

Rand Water
Quarterly Water Quality Status of the Blesbokspruit Catchment

01 Oct 2013 - 30 Sep 2014



| 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 |
|---------------|---|-----------|---------|------------------------|----------|--------------|------------------|------------------|--------|----------|------|-----------|-----------|---------|-----|-----------|--------|----------|------------------|
| B1 | Outflow from New Kleinfontein Dam S26.183 E28.334 | 0.01 | 0.19 | | 39 | 42 | | 5.5 | | 0.35 | 0.04 | 13 | 0.12 | 0.17 | 8.3 | 0.35 | 46 | 52 | |
| | | 0.03 | 0.24 | | 14 | 27 | | 6.1 | | 0.32 | 0.05 | 9 | 0.05 | 0.20 | 7.4 | 0.12 | 17 | 31 | |
| | | 0.01 | 0.14 | | 23 | 31 | | 9.0 | | 0.32 | 0.06 | 9 | 0.13 | 0.73 | 7.7 | 0.26 | 16 | 49 | |
| | | 0.01 | 0.22 | | 37 | 40 | | 8.1 | | 0.32 | 0.07 | 11 | 0.11 | 0.94 | 8.1 | 0.09 | 28 | 77 | |
| B2 | Outflow from Van Ryn Dam S26.166 E28.371 | 0.01 | 6.30 | | 53 | 56 | | 9.3 | | 0.30 | 0.05 | 9 | 0.05 | 0.53 | 7.9 | 0.79 | 40 | 37 | |
| | | 0.02 | 4.60 | | 60 | 48 | | 7.5 | | 0.30 | 0.08 | 11 | 0.12 | 0.56 | 7.4 | 0.77 | 42 | 46 | |
| | | 0.02 | 3.60 | | 56 | 62 | | 11.0 | | 0.29 | 0.10 | 12 | 0.15 | 0.97 | 8.1 | 0.62 | 46 | 50 | |
| | | 0.01 | 5.70 | | 59 | 55 | | 7.4 | | 0.22 | 0.36 | 10 | 0.09 | 5.20 | 8.2 | 1.40 | 52 | 58 | |
| B3 | Stream from Brakpan Lake S26.209 E28.385 | <0.01 | 3.10 | | 85 | 76 | | 3.5 | | 0.15 | 0.04 | 12 | 0.18 | 1.90 | 7.2 | 0.24 | 67 | 77 | |
| | | 0.01 | 0.21 | | 56 | 52 | | 2.2 | | 0.15 | 0.04 | 10 | 0.04 | 1.50 | 7.4 | 0.38 | 52 | 65 | |
| | | 0.01 | 2.50 | | 64 | 66 | | 4.5 | | 0.23 | 0.04 | 13 | 0.13 | 2.70 | 7.4 | 0.44 | 61 | 78 | |
| | | 0.02 | 4.80 | | 61 | 71 | | 4.3 | | 0.31 | 0.07 | 13 | 0.15 | 3.90 | 7.6 | 0.79 | 68 | 88 | |
| B4 | Causeway @ Alexander Dam S26.211 E28.415 | 0.01 | 0.32 | | 54 | 58 | | 6.9 | | 0.35 | 0.03 | 11 | 0.05 | 0.47 | 8.1 | 0.42 | 48 | 53 | |
| | | 0.01 | 0.22 | | 32 | 42 | | 4.6 | | 0.34 | 0.05 | 11 | 0.25 | 0.51 | 7.5 | 0.43 | 32 | 51 | |
| | | 0.03 | 0.44 | | 53 | 56 | | 12.0 | | 0.27 | 0.02 | 14 | 0.04 | 2.00 | 8.5 | 0.38 | 56 | 81 | |
| | | 0.02 | 1.50 | | 58 | 65 | | 6.6 | | 0.21 | 0.04 | 13 | 0.11 | 3.40 | 8.3 | 0.60 | 56 | 63 | |
| B9 | Outflow from Cowles Dam S26.209 E28.467 | 0.06 | 0.76 | | 77 | 91 | | 4.9 | 105 | 0.35 | 0.05 | 19 | 0.23 | 1.60 | 7.6 | 0.21 | 70 | 155 | |
| | | 0.06 | 0.21 | | 38 | 52 | | 5.1 | 920 | 0.34 | 0.04 | 14 | 0.06 | 1.10 | 7.5 | 0.12 | 38 | 90 | |
