**Algae Sampling Maguires Creek and Alstonville WWTP - Summer 2014/15**

**TABLE 1: Total Cyanophyta Biovolume (mm3/L)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date of sampling** | **SITE 4**  **14/3145-A**  **Godfrey's/Pearces Creek Road - Maguires Creek** | **SITE 2**  **14/3146-A**  **Gap Road Recycled Reservoir** | **SITE 3**  **14/3147-A**  **Maguires Creek d/s STP Pond** | **SITE 1**  **14/3148-A**  **Maturation Pond** | **SITE 5**  **14/3149-A**  **Maguires Creek Howards Crossing Swim Hole** | **SITE 6**  **14/3150-A**  **Teven Booyong Road - Maguires Creek** |
| 28/11/2014 | 0.06 | <0.01 | Not collected | 0.45 | <0.01 | ND |
| 2/11/2014 | <0.01 | 1.95 | Not collected | 3.34 | <0.01 | ND |
| 5/12/2014 | ND | 0.27 | ND | 4.15 | ND | ND |
| 9/12/14 | ND | 0.17 | ND | 4.98 | ND | ND |
| 12/12/14 | 1.52 | 6.22 | 3.36 | 6.24 | ND | ND |
| 16/12/14 | 1.23 | 6.90 | 0.12 | 20.17 | ND | ND |
| 19/12/14 | 0.33 | 2.94 | 0.21 | 6.81 | 0.49 | ND |
| 23/12/14 | <0.01 | 0.26 | 0.04 | 2.62 | ND | ND |
| 31/12/14 | 0.03 | 0.47 | ND | 0.74 | ND | ND |
| 2/1/15 | **ND** | 0.34 | ND | 0.21 | ND | ND |
| 6/1/15 | ND | 0.29 | ND | 0.45 | ND | ND |
| 9/1/15 | 0.03 | 0.62 | 0.07 | 0.34 | ND | ND |
| 13/1/15 | 0.17 | 0.27 | 0.11 | 0.28 | 0.01 | ND |
| 16/1/15 | 0.01 | 0.07 | 0.04 | 0.46 | ND | ND |
| 20/1/15 | ND | 0.59 | ND | 1.11 | ND | ND |
| 23/01/15 | IN FLOOD | 0.36 | 0.01 | 0.46 | IN FLOOD | IN FLOOD |
| 27/01/15 | 0.01 | 0.40 | 0.37 | 2.63 | ND | ND |
| 30/1/15 | ND | 0.33 | 0.07 | 1.72 | ND | ND |
| 3/2/15 | 0.10 | 0.43 | 0.08 | 0.72 | ND | ND |
| 6/2/15 | 0.04 | 0.34 | 0.25 | 0.19 | ND | ND |
| 10/2/15 | ND | 0.16 | 0.11 | 0.27 | Not collected | Not collected |
| 13/2/15 | ND | 0.16 | 0.11 | 0.38 | ND | ND |
| 17/2/15 | 0.01 | 0.15 | 0.17 | 0.22 | ND | ND |
| 20/2/15 | ND | 0.04 | 0.12 | 0.44 | ND | ND |
| 24/2/15 | ND | 0.04 | ND | 0.54 | ND | ND |
| 27/2/15 | <0.01 | 0.02 | ND | 0.08 | ND | ND |
| 3/3/15 | ND | 0.04 | 0.01 | 0.03 | ND | ND |
| 6/3/15 | ND | 0.04 | ND | 0.21 | ND | ND |
| 10/3/15 | ND | 0.01 | ND | ND | ND | ND |
| 13/3/15 | ND | 0.03 | ND | 0.09 | ND | ND |
| 17/3/15 | ND | 0.09 | ND | 0.07 | ND | ND |
| 20/3/15 | ND | ND | ND | ND | ND | ND |
| 24/3/15 | ND | ND | ND | ND | ND | ND |
|  |  |  |  |  |  |  |
| **Date of sampling** | **SITE 4**  **14/3145-A**  **Godfrey's/Pearces Creek Road - Maguires Creek** | **SITE 2**  **14/3146-A**  **Gap Road Recycled Reservoir** | **SITE 3**  **14/3147-A**  **Maguires Creek d/s STP Pond** | **SITE 1**  **14/3148-A**  **Maturation Pond** | **SITE 5**  **14/3149-A**  **Maguires Creek Howards Crossing Swim Hole** | **SITE 6**  **14/3150-A**  **Teven Booyong Road - Maguires Creek** |
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| --- | --- | --- |
| Criteria | | |
| **Drinking Water**  ***Source:*** | **Recreational Water**  ***Source:*** | **Stock Watering**  ***Source:*** |
| ≥0.05 - <0.2 Low alert  ≥0.2 - <0.6 Medium alert  >0.6 High alert  > 6 Very high alert | <10 Amber alert  >10 Red alert | N/A |

