07	14	38	
		0.02	0.12		27	50		5.0		0.44	0.04	14	0.08	0.36	7.3	0.13	29	80	
		0.02	0.24		28	64		6.3		0.53	0.02	16	0.19	0.58	7.5	0.04	29	94	
R4	Rietspruit @ Vosloorus S26.372 E28.245	<0.01	0.12		140	210		5.5		0.40	<0.01	96	0.73	0.77	8.1	<0.04	130	970	
		<0.01	0.12		155	215		5.0		0.44	<0.01	135	0.49	0.20	7.6	0.07	150	1350	
		<0.01	0.12		73	110		5.1		0.42	<0.01	43	0.08	0.20	7.4	0.06	62	425	
		<0.01	0.24		76	121		6.5		0.50	0.01	56	1.11	1.58	7.7	0.05	63	398	
R5	Rietspruit @ Hardmans Farm S26.429 E28.181	<0.01	0.71		87	140		9.5	4,735	0.26	0.01	62	0.34	1.40	8.2	0.20	72	470	
		<0.01	0.53		84	155		6.6	92,980	0.30	<0.01	67	0.54	1.10	7.8	0.23	62	600	
		<0.01	0.21		52	88		6.4	181,760	0.37	0.01	42	0.14	0.75	7.8	0.08	50	330	
		<0.01	0.24		77	120		6.6	12,935	0.40	0.01	57	0.11	1.36	8.0	0.06	62	359	
R6	Rietspruit @ Hardmans Farm S26.429 E28.181	<0.01	2.50	22	81	87	98	6.3	2,521	0.24	0.05	24	0.38	2.80	7.6	0.57	60	165	<10
		<0.01	0.79	21	72	82	100	4.3	5,050	0.30	0.01	20	0.31	3.10	7.2	0.39	49	180	27
		0.06	0.68	18	46	70	100	5.7	5,460	0.32	0.05	21	0.18	2.00	7.5	0.28	41	145	38
		<0.01	1.80	20	71	83	100	5.2	11,373	0.33	0.02	27	0.28	3.11	7.5	0.21	52	201	14

Key

N4	Natalspruit from Simmer and Jack Mine	9.80	3.10	- 1 Jul to 30 Sep 2010
		15.00	1.80	- 1 Oct to 31 Dec 2010
		1.40	1.70	- 1 Jan to 31 Mar 2011
		5.35	1.83	- 1 Apr to 30 Jun 2011

Water Quality Guidelines

	- Ideal
	- Acceptable
	- Tolerable
	- Unacceptable