

Sydney Water Quality Analysis - Table 2

Water Filtration Plant - Minimum & Maximum

| | Unit | Cascade | Illawarra | Macarthur | Nepean | North Richmond | Orchard Hills | Prospect | Warragamba | Woronora |
|--|---|--------------|--------------|----------------|----------------|----------------|----------------|--------------|----------------|--------------|
| See bottom of table for catchment area guide | | | | | | | | | | |
| Physical Characteristics | | | | | | | | | | |
| True Colour | TCU or HU | 1-2 | 1 | 1-3 | 1-2 | 1 | 1 | 1-2 | 1-2 | 1 |
| Turbidity | NTU | 0.1-0.3 | 0.1-0.2 | 0.1-0.2 | 0.1-0.3 | 0.1-0.2 | 0.1-0.2 | 0.1-0.2 | 0.1 | 0.1-0.2 |
| Total Dissolved Solids | mg/L | 85-152 | 51-87 | 101-187 | 98-153 | 119-212 | 125-186 | 94-136 | 115-230 | 85-135 |
| pH | pH units | 7.6-8.3 | 7.5-8.0 | 7.5-8.0 | 7.3-8.0 | 7.5-8.6 | 7.5-8.2 | 7.7-8.0 | 7.5-8.2 | 7.6-8.4 |
| Conductivity | mS/m | 13-15 | 8-14 | 15-18 | 17-19 | 26-43 | 22-24 | 19-22 | 22-24 | 17-19 |
| Total Hardness | mg CaCO ₃ /L | 52-62 | 14-46 | 42-58 | 55-67 | 35-62 | 61-74 | 51-65 | 57-63 | 43-51 |
| Calcium Hardness | mg CaCO ₃ /L | 45-54 | 6-36 | 32-44 | 43-53 | 17-32 | 35-52 | 33-46 | 31-39 | 34-39 |
| Magnesium Hardness | mg CaCO ₃ /L | 7-24 | 7-9 | 5-14 | 10-12 | 16-28 | 14-25 | 16-25 | 18-27 | 8-11 |
| Alkalinity | mg CaCO ₃ /L | 38-45 | 6-31 | 21-30 | 35-42 | 25-50 | 41-51 | 35-46 | 39-53 | 24-29 |
| Temperature | °C | 10-22 | 14-24 | 13-25 | 13-23 | 14-27 | 14-24 | 14-23 | 14-23 | 14-25 |
| Dissolved Oxygen | % Saturation | 88-105 | 101-113 | 98-115 | 97-117 | 86-115 | 102-122 | 104-127 | 102-121 | 102-120 |
| Disinfectants | | | | | | | | | | |
| Free Chlorine | mg/L | 0.22-0.86 | 0.30-0.80 | 0.00-0.49 | 0.23-0.98 | 0.27-0.82 | 0.17-0.88 | na | 0.2-0.87 | na |
| Monochloramine | mg/L | 0.06-0.12 | 0.04-0.07 | 0.08-1.45 | 0.05-0.12 | 0.04-0.10 | 0.07-0.12 | 0.52-1.42 | 0.06-0.12 | 0.38-1.43 |
| Disinfectant By-products | | | | | | | | | | |
| Tribalomethanes | mg/L | 0.036-0.108 | 0.038-0.077 | 0.033-0.107 | 0.053-0.137 | 0.029-0.095 | 0.032-0.100 | 0.026-0.052 | 0.042-0.095 | 0.017-0.044 |
| Inorganic Chemicals | | | | | | | | | | |
| Aluminium | mg/L | <0.010-0.033 | 0.018-0.034 | <0.010-0.024 | 0.013-0.036 | <0.010-0.022 | <0.010-0.014 | <0.010-0.012 | 0.010-0.012 | 0.018-0.033 |
| Ammonia | mg/L | <0.01 | <0.01 | <0.01-0.44 | <0.01 | <0.01 | <0.01 | 0.05-0.41 | <0.01 | 0.05-0.43 |
| Arsenic | mg/L | nd | nd | nd | nd | nd | nd | nd | nd | nd |
| Cadmium | mg/L | nd | nd | nd | nd | nd | nd | nd | nd | nd |
| Calcium | mg/L | 14.1-24.3 | 12.8-15.4 | 12.6-17.2 | 17.8-20.6 | 6.0-12.4 | 12.6-20.4 | 11.8-17.1 | 11.5-14.3 | 12.7-16.9 |
| Chloride | mg/L | 15.0-26.5 | 18.5-21.5 | 24.5-31.5 | 24.0-27.0 | 55.5-74.0 | 29.5-33.5 | 26.5-30.0 | 32.5-34.5 | 27.0-31.5 |
| Chromium | mg/L | nd | nd | <0.0004-0.0008 | <0.0004-0.0015 | nd | <0.0004-0.0008 | nd | <0.0004-0.0004 | nd |