**TABLE 2: Total PotentiallyToxic Cyanophyta Biovolume (mm3/L)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date of sampling** | **SITE 4**  **14/3145-A**  **Godfrey's/Pearces Creek Road - Maguires Creek** | **SITE 2**  **14/3146-A**  **Gap Road Recycled Reservoir** | **SITE 3**  **14/3147-A**  **Maguires Creek d/s STP Pond** | **SITE 1**  **14/3148-A**  **Maturation Pond** | **SITE 5**  **14/3149-A**  **Maguires Creek Howards Crossing Swim Hole** | **SITE 6**  **14/3150-A**  **Teven Booyong Road - Maguires Creek** |
| 28/11/2014 | 0.06 | ND | Not collected | 0.45 | ND | ND |
| 2/12/2014 | ND | 1.95 | Not collected | 3.34 | ND | ND |
| 5/12/2014 | ND | 0.27 | ND | 4.15 | ND | ND |
| 9/12/14 | ND | 0.17 | ND | 4.98 | ND | ND |
| 12/12/14 | 1.52 | 6.22 | 3.36 | 6.23 | ND | ND |
| 16/12/14 | 1.23 | 6.90 | 0.12 | 20.17 | ND | ND |
| 19/12/14 | 0.33 | 2.94 | 0.21 | 6.81 | 0.49 | ND |
| 23/12/14 | ND | 0.26 | 0.04 | 2.62 | ND | ND |
| 31/12/14 | 0.03 | 0.47 | ND | 0.74 | ND | ND |
| 2/1/15 | **ND** | 0.34 | ND | 0.21 | ND | ND |
| 6/1/15 | ND | 0.29 | ND | 0.45 | ND | ND |
| 9/1/15 | 0.03 | 0.62 | 0.07 | 0.34 | ND | ND |
| 13/1/15 | 0.17 | 0.27 | 0.11 | 0.28 | 0.01 | ND |
| 16/1/15 | 0.01 | 0.07 | 0.04 | 0.46 | ND | ND |
| 20/1/15 | ND | 0.59 | ND | 1.11 | ND | ND |
| 23/01/15 | IN FLOOD | 0.36 | 0.01 | 0.46 | IN FLOOD | IN FLOOD |
| 27/1/15 | 0.01 | 0.40 | 0.37 | 2.63 | ND | ND |
| 30/1/15 | ND | 0.33 | 0.07 | 1.72 | ND | ND |
| 3/2/15 | 0.10 | 0.43 | 0.08 | 0.72 | ND | ND |
| 6/2/15 | 0.04 | 0.34 | 0.25 | 0.19 | ND | ND |
| 10/2/15 | ND | 0.16 | 0.11 | 0.27 | Not collected | Not collected |
| 13/2/15 | ND | 0.16 | 0.11 | 0.38 | ND | ND |
| 17/2/15 | 0.01 | 0.15 | 0.17 | 0.22 | ND | ND |
| 20/2/15 | ND | 0.04 | 0.12 | 0.44 | ND | ND |
| 24/2/15 | ND | 0.04 | ND | 0.54 | ND | ND |
| **Date of sampling** | **SITE 4**  **14/3145-A**  **Godfrey's/Pearces Creek Road - Maguires Creek** | **SITE 2**  **14/3146-A**  **Gap Road Recycled Reservoir** | **SITE 3**  **14/3147-A**  **Maguires Creek d/s STP Pond** | **SITE 1**  **14/3148-A**  **Maturation Pond** | **SITE 5**  **14/3149-A**  **Maguires Creek Howards Crossing Swim Hole** | **SITE 6**  **14/3150-A**  **Teven Booyong Road - Maguires Creek** |
| 27/2/15 | ND | 0.02 | ND | 0.08 | ND | ND |
| 3/3/15 | ND | 0.04 | 0.01 | 0.03 | ND | ND |
| 6/3/15 | ND | 0.04 | ND | 0.21 | ND | ND |
| 10/3/15 | ND | 0.01 | ND | ND | ND | ND |
| 13/3/15 | ND | 0.03 | ND | 0.09 | ND | ND |
| 17/3/15 | ND | 0.09 | ND | 0.07 | ND | ND |
| 20/3/15 | ND | ND | ND | ND | ND | ND |
| 24/3/15 | ND | ND | ND | ND | ND | ND |
|  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| Criteria | | |
| **Drinking Water**  ***Source:*** | **Recreational Water**  ***Source:*** | **Stock Watering**  ***Source:*** CSIRO 2000 (Jones, G.J. & Orr, P.T) |
| N/A | >0.04 – < 0.4 Green alert  >0.4- 4 Amber alert  >10 Red alert | > 4 High Alert |