| | | 0.04 | 0.35 | | 41 | 67 | | 4.0 | 420 | 0.29 | 0.08 | 14 | 0.15 | 0.21 | 7.6 | 0.14 | 51 | 132 | |
| | | 0.06 | 0.32 | | 74 | 91 | | 3.2 | 96 | 0.40 | 0.13 | 18 | 0.21 | 1.90 | 7.5 | 0.17 | 76 | 180 | |
| B13 | Stream from Daveyton below Welgedacht WWTW S26.199 E28.480 | <0.01 | 2.50 | | 53 | 68 | | 2.4 | 7,760 | 0.28 | 0.03 | 13 | 0.31 | 1.60 | 7.2 | 0.86 | 58 | 94 | |
| | | <0.01 | 1.70 | | 45 | 60 | | 1.5 | 3,730 | 0.31 | 0.06 | 13 | 0.17 | 1.00 | 6.7 | 0.88 | 52 | 60 | |
| | | 0.01 | 0.50 | | 48 | 58 | | 2.6 | 1,160 | 0.27 | 0.04 | 13 | 0.12 | 3.20 | 7.4 | 0.74 | 52 | 59 | |
| | | 0.02 | 1.90 | | 57 | 62 | | 4.2 | 13,890 | 0.24 | 0.18 | 12 | 0.13 | 2.90 | 7.2 | 0.72 | 60 | 82 | |
| B5 | Blesbokspruit @ Welgedacht S26.215 E28.480 | <0.01 | 1.80 | | 63 | 82 | | 2.5 | | 0.43 | 0.04 | 15 | 0.36 | 0.65 | 7.2 | 0.47 | 62 | 120 | |
| | | <0.01 | 0.66 | | 42 | 56 | | 3.4 | | 0.31 | 0.15 | 14 | 0.28 | 0.30 | 7.5 | 0.48 | 46 | 83 | |
| | | 0.02 | 0.42 | | 50 | 62 | | 2.9 | | 0.28 | 0.03 | 14 | 0.32 | 1.40 | 7.4 | 0.36 | 52 | 99 | |
| | | 0.01 | 1.30 | | 62 | 76 | | 3.4 | | 0.40 | 0.13 | 15 | 0.27 | 1.30 | 7.4 | 0.57 | 70 | 110 | |
| B16 | Train Bridge @ Grootvlei Mine S26.256 E28.498 | <0.01 | 5.00 | | 74 | 91 | | 2.0 | | 0.35 | 0.04 | 18 | 0.55 | 0.33 | 7.5 | 1.90 | 75 | 120 | |
| | | <0.01 | 1.40 | | 46 | 60 | | 1.8 | | 0.37 | 0.05 | 16 | 0.46 | 0.24 | 7.5 | 0.92 | 46 | 83 | |
| | | 0.03 | 0.38 | | 50 | 68 | | 2.7 | | 0.26 | 0.03 | 16 | 0.16 | 0.96 | 7.7 | 0.42 | 49 | 100 | |
| | | 0.01 | 0.31 | | 70 | 78 | | 4.4 | | 0.32 | 0.04 | 18 | 0.09 | 1.10 | 7.6 | 0.62 | 68 | 110 | |
| B6 | Klein Blesbokspruit @ Selection Park S26.283 E28.444 | 0.02 | 0.68 | | 44 | 58 | | 5.2 | | 0.41 | 0.03 | 14 | 0.29 | 0.44 | 7.3 | 0.21 | 37 | 70 | |
| | | 0.06 | 0.22 | | 36 | 48 | | 6.9 | | 2.00 | 0.04 | 15 | 0.50 | 0.15 | 7.6 | 0.12 | 32 | 84 | |
| | | 0.09 | 0.26 | | 48 | 54 | | 8.8 | | 0.34 | 0.02 | 16 | 0.35 | 0.60 | 7.7 | 0.19 | 40 | 90 | |
| | | 0.05 | 0.22 | | 56 | 57 | | 7.5 | | 0.36 | 0.03 | 17 | 0.18 | 0.24 | 7.8 | 0.09 | 39 | 105 | |
| B15 | Blesbokspruit on N17 Toll Road @ Springs S26.271 E28.504 | <0.01 | 3.00 | | 79 | 90 | | 2.1 | | 0.36 | 0.04 | 18 | 1.00 | 0.27 | 7.4 | 2.00 | 77 | 125 | |
| | | <0.01 | 1.40 | | 47 | 60 | | 1.8 | | 0.32 | 0.05 | 16 | 0.54 | 0.17 | 7.5 | 0.95 | 46 | 125 | |
| | | 0.02 | 0.23 | | 58 | 69 | | 2.8 | | 0.33 | 0.02 | 17 | 0.14 | 0.30 | 7.6 | 0.36 | 54 | 101 | |
