

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

01 Oct 2016 - 30 Sep 2017



| 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<br>S26.183 E28.334           | 0.03      | 0.24    |                        | 29       | 38           |                  | 6.4              |        | 0.32     | 0.11 | 8         | 0.06      | 0.82    | 7.9 | 0.10      | 25     | 55       |                  |
|               |  | 0.03      | 0.16    |                        | 24       | 27           |                  | 7.6              |        | 0.30     | 0.12 | 8         | 0.06      | 0.10    | 7.7 | 0.13      | 16     | 20       |                  |
|               |  | 0.05      | 0.05    |                        | 31       | 29           |                  | 3.1              |        | 0.21     | 0.21 | 10        | 0.12      | 0.16    | 7.9 | 0.20      | 22     | 28       |                  |
|               |  | 0.05      | 1.05    |                        | 50       | 41           |                  | 3.0              |        | 0.55     | 0.35 | 10        | 0.12      | 1.16    | 7.6 | 0.24      | 26     | 74       |                  |
| B2            | Outflow from Van Ryn Dam<br>S26.166 E28.371                    | 0.04      | 5.63    |                        | 51       | 59           |                  | 5.4              |        | 0.23     | 0.67 | 8         | 0.10      | 0.27    | 7.6 | 2.27      | 52     | 40       |                  |
|               |  | 0.07      | 4.56    |                        | 48       | 43           |                  | 4.9              |        | 0.30     | 0.63 | 8         | 0.09      | 0.21    | 7.6 | 1.09      | 31     | 35       |                  |
|               |  | 0.03      | 4.98    |                        | 58       | 47           |                  | 4.0              |        | 0.19     | 0.36 | 9         | 0.17      | 0.41    | 7.9 | 1.28      | 48     | 35       |                  |
|               |  | 0.17      | 5.00    |                        | 51       | 60           |                  | 4.5              |        | 0.29     | 0.33 | 8         | 0.14      | 0.98    | 7.5 | 0.80      | 37     | 49       |                  |
| B3            | Stream from Brakpan Lake<br>S26.209 E28.385                    | 0.06      | 0.62    |                        | 77       | 56           |                  | 3.8              |        | 0.15     | 0.11 | 9         | 0.03      | 2.23    | 7.8 | 0.53      | 58     | 64       |                  |
|               |  | 0.07      | 0.15    |                        | 55       | 48           |                  | 4.3              |        | 0.15     | 0.30 | 12        | 0.11      | 0.86    | 7.3 | 0.13      | 40     | 77       |                  |
|               |  | 0.12      | 0.18    |                        | 80       | 58           |                  | 4.5              |        | 0.20     | 0.52 | 17        | 0.08      | 0.61    | 7.1 | 0.20      | 57     | 120      |                  |
|               |  | 0.11      | 0.24    |                        | 71       | 66           |                  | 4.2              |        | 0.48     | 0.22 | 15        | 0.12      | 3.80    | 7.5 | 0.20      | 58     | 118      |                  |
| B4            | Causeway @ Alexander Dam<br>S26.211 E28.415                    | 0.03      | 0.20    |                        | 48       | 50           |                  | 6.2              |        | 0.20     | 0.08 | 10        | 0.13      | 0.15    | 8.1 | 0.27      | 51     | 55       |                  |
|               |  | 0.06      | 0.15    |                        | 34       | 44           |                  | 5.2              |        | 0.30     | 0.12 | 12        | 0.40      | 0.30    | 7.3 | 0.13      | 30     | 74       |                  |
|               |  | 0.07      | 1.31    |                        | 57       | 48           |                  | 2.9              |        | 0.20     | 0.13 | 16        | 0.10      | 0.09    | 7.8 | 0.21      | 43     | 83       |                  |
