

## **Drinking Water Quality Summary - December 2018**

Shoalhaven Water provides safe and reliable drinking water to approximately 100,000 people in the Shoalhaven on a daily basis. The drinking water we supply is routinely tested throughout our water supply systems with analysis undertaken at independent NATA certified laboratories as per the 2011 Australian Drinking Water Guidelines (ADWG). This detailed water quality monitoring forms part of Shoalhaven Water's framework for the management of drinking water quality. Results are based on samples representative of water supplied to customers' taps. Results for microbiological and key physical/chemical parameters are summarised in the following:

| Analyte                       | ADWG<br>Guideline<br>Health | ADWG<br>Guideline<br>Aesthetic | <    | >      | Units     | Whole of Shoalhaven |            | Northern Shoalhaven<br>Supply System (Bamarang) |            | Kangaroo Valley Supply<br>System |            | Southern Shoalhaven<br>Supply System |            | Flat Rock Supply<br>System |            |
|-------------------------------|-----------------------------|--------------------------------|------|--------|-----------|---------------------|------------|---|------------|----------------------------------|------------|--------------------------------------|------------|----------------------------|------------|
|                               |                             |                                |      |        |           | Monthly             | Monthly    | Monthly   | Monthly    | Monthly                          | Monthly    | Monthly                              | Monthly    | Monthly                    | Monthly    |
|                               |                             |                                |      |        |           | Average             | Compliance | Average   | Compliance | Average                          | Compliance | Average                              | Compliance | Average                    | Compliance |
| E. coli                       | 0                           | С                              |      | >0     | MPN/100mL | 0                   | 100%       | 0   | 100%       | 0                                | 100%       | 0                                    | 100%       | 0                          | 100%       |
| Aluminium                     | С                           | 0.2                            |      | >0.2   | mg/L      | 0.0733              | 100%       | 0.0800  | 100%       | -                                | -          | 0.0900                               | 100%       | 0.0500                     | 100%       |
| Arsenic                       | С                           | 0.01                           |      | >0.01  | mg/L      | 0.0005              | 100%       | 0.0005  | 100%       | -                                | -          | 0.0005                               | 100%       | 0.0005                     | 100%       |
| Cadmium                       | 0.002                       | С                              |      | >0.002 | mg/L      | 0.0003              | 100%       | 0.0003  | 100%       | -                                | -          | 0.0003                               | 100%       | 0.0003                     | 100%       |
| Calcium                       | 10000                       | С                              |      | >10000 | mg/L      | 22.4333             | 100%       | 22.2000   | 100%       | -                                | -          | 23.5000                              | 100%       | 21.6000                    | 100%       |
| Free Chlorine                 | 5                           | 0.2                            | <0.2 | >5     | mg/L      | 0.6341              | 93.1%      | 0.6114  | 92.9%      | 0.6750                           | 50.0%      | 0.6991                               | 100%       | 0.6867                     | 100%       |
| Copper                        | 2                           | 1                              |      | >2     | mg/L      | 0.0089              | 100%       | 0.0110  | 100%       | -                                | -          | 0.0020                               | 100%       | 0.0250                     | 100%       |
| Fluoride                      | 1.5                         | С                              |      | >1.5   | mg/L      | 0.9944              | 100%       | 1.0289  | 100%       | 0.9000                           | 100%       | 0.9840                               | 100%       | 0.8300                     | 100%       |
| Hardness                      | С                           | 200                            |      | >200   | mg/L      | 71.7333             | 100%       | 71.2000   | 100%       | -                                | -          | 73.8000                              | 100%       | 70.2000                    | 100%       |
| Iron                          | С                           | 0.3                            |      | >0.3   | mg/L      | 0.0293              | 100%       | 0.0283  | 100%       | -                                | -          | 0.0350                               | 100%       | 0.0100                     | 100%       |
| Lead                          | 0.01                        | С                              |      | >0.01  | mg/L      | 0.0010              | 100%       | 0.0010  | 100%       | -                                | -          | 0.0010                               | 100%       | 0.0010                     | 100%       |
| Magnesium                     | 10000                       | С                              |      | >10000 | mg/L      | 3.8233              | 100%       | 3.8400  | 100%       | -                                | -          | 3.6700                               | 100%       | 3.9600                     | 100%       |