| | | 0.01 | 0.22 | | 68 | 77 | | 4.6 | | 0.36 | 0.03 | 17 | 0.04 | 0.36 | 7.6 | 0.54 | 68 | 100 | |
| B17 | Blesbokspruit @ Marievale Bird Sanctuary S26.359 E28.508 | <0.01 | 0.19 | | 99 | 105 | | 1.9 | | 0.41 | 0.02 | 23 | 1.10 | <0.10 | 7.6 | 0.90 | 99 | 150 | |
| | | 0.02 | 0.22 | | 52 | 65 | | 3.0 | | 0.38 | 0.02 | 18 | 1.60 | 0.96 | 7.7 | 0.90 | 51 | 85 | |
| | | 0.01 | 3.10 | | 56 | 69 | | 3.1 | | 0.33 | 0.03 | 18 | 0.34 | 0.28 | 7.6 | 0.87 | 52 | 102 | |
| | | 0.01 | 0.22 | | 64 | 81 | | 5.0 | | 0.42 | 0.03 | 20 | 0.16 | 1.90 | 7.8 | 0.46 | 66 | 125 | |
| B11 | Blesbokspruit on R42 bridge @ Nigel S26.391 E28.497 | 0.02 | 0.19 | | 84 | 105 | | 4.6 | | 0.43 | 0.04 | 21 | 0.27 | <0.10 | 7.9 | 0.78 | 88 | 130 | |
| | | <0.01 | 0.22 | | 50 | 65 | | 3.4 | | 0.39 | 0.04 | 16 | 0.34 | <0.10 | 7.9 | 0.86 | 44 | 78 | |
| | | 0.01 | 0.86 | | 54 | 68 | | 7.9 | | 0.40 | 0.01 | 18 | 0.13 | 0.16 | 7.9 | 0.59 | 50 | 94 | |
| | | 0.01 | 0.22 | | 65 | 81 | | 6.0 | | 0.41 | 0.03 | 20 | 0.08 | 1.80 | 7.9 | 0.42 | 67 | 120 | |
| B7 | Stormwater drain from Nigel Dam S26.416 E28.466 | <0.01 | 0.82 | | 45 | 115 | | 4.2 | | 0.41 | 0.03 | 33 | 4.20 | 0.33 | 6.6 | 0.08 | 62 | 295 | |
| | | <0.01 | 0.27 | | 42 | 65 | | 4.3 | | 0.44 | 0.10 | 18 | 1.50 | <0.10 | 7.5 | 0.15 | 54 | 155 | |
| | | 0.05 | 0.32 | | 39 | 74 | | 5.4 | | 0.42 | 0.02 | 21 | 1.80 | 0.18 | 7.0 | 0.08 | 44 | 224 | |
| | | 0.03 | 0.28 | | 49 | 83 | | 6.0 | | 0.35 | 0.07 | 22 | 1.30 | 1.30 | 6.9 | 0.15 | 54 | 280 | |
| B8 | Blesbokspruit @ Nigel S26.439 E28.456 | <0.01 | 0.29 | | 93 | 99 | | 4.0 | 7,210 | 0.41 | 0.02 | 23 | 0.37 | 0.63 | 7.9 | 0.70 | 87 | 145 | |
| | | <0.01 | 0.22 | | 46 | 61 | | 5.7 | 13,060 | 0.39 | 0.01 | 17 | 0.14 | <0.10 | 8.0 | 0.81 | 50 | 74 | |
| | | 0.02 | 0.14 | | 43 | 62 | | 5.5 | 24,810 | 0.34 | 0.01 | 18 | 0.92 | 0.40 | 7.8 | 0.43 | 44 | 122 | |
| | | 0.02 | 0.33 | | 68 | 76 | | 6.0 | 1,440 | 0.37 | 0.04 | 17 | 0.21 | 0.24 | 8.1 | 0.28 | 61 | 165 | |
| B14 | Bridge @ Jameson Park S26.479 E28.426 | <0.01 | 0.70 | | 79 | 88 | | 2.7 | | 0.38 | 0.06 | 18 | 0.16 | 1.30 | 7.5 | 0.86 | 72 | 125 | |
| | | <0.01 | 0.34 | | 48 | 61 | | 4.8 | | 0.39 | 0.02 | 16 | 0.06 | 0.53 | 7.9 | 0.66 | 48 | 73 | |
| | | 0.02 | 0.16 | | 46 | 60 | | 5.8 | | 0.34 | 0.03 | 16 | 0.10 | 1.50 | 7.8 | 0.55 | 44 | 77 | |
| | | 0.02 | 0.75 | | 64 | 74 | | 6.6 | | 0.39 | 0.03 | 17 | 0.12 | 1.00 | 7.7 | 0.52 | 59 | 92 | |