|               |  | 0.06      | 0.05    |                        | 56       | 61           |                  | 3.0              |        | 0.26     | 0.08 | 15        | 0.06      | 0.25    | 8.0 | 0.20      | 57     | 115      |                  |
| B9            | Outflow from Cowles Dam<br>S26.209 E28.467                     | 0.12      | 1.04    |                        | 80       | 101          |                  | 4.6              | 47     | 0.31     | 0.14 | 27        | 0.36      | 3.34    | 7.6 | 0.15      | 88     | 155      |                  |
|               |  | 0.07      | 0.65    |                        | 41       | 64           |                  | 6.3              | 6,548  | 0.18     | 0.15 | 15        | 0.23      | 1.52    | 7.5 | 0.52      | 46     | 99       |                  |
|               |  | 0.10      | 0.50    |                        | 72       | 97           |                  | 3.0              | 25     | 0.22     | 0.11 | 32        | 0.14      | 3.30    | 7.5 | 0.25      | 76     | 208      |                  |
|               |  | 0.08      | 1.00    |                        | 35       | 118          |                  | 1.9              | 205    | 0.22     | 0.18 | 31        | 0.21      | 2.59    | 7.5 | 0.70      | 92     | 183      |                  |
| B13           | Stream from Daveyton below Welgedacht WWTW<br>S26.199 E28.480  | 0.08      | 2.04    |                        | 49       | 63           |                  | 4.4              | 679    | 0.29     | 0.67 | 10        | 0.14      | 0.83    | 7.4 | 1.08      | 58     | 72       |                  |
|               |  | 0.08      | 0.74    |                        | 66       | 57           |                  | 3.2              | 699    | 0.25     | 0.31 | 11        | 0.15      | 1.00    | 7.4 | 0.61      | 56     | 59       |                  |
|               |  | 0.07      | 3.06    |                        | 70       | 68           |                  | 2.4              | 29,435 | 0.22     | 0.30 | 12        | 0.16      | 1.51    | 7.3 | 1.01      | 68     | 65       |                  |
|               |  | 0.08      | 2.23    |                        | 60       | 70           |                  | 3.8              | 436    | 0.37     | 0.20 | 13        | 0.12      | 2.12    | 7.3 | 0.84      | 72     | 118      |                  |
| B5            | Blesbokspruit @ Welgedacht<br>S26.215 E28.480                  | 0.11      | 3.90    |                        | 71       | 51           |                  | 1.2              |        | 0.21     | 0.61 | 18        | 0.42      | 0.43    | 6.3 | 1.01      | 78     | 152      |                  |
|               |  | 0.05      | 0.83    |                        | 53       | 52           |                  | 3.0              |        | 0.25     | 0.25 | 12        | 0.34      | 0.34    | 7.4 | 0.46      | 41     | 85       |                  |
|               |  | 0.05      | 2.07    |                        | 81       | 68           |                  | 3.0              |        | 0.18     | 0.32 | 20        | 0.23      | 0.67    | 7.4 | 1.03      | 70     | 112      |                  |
|               |  | 0.15      | 0.61    |                        | 66       | 77           |                  | 2.9              |        | 0.24     | 0.28 | 18        | 0.15      | 2.33    | 7.5 | 1.01      | 75     | 127      |                  |
| B16           | Blesbokspruit @ Grootvlei Mine Train Bridge<br>S26.256 E28.498 | 0.03      | 0.87    |                        | 87       | 158          |                  | 5.7              |        | 0.34     | 0.15 | 47        | 0.57      | 1.26    | 7.5 | 1.18      | 114    | 99       |                  |
|               |  | 0.03      | 0.64    |                        | 75       | 81           |                  | 2.8              |        | 0.28     | 0.25 | 23        | 0.35      | 0.54    | 7.5 | 0.51      | 64     | 259      |                  |