| Manganese                     | 0.5                         | 0.1                            |      | >0.5   | mg/L      | 0.0070              | 100%       | 0.0074  | 100%       | -                                | -          | 0.0051                               | 100%       | 0.0130                     | 100%       |
| Mercury                       | 0.001                       | С                              |      | >0.001 | mg/L      | 0.0001              | 100%       | 0.0001  | 100%       | -                                | -          | 0.0001                               | 100%       | 0.0001                     | 100%       |
| Nickel                        | 0.02                        | С                              |      | >0.02  | mg/L      | 0.0050              | 100%       | 0.0050  | 100%       | -                                | -          | 0.0050                               | 100%       | 0.0050                     | 100%       |
| Nitrate (as NO <sub>3</sub> ) | 50                          | С                              |      | >50    | mg/L      | 0.1127              | 100%       | 0.0700  | 100%       | -                                | -          | 0.1120                               | 100%       | 0.5000                     | 100%       |
| Nitrite (as NO <sub>2</sub> ) | 3                           | С                              |      | >3     | mg/L      | 0.0143              | 100%       | 0.0106  | 100%       | -                                | -          | 0.0140                               | 100%       | 0.0500                     | 100%       |
| pН                            | С                           | 6.5-8.5                        | <6.5 | >8.5   | pH units  | 7.7913              | 100%       | 7.8049  | 100%       | 7.3200                           | 100%       | 7.8700                               | 100%       | 7.6450                     | 100%       |
| Selenium                      | 0.01                        | С                              |      | >0.01  | mg/L      | 0.0010              | 100%       | 0.0010  | 100%       | -                                | -          | 0.0010                               | 100%       | 0.0010                     | 100%       |
| Silver                        | 0.1                         | С                              |      | >0.1   | mg/L      | 0.0010              | 100%       | 0.0010  | 100%       | -                                | -          | 0.0010                               | 100%       | 0.0010                     | 100%       |
| Sodium                        | С                           | 180                            |      | >180   | mg/L      | 11.6667             | 100%       | 11.0000   | 100%       | -                                | -          | 12.0000                              | 100%       | 12.0000                    | 100%       |
| Sulfate                       | 500                         | 250                            |      | >500   | mg/L      | 15.6667             | 100%       | 15.0000   | 100%       | -                                | -          | 16.0000                              | 100%       | 16.0000                    | 100%       |
| TDS <sup>2</sup>              | С                           | 600                            |      | >600   | mg/L      | 115.6667            | 100%       | 119.3333  | 100%       | -                                | -          | 113.6000                             | 100%       | 93.0000                    | 100%       |
| True Colour                   | С                           | 15                             |      | >15    | HU        | 0.8333              | 100%       | 1.0000  | 100%       | -                                | -          | 0.5000                               | 100%       | 1.0000                     | 100%       |
| Turbidity                     | С                           | 5                              |      | >5     | NTU       | 0.4648              | 100%       | 0.5412  | 100%       | 0.3150                           | 100%       | 0.1917                               | 100%       | 0.5375                     | 100%       |
| Uranium                       | 0.017                       | С                              |      | >0.017 | mg/L      | 0.0025              | 100%       | 0.0025  | 100%       | -                                | -          | 0.0025                               | 100%       | 0.0025                     | 100%       |
| Zinc                          | С                           | 3                              |      | >3     | mg/L      | 0.0067              | 100%       | 0.0100  | 100%       | -                                | -          | 0.0050                               | 100%       | 0.0050                     | 100%       |

<sup>&</sup>lt;sup>1</sup> Note that the Australian Drinking Water Guidelines (ADWG) specifies water quality standards that are considered safe for people to drink over an entire lifetime. Therefore compliance is based on a statistical measure of results rather than absolute figures.

Australian Drinking Water Guidelines 2011:

http://www.nhmrc.gov.au/guidelines/publications/eh52

<sup>&</sup>lt;sup>2</sup> TDS = Total Dissolved Solids

<sup>&</sup>lt;sup>3</sup> Corrective action taken for E.coli exception and the repeat test result was complient (all clear). Contact Shoahaven Water for further information.

<sup>-</sup> Denotes that this analyte was not tested this month due to either the treatment plant being offline or the required frequency resulted in no sample required for this month.

c Health or Aesthetic limits have not been set by the ADWG.

<sup>+</sup> Inadvertent omission