

10.2 Drinking Water Annual Report and Factsheet

REPORT BY THE WATER QUALITY OFFICER
TO 20 APRIL 2022 ORDINARY MEETING
GOV400098, WAT500075

RECOMMENDATION

That Council:

1. **receive the report by the Water Quality officer on the Drinking Water Annual Report and Factsheet ; and**
2. **note that the Drinking Water Annual Report and Factsheet will be publicly available and updated yearly.**

Executive summary

The Drinking Water Annual Report and Factsheet will be available on the MWRC Website in order to satisfy the requirements of Element 8 (Community Involvement and Awareness) of the Australian Drinking Water Guideline framework for the management of drinking water quality.

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Disclosure of Interest

Nil

Detailed report

The attached "Drinking Water" factsheet and "