|               |  | 0.03      | 0.36    |                        | 108      | 125          |                  | 4.2              |        | 0.30     | 0.11 | 40        | 0.18      | 0.91    | 7.4 | 0.48      | 99     | 372      |                  |
|               |  | 0.03      | 0.14    |                        | 77       | 148          |                  | 4.9              |        | 0.47     | 0.08 | 41        | 0.07      | 1.30    | 7.6 | 0.58      | 125    | 222      |                  |
| B6            | Klein Blesbokspruit @ Selection Park<br>S26.283 E28.444        | 0.06      | 0.20    |                        | 27       | 29           |                  | 5.8              |        | 0.30     | 0.26 | 12        | 0.26      | 0.16    | 6.3 | 0.10      | 25     | 43       |                  |
|               |  | 0.21      | 0.15    |                        | 70       | 55           |                  | 7.7              |        | 0.38     | 0.12 | 15        | 0.35      | 0.21    | 7.8 | 0.17      | 39     | 148      |                  |
|               |  | 0.18      | 0.11    |                        | 77       | 71           |                  | 3.1              |        | 0.20     | 0.06 | 16        | 0.46      | 1.55    | 7.6 | 0.20      | 36     | 73       |                  |
|               |  | 0.38      | 2.51    |                        | 54       | 50           |                  | 4.2              |        | 0.48     | 0.30 | 11        | 1.15      | 3.47    | 7.4 | 0.20      | 37     | 43       |                  |
| B15           | Blesbokspruit on N17 Toll Road @ Springs<br>S26.271 E28.504    | 0.04      | 0.23    |                        | 56       | 147          |                  | 5.9              |        | 0.28     | 0.06 | 30        | 0.17      | 0.50    | 7.5 | 0.65      | 78     | 217      |                  |
|               |  | 0.03      | 0.21    |                        | 33       | 88           |                  | 5.9              |        | 0.29     | 0.07 | 21        | 0.38      | 0.30    | 7.6 | 0.58      | 62     | 180      |                  |
|               |  | 0.03      | 0.11    |                        | 115      | 132          |                  | 3.3              |        | 0.19     | 0.03 | 41        | 0.11      | 0.84    | 7.5 | 0.43      | 105    | 438      |                  |
|               |  | 0.03      | 0.08    |                        | 88       | 158          |                  | 5.8              |        | 0.48     | 0.03 | 46        | 0.09      | 0.82    | 7.5 | 0.45      | 135    | 345      |                  |
| B17           | Blesbokspruit @ Marievale Bird Sanctuary<br>S26.359 E28.508    | 0.03      | 0.20    |                        | 88       | 150          |                  | 3.3              |        | 0.44     | 0.03 | 44        | 0.36      | 0.45    | 7.7 | 0.62      | 118    | 237      |                  |
|               |  | 0.03      | 0.15    |                        | 77       | 103          |                  | 4.2              |        | 0.36     | 0.03 | 26        | 0.24      | 0.10    | 7.7 | 0.67      | 67     | 318      |                  |
|               |  | 0.03      | 0.63    |                        | 106      | 122          |                  | 2.6              |        | 0.22     | 0.01 | 39        | 0.15      | 0.07    | 7.8 | 0.52      | 94     | 378      |                  |
|               |  | 0.03      | 0.05    |                        | 97       | 158          |                  | 3.7              |        | 0.51     | 0.02 | 43        | 0.10      | 0.21    | 7.6 | 0.36      | 108    | 341      |                  |
| B11           | Blesbokspruit on R42 bridge @ Nigel<br>S26.391 E28.497         | 0.03      | 0.20    |                        | 89       | 148          |                  | 7.4              |        | 0.35     | 0.02 | 44        | 0.21      | 0.40    | 7.9 | 0.50      | 120    | 177      |                  |