**TABLE 3: Microcystis Aeruginosa cells/mL**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date of sampling** | **SITE 4**  **14/3145-A**  **Godfrey's/Pearces Creek Road - Maguires Creek** | **SITE 2**  **14/3146-A**  **Gap Road Recycled Reservoir** | **SITE 3**  **14/3147-A**  **Maguires Creek d/s STP Pond** | **SITE 1**  **14/3148-A**  **Maturation Pond** | **SITE 5**  **14/3149-A**  **Maguires Creek Howards Crossing Swim Hole** | **SITE 6**  **14/3150-A**  **Teven Booyong Road - Maguires Creek** |
| 28/11/2014 | 900 | ND | Not collected | 6,900 | ND | ND |
| 2/12/2014 | ND | 17,200 | Not collected | 29,550 | ND | ND |
| 5/12/2014 | ND | 2,360 | 36,700 | 36,700 | ND | ND |
| 9/12/14 | ND | 1480 | ND | 44000 | ND | ND |
| 12/12/14 | 13475 | 55000 | 29725 | 55100 | ND | ND |
| 16/12/14 | 10875 | 61000 | 1087 | 178350 | ND | ND |
| 19/12/14 | 2938 | 26000 | 1875 | 60175 | 4350 | ND |
| 23/12/14 | ND | 2320 | 363 | 23200 | ND | ND |
| 31/12/14 | 460 | 7170 | ND | 11350 | ND | ND |
| 2/1/15 | **ND** | 5200 | ND | 3263 | ND | ND |
| 6/1/15 | ND | 4480 | ND | 6850 | ND | ND |
| 9/1/15 | 475 | 9.400 | 1.100 | 5.250 | ND | ND |
| 13/1/15 | 2625 | 4100 | 1750 | 4250 | 88 | ND |
| 16/1/15 | 125 | 1120 | 680 | 7000 | ND | ND |
| 20/1/15 | ND | 9000 | ND | 17000 | ND | ND |
| 23/01/15 | IN FLOOD | 5450 | 188 | 7000 | IN FLOOD | IN FLOOD |
| 27/01/15 | 188 | 6100 | 5625 | 40250 | ND | ND |
| 30/1/15 | ND | 5025 | 1025 | 26250 | ND | ND |
| 3/2/15 | 1550 | 6560 | 1150 | 11050 | ND | ND |
| 6/12/15 | 550 | 5200 | 3800 | 2850 | ND | ND |
| 10/2/15 | ND | 2520 | 1650 | 4150 | Not collected | Not collected |
| 13/2/15 | ND | 2440 | 1700 | 5750 | ND | ND |
| 17/2/15 | 140 | 2240 | 2550 | 3400 | ND | ND |
| 20/2/15 | ND | 640 | 1900 | 6750 | ND | ND |
| 24/2/15 | ND | 640 | ND | 8250 | ND | ND |
| 27/2/15 | ND | 360 | ND | 1175 | ND | ND |
| 3/3/15 | ND | 660 | 80 | 525 | ND | ND |
| 6/3/15 | ND | 640 | ND | 3200 | ND | ND |
| 10/3/15 | ND | 140 | ND | ND | ND | ND |
| 13/3/15 | ND | 420 | ND | 1450 | ND | ND |
| 17/3/15 | ND | 1360 | ND | 1025 | ND | ND |
| 20/3/15 | ND | ND | ND | ND | ND | ND |
| 24/3/15 | ND | ND | ND | ND | ND | ND |
|  |  |  |  |  |  |  |