Rand Water
Quarterly Water Quality Status of the Blesbokspruit Catchment

01 Oct 2013 - 30 Sep 2014



| 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 |
|---------------|--|-----------|---------|------------------------|----------|--------------|------------------|------------------|--------|----------|------|-----------|-----------|---------|-----|-----------|--------|----------|------------------|
| B12 | Stream from Kaydale Station S26.477 E28.404 | 0.21 | 4.90 | | 31 | 53 | | 3.1 | | 0.27 | 0.05 | 10 | 0.17 | 2.50 | 7.3 | 0.57 | 33 | 45 | |
| | | 0.02 | 1.10 | | 23 | 43 | | 4.2 | | 0.31 | 0.06 | 13 | 0.25 | 2.40 | 7.4 | 0.39 | 32 | 39 | |
| | | 0.03 | 1.30 | | 31 | 48 | | 4.8 | | 0.25 | 0.02 | 11 | 0.17 | 3.20 | 7.2 | 0.73 | 32 | 44 | |
| | | 0.22 | 4.50 | | 38 | 49 | | 6.0 | | 0.35 | 0.19 | 11 | 0.13 | 6.10 | 7.4 | 0.84 | 37 | 54 | |
| B10 | Blesbokspruit Weir @ Heidelberg S26.511 E28.351 | 0.01 | 0.90 | 36 | 63 | 78 | 100 | 4.3 | 2980 | 0.37 | 0.03 | 16 | 0.18 | 2.50 | 7.7 | 0.64 | 61 | 93 | 45 |
| | | 0.01 | 0.24 | 24 | 39 | 56 | 99 | 5.4 | 7970 | 0.35 | 0.04 | 16 | 0.08 | 1.10 | 7.9 | 0.58 | 45 | 61 | 53 |
| | | 0.01 | 0.18 | 22 | 45 | 57 | 100 | 9.5 | 14040 | 0.34 | 0.02 | 15 | 0.06 | 1.70 | 7.8 | 0.52 | 45 | 81 | 12 |
| | | 0.03 | 0.38 | 24 | 47 | 69 | 100 | 5.8 | 850 | 0.35 | 0.05 | 16 | 0.11 | 1.90 | 7.8 | 0.43 | 58 | 115 | 11 |
| S1 | Suikerbosrant River @ Heidelberg S26.630 E28.297 | 0.16 | 0.21 | | 42 | 46 | | 3.1 | 500 | 0.35 | 0.09 | 15 | 0.04 | 0.78 | 7.4 | 0.26 | 37 | 18 | |
| | | 0.43 | 0.25 | | 11 | 22 | | 3.9 | 1030 | 0.34 | 0.37 | 9 | 0.13 | 0.46 | 7.4 | 0.18 | 14 | 17 | |
| | | 0.06 | 0.22 | | 21 | 33 | | 8.6 | 93 | 0.32 | 0.10 | 14 | 0.05 | 0.12 | 7.5 | 0.12 | 21 | 24 | |
| | | 0.05 | 0.41 | | 90 | 48 | | 4.8 | 25 | 0.24 | 0.09 | 18 | 0.10 | 1.70 | 8.0 | 0.12 | 42 | 89 | |
| S2 | Suikerbosrant River Weir @ Three Rivers S26.671 E28.030 | 0.08 | 0.18 | 32 | 60 | 69 | 100 | 5.9 | 1840 | 0.32 | 0.03 | 16 | 0.01 | 1.60 | 7.9 | 0.36 | 59 | 81 | 37 |
| | | 0.06 | 0.24 | 31 | 35 | 48 | 95 | 6.9 | 1390 | 0.32 | 0.05 | 14 | 0.05 | 0.99 | 8.1 | 0.37 | 35 | 47 | 66 |
| | | 0.02 | 0.18 | 21 | 43 | 55 | 98 | 7.9 | 185 | 0.33 | 0.02 | 15 | 0.03 | 1.80 | 8.1 | 0.30 | 40 | 73 | <10 |
| | | 0.01 | 0.24 | 19 | 46 | 65 | 99 | 7.1 | 125 | 0.27 | 0.04 | 17 | 0.06 | 1.50 | 8.2 | 0.22 | 69 | 80 | <10 |

Key

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|-----|-----------------------------|------|------|------------------------|
| B12 | Stream from Kaydale Station | 0.21 | 4.90 | - 1 Oct to 31 Dec 2013 |
| | | 0.02 | 1.10 | - 1 Jan to 31 Mar 2014 |
| | | 0.03 | 1.30 | - 1 Apr to 30 Jun 2014 |
| | | 0.22 | 4.50 | - 1 Jul to 30 Sep 2014 |

Water Quality Guidelines

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|--|----------------|
| | - Ideal |
| | - Acceptable |
| | - Tolerable |
| | - Unacceptable |