|               |  | 0.03      | 0.15    |                        | 73       | 92           |                  | 4.9              |        | 0.42     | 0.02 | 25        | 0.05      | 0.10    | 7.8 | 0.72      | 66     | 287      |                  |
|               |  | 0.03      | 0.05    |                        | 102      | 118          |                  | 2.6              |        | 0.22     | 0.01 | 37        | 0.07      | 0.57    | 7.9 | 0.51      | 92     | 400      |                  |
|               |  | 0.03      | 0.24    |                        | 86       | 155          |                  | 3.3              |        | 0.51     | 0.04 | 44        | 0.11      | 0.23    | 7.8 | 0.35      | 95     | 302      |                  |
| B7            | Stormwater drain from Nigel Dam<br>S26.416 E28.466             | 0.03      | 0.28    |                        | 42       | 71           |                  | 6.5              |        | 0.31     | 0.39 | 24        | 2.06      | 0.38    | 5.5 | 0.10      | 96     | 308      |                  |
|               |  | 0.13      | 0.19    |                        | 54       | 60           |                  | 4.6              |        | 0.50     | 0.50 | 14        | 0.93      | 0.16    | 7.5 | 0.13      | 53     | 208      |                  |
|               |  | 0.20      | 0.20    |                        | 54       | 80           |                  | 5.6              |        | 0.34     | 1.53 | 21        | 1.75      | 0.10    | 7.3 | 0.20      | 59     | 210      |                  |
|               |  | 0.29      | 0.21    |                        | 44       | 119          |                  | 2.6              |        | 0.52     | 2.34 | 36        | 2.82      | 0.28    | 6.8 | 0.20      | 78     | 310      |                  |
| B8            | Blesbokspruit @ Nigel<br>S26.439 E28.456                       | 0.15      | 0.45    |                        | 74       | 92           |                  | 6.0              | 3,256  | 0.33     | 0.12 | 33        | 0.23      | 0.22    | 6.8 | 0.40      | 95     | 261      |                  |
|               |  | 0.11      | 0.39    |                        | 75       | 92           |                  | 5.7              | 1,174  | 0.33     | 0.34 | 24        | 0.93      | 0.17    | 7.8 | 0.53      | 68     | 244      |                  |
|               |  | 0.06      | 0.14    |                        | 80       | 102          |                  | 4.8              | 960    | 0.27     | 0.10 | 29        | 0.10      | 0.67    | 7.7 | 0.38      | 82     | 350      |                  |
|               |  | 0.03      | 0.22    |                        | 93       | 156          |                  | 4.9              | 8,657  | 0.25     | 0.08 | 44        | 0.11      | 1.38    | 7.9 | 0.36      | 126    | 341      |                  |
| B14           | Blesbokspruit @ Jameson Park<br>S26.479 E28.426                | 0.08      | 0.43    |                        | 79       | 129          |                  | 7.4              |        | 0.35     | 0.21 | 36        | 0.20      | 1.83    | 7.7 | 0.58      | 105    | 157      |                  |
|               |  | 0.18      | 0.15    |                        | 43       | 85           |                  | 6.6              |        | 0.33     | 0.23 | 23        | 0.14      | 0.38    | 7.8 | 0.57      | 64     | 205      |                  |
|               |  | 0.05      | 0.27    |                        | 99       | 110          |                  | 2.1              |        | 0.22     | 0.12 | 36        | 0.07      | 0.72    | 7.8 | 0.48      | 86     | 387      |                  |
|               |  | 0.03      | 0.35    |                        | 93       | 142          |                  | 5.6              |        | 0.51     | 0.08 | 41        | 0.11      | 0.91    | 7.6 | 0.39      | 122    | 258      |                  |