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| --- | --- | --- |
| Criteria | | |
| **Drinking Water**  ***Source:*** | **Recreational Water**  ***Source:*** | **Stock Watering**  ***Source: ANZECC 2000*** |
| ≥500 - > 2,000 Low alert  ≥2,000 - < 6,500 Medium alert  ≥ 6,500 High alert  65,000 Very high alert | >500 - <5,000 Green alert  >5,000 - <50,000 Amber alert  >50,000 Red alert | >11,500 High Alert |

**TABLE 4: *Dolichospermum circinale* (formally Anabaena circinalis) (cells/mL)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date of sampling** | **SITE 4**  **14/3145-A**  **Godfrey's/Pearces Creek Road - Maguires Creek** | **SITE 2**  **14/3146-A**  **Gap Road Recycled Reservoir** | **SITE 3**  **14/3147-A**  **Maguires Creek d/s STP Pond** | **SITE 1**  **14/3148-A**  **Maturation Pond** | **SITE 5**  **14/3149-A**  **Maguires Creek Howards Crossing Swim Hole** | **SITE 6**  **14/3150-A**  **Teven Booyong Road - Maguires Creek** |
| 28/11/2014 | ND | ND | Not collected | ND | ND | ND |
| 2/12/2014 | ND | ND | Not collected | ND | ND | ND |
| 5/12/2014 | ND | ND | ND | ND | ND | ND |
| 9/12/14 | ? | ? | ? | ? | ? | ? |
| 12/12/14 | ND | ND | ND | ND | ND | ND |
| 16/12/14 | ND | ND | ND | ND | ND | ND |
| 19/12/14 | ND | ND | ND | ND | ND | ND |
| 23/12/14 | ND | ND | ND | ND | ND | ND |
| 31/12/14 | ND | ND | ND | ND | ND | ND |
| 2/1/15 | **ND** | ND | ND | ND | ND | ND |
| 6/1/15 | ND | ND | ND | ND | ND | ND |
| 9/1/15 | ND | ND | ND | ND | ND | ND |
| 13/1/15 | ND | ND | ND | ND | ND | ND |
| 16/1/15 | ND | ND | ND | ND | ND | ND |
| 20/1/15 | ND | ND | ND | ND | ND | ND |
| 23/01/15 | IN FLOOD | ND | ND | ND | IN FLOOD | IN FLOOD |
| 27/1/15 | ND | ND | ND | ND | ND | ND |
| 30/1/15 | ND | ND | ND | ND | ND | ND |
| 3/2/15 | ND | ND | ND | ND | ND | ND |
| 13/2/15 | ND | ND | ND | ND | ND | ND |
| 17/2/15 | ND | ND | ND | ND | ND | ND |
| 20/2/15 | ND | ND | ND | ND | ND | ND |
| 24/2/15 | ND | ND | ND | ND | ND | ND |
| 27/2/15 | ND | ND | ND | ND | ND | ND |
| 3/3/15 | ND | ND | ND | ND | ND | ND |
| 6/3/15 | ND | ND | ND | ND | ND | ND |
| 10/3/15 | ND | ND | ND | ND | ND | ND |
| 13/3/15 | ND | ND | ND | ND | ND | ND |
| 17/3/15 | ND | ND | ND | ND | ND | ND |
| 20/3/15 | ND | ND | ND | ND | ND | ND |
| 24/3/15 | ND | ND | ND | ND | ND | ND |
|  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| Criteria | | |
| **Drinking Water**  ***Source:*** | **Recreational Water**  ***Source:*** | **Stock Watering**  ***Source:*** |
| N/A | N/A | >25,500 |

ND: Not Detected

NT: Not Tested