| Copper | mg/L | 0.008-0.038 | 0.005-0.049 | 0.007-0.124 | 0.007-0.072 | 0.005-0.046 | 0.007-0.046 | 0.007-0.046 | 0.006-0.029 | 0.006-0.028 |
| Cyanide | mg/L | nd | nd | nd | nd | nd | nd | nd | nd | nd |
| Fluoride | mg/L | 0.98-1.10 | 0.98-1.05 | 1.04-1.16 | 1.00-1.12 | 1.03-1.13 | 0.97-1.09 | 1.02-1.12 | 0.99-1.09 | 0.96-1.08 |
| Iron | mg/L | 0.005-0.039 | 0.005-0.025 | 0.014-0.052 | 0.005-0.029 | 0.005-0.036 | 0.005-0.017 | 0.005-0.023 | 0.005-0.019 | 0.005-0.022 |
| Lead | mg/L | nd | nd | nd | nd | nd | nd | nd | nd | nd |
| Magnesium | mg/L | 1.54-5.98 | 1.83-2.18 | 1.84-2.82 | 2.51-2.94 | 3.72-7.28 | 5.71-6.86 | 4.62-6.04 | 5.69-6.70 | 2.11-2.75 |
| Manganese | mg/L | 0.001-0.009 | <0.001-0.001 | 0.002-0.006 | 0.001-0.011 | <0.001-0.001 | 0.002-0.007 | <0.001-0.004 | <0.001 | <0.001-0.002 |
| Mercury | mg/L | nd | nd | nd | nd | nd | nd | nd | nd | nd |
| Nitrate | mg/L | 0.09-0.49 | 0.02-0.13 | 0.35-1.06 | 0.53-1.00 | 0.35-2.89 | 0.44-0.84 | 0.58-1.29 | 0.47-0.84 | 0.53-1.11 |
| Nitrite | mg/L | <0.003-0.003 | <0.003-0.003 | <0.003-0.013 | <0.003 | <0.003-0.003 | <0.003-0.003 | 0.003-0.181 | <0.003 | 0.003-0.234 |
| Phosphorous | mg/L | 0.001-0.003 | 0.004-0.007 | 0.010-0.015 | 0.005-0.009 | 0.006-0.010 | 0.007-0.010 | 0.007-0.009 | 0.005-0.010 | 0.003-0.010 |
| Potassium | mg/L | 0.78-2.02 | 0.76-1.00 | 0.68-1.27 | 1.12-2.12 | 2.81-6.62 | 1.93-2.31 | 1.7-2.18 | 1.95-2.3 | 1.13-1.40 |
| Silica | mg/L | 1.7-4.0 | 1.1-2.0 | 1.0-2.0 | 1.4-1.9 | 1.4-3.1 | 07-2.6 | 1.5-2.4 | 1.5-2.6 | 3.6-4.1 |
| Selenium | mg/L | nd | nd | nd | nd | nd | nd | nd | nd | nd |
| Silver | mg/L | nd | nd | nd | nd | nd | nd | nd | nd | nd |
| Sodium | mg/L | 4.1-14.8 | 8.2-9.6 | 9.3-12.9 | 8.5-11.1 | 38.9-65.3 | 13.5-19.3 | 12.2-15.0 | 17.6-22.1 | 12.7-15.7 |
| Sulfate | mg/L | 1-3 | 3-4 | 4-6 | 3-6 | 10-16 | 9-13 | 8-12 | 10-13 | 7-11 |
| Zinc | mg/L | <0.005-0.009 | <0.005-0.006 | <0.005-0.010 | <0.005-0.008 | <0.005 | <0.005-0.007 | <0.005-0.006 | <0.005-0.006 | <0.005 |
| Microbiological | | | | | | | | | | |
| E.coli | orgs/100ml | <1 | <1-89 | <1 | <1 | <1 | <1 | <1-15 | <1 | <1 |
| nd = not detected (below detection limits) | | | | | | | | | | |
| Cascade | Katoomba to Springwood (part), Mt Victoria, Medlow Bath, | | | | | | | | | |
| Illawarra | Kiama, Shellharbour and Wollongong (except Helensburgh and Stanwell Park | | | | | | | | | |
| Macarthur | Campbelltown, Glenfield, Minto, Narellan, Camden (part), Leppington, Casula | | | | | | | | | |
| Nepean | Picton, Thirlmere, Oakdale | | | | | | | | | |
| North Richmond | Windsor, Richmond, Wilberforce, Kurrajong | | | | | | | | | |
| Orchard Hills | Lower Blue Mountains, Springwood (part) to Penrith, Penrith, St Marys, Erskine park | | | | | | | | | |
| Prospect | Liverpool | | | | | | | | | |
| Warragamba | Warragamba township | | | | | | | | | |
| Woronora | Helensburgh, Stanwell Park, Coalcliff | | | | | | | | | |