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

**01 Oct 2016 - 30 Sep 2017**



| 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<br>S26.477 E28.404             | 0.21      | 5.17    |                        | 26       | 51           |                  | 8.1              |        | 0.23     | 0.31 | 10        | 0.16      | 2.13    | 7.3 | 1.02      | 35     | 40       |                  |
|               |  | 0.25      | 1.17    |                        | 28       | 39           |                  | 5.0              |        | 0.35     | 0.54 | 12        | 0.16      | 1.59    | 7.5 | 0.17      | 27     | 42       |                  |
|               |  | 0.70      | 4.63    |                        | 46       | 47           |                  | 3.2              |        | 0.23     | 0.95 | 13        | 0.24      | 1.72    | 7.4 | 0.71      | 42     | 38       |                  |
|               |  | 0.53      | 8.80    |                        | 35       | 56           |                  | 3.6              |        | 0.56     | 0.71 | 11        | 0.64      | 1.38    | 7.3 | 1.54      | 44     | 40       |                  |
| B10           | Blesbokspruit Weir @ Heidelberg<br>S26.511 E28.351         | 0.21      | 0.31    | 20                     | 64       | 110          | 84               | 8.0              | 6,226  | 0.40     | 0.24 | 29        | 0.16      | 1.65    | 7.7 | 0.56      | 76     | 279      | 18               |
|               |  | 0.16      | 0.29    | 16                     | 65       | 79           | 100              | 5.9              | 6,687  | 0.36     | 0.25 | 22        | 0.09      | 0.90    | 7.7 | 0.53      | 60     | 204      | 70               |
|               |  | 0.11      | 0.62    | 15                     | 87       | 104          | 85               | 5.3              | 9,645  | 0.26     | 0.18 | 31        | 0.08      | 1.58    | 7.6 | 0.45      | 81     | 367      | 16               |
|               |  | 0.08      | 0.53    | 18                     | 75       | 119          | 92               | 5.7              | 943    | 0.32     | 0.15 | 37        | 0.15      | 1.79    | 7.6 | 0.56      | 98     | 311      | 15               |
| S1            | Suikerbosrant River below Balfour<br>S26.630 E28.297       | 1.07      | 0.21    |                        | 31       | 51           |                  | 5.6              | 2,038  | 0.32     | 0.69 | 11        | 0.02      | 0.41    | 7.3 | 0.17      | 36     | 16       |                  |
|               |  | 1.29      | 0.12    |                        | 11       | 25           |                  | 4.9              | 769    | 0.30     | 0.59 | 7         | 0.06      | 0.80    | 7.3 | 0.17      | 14     | 19       |                  |
|               |  | 0.15      | 0.50    |                        | 36       | 39           |                  | 3.1              | 206    | 0.35     | 0.18 | 13        | 0.07      | 0.19    | 7.4 | 0.34      | 25     | 20       |                  |
|               |  | 0.06      | 0.17    |                        | 44       | 70           |                  | 4.7              | 36     | 0.28     | 0.12 | 15        | 0.07      | 1.28    | 8.2 | 0.20      | 40     | 22       |                  |
| S2            | Suikerbosrant River Weir @ Three Rivers<br>S26.671 E28.030 | 0.48      | 0.34    | 25                     | 53       | 96           | 86               | 7.4              | 1,421  | 0.38     | 0.18 | 25        | 0.05      | 1.71    | 7.8 | 0.42      | 71     | 229      | 28               |
|               |  | 0.19      | 0.20    | 29                     | 53       | 73           | 100              | 4.7              | 10,606 | 0.32     | 0.17 | 18        | 0.06      | 1.08    | 7.4 | 0.43      | 45     | 138      | 32               |
|               |  | 0.12      | 0.30    | 21                     | 78       | 98           | 100              | 4.0              | 258    | 0.26     | 0.21 | 29        | 0.12      | 1.88    | 7.7 | 0.33      | 74     | 297      | 17               |
|               |  | 0.13      | 0.06    | 20                     | 77       | 122          | 92               | 4.9              | 126    | 0.33     | 0.20 | 35        | 0.10      | 1.78    | 8.0 | 0.26      | 92     | 317      | 24               |

**Key**

|     |  |      |      |                        |
|-----|--|------|------|------------------------|
| B12 | Stream from Kaydale Station<br>S26.477 E28.404 | 0.21 | 5.17 | - 1 Oct to 31 Dec 2016 |
|     |  | 0.25 | 1.17 | - 1 Jan to 31 Mar 2017 |
|     |  | 0.70 | 4.63 | - 1 Apr to 30 Jun 2017 |
|     |  | 0.53 | 8.80 | - 1 Jul to 30 Sep 2017 |

**Water Quality Guidelines**

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