



**Rand Water**  
**Quarterly Water Quality Status of the Blesbokspruit Catchment**

01 Jul 2019 - 30 Jun 2020



Sample Points	Sample Point Description	Quarter	Aluminium	Ammonium	Chemical Oxygen Demand	Chloride	Conductivity	Daphnia Toxicity	Dissolved Oxygen	E.coli	Fluoride	Iron	Magnesium	Manganese	Nitrate	pH	Phosphate	Sodium	Sulphate	Suspended Solids
B12	Stream from Kaydale Station 26° 28.627'S 28° 24.266'E	1	0.08	4.55		61	89		4.4		0.80	0.11	21	0.31	0.87	7.5	0.82	72	217	
		2	0.11	2.75		34	47		2.3		0.66	0.15	10	0.09	3.50	7.4	0.94	47	57	
		3	0.08	3.28		35	49		2.1		0.38	0.19	12	0.09	1.43	7.6	1.08	43	44	
		4																		
B10	Blesbokspruit Weir @ Heidelberg 26° 30.641'S 28° 21.049'E	1	0.07	0.44	20	81	133	99	4.0	1,387	1.45	0.10	33	0.24	1.97	7.7	0.43	101	424	15
		2	0.16	0.96	28	88	127	100	3.0	5,702	1.72	0.03	37	0.52	2.35	7.6	0.56	116	436	83
		3	0.05	0.23	28	54	78	93	1.8	1,348	0.52	0.06	22	0.10	1.21	7.9	0.69	64	172	64
		4	0.04	0.47	25	58	91	100	2.6	4,535	0.85	0.09	25	0.04	1.74	7.9	0.37	61	256	36
S1	Suikerbosrant River below Balfour 26° 37.793'S 28° 17.797'E	1	0.03	0.18		50	61		4.9	36	0.42	0.03	17	0.02	2.41	7.7	0.25	47	24	
		2	0.10	0.15		62	61		0.9	3,602	0.57	0.09	21	0.14	0.50	7.6	0.25	56	17	
		3	0.07	0.09		16	27		2.6	975	0.35	0.14	13	0.04	0.74	7.7	0.54	27	21	
		4																		
S2	Suikerbosrant River Weir @ Three Rivers 26° 40.253'S 28° 01.828'E	1	0.04	0.94	19	87	121	100	5.3	165	1.36	0.07	34	0.07	2.13	8.0	0.32	117	442	19
		2	0.23	0.09	30	96	119	100	3.1	603	1.75	0.11	29	0.06	1.38	7.8	0.35	169	451	26
		3	0.08	0.43	33	50	76	100	2.4	393	0.48	0.07	20	0.05	1.33	8.0	0.40	58	147	47
		4	0.06	0.38	30	55	88	100	3.6	537	0.78	0.08	25	0.03	2.04	8.0	0.27	61	225	26

**Key**

B12	Stream from Kaydale Station 26° 28.627'S 28° 24.266'E	1	0.08	4.55	- 1 Jul to 30 Sep 2019
		2	0.11	2.75	- 1 Oct to 31 Dec 2019
		3	0.08	3.28	- 1 Jan to 31 Mar 2020
		4			- 1 Apr to 30 Jun 2020

**Water Quality Guidelines**

	- Ideal
	- Acceptable
	- Tolerable
	- Unacceptable
	- Not analysed

Variables	Measured as	Ideal Catchment Background	Acceptable Management Target	Tolerable Interim Target	Unacceptable
<b>Physical</b>					
Conductivity	mS/m	< 45	45 - 70	70 - 120	> 120
Dissolved Oxygen (O <sub>2</sub> )	mg/l O <sub>2</sub>		> 6.0	5.0 - 6.0	< 5.0
pH	pH units	6.5 - 8.5			< 6.5; > 8.5
Suspended Solids	mg/l	< 20	20 - 30	30 - 55	> 55
<b>Organic</b>					
Chemical Oxygen Demand (COD)	mg/l	< 20	20 - 35	35 - 55	> 55
<b>Macro Elements</b>					
Aluminium (Al)	mg/l		< 0.3	0.3 - 0.5	> 0.5
Ammonium (NH <sub>4</sub> )	mg/l	< 0.1	0.1 - 1.5	1.5 - 5.0	> 5.0
Chloride (Cl)	mg/l	< 80	80 - 150	150 - 200	> 200
Fluoride (F)	mg/l	< 0.19	0.19 - 0.70	0.70 - 1.00	> 1.00
Iron (Fe)	mg/l	< 0.1	0.1 - 0.5	0.5 - 1.0	> 1.0
Magnesium (Mg)	mg/l	< 8	8 - 30	30 - 70	> 70
Manganese (Mn)	mg/l	< 0.2	0.2 - 0.5	0.5 - 1.0	> 1.0
Nitrate (NO <sub>3</sub> )	mg/l	< 0.5	0.5 - 3.0	3.0 - 6.0	> 6.0
Phosphate (PO <sub>4</sub> )	mg/l	< 0.2	0.2 - 0.4	0.4 - 0.6	> 0.6
Sodium (Na)	mg/l	< 70	70 - 100	100 - 150	> 150
Sulphate (SO <sub>4</sub> )	mg/l	< 150	150 - 300	300 - 500	> 500
<b>Bacteriological</b>					
<i>E. coli</i>	counts/100ml	< 130	130 - 200	200 - 400	> 400
Faecal coliforms	counts/100ml		< 126	126 - 1,000	> 1,000
<b>Biological</b>					
<i>Daphnia</i>	% survival	100	90 - 100	80 - 90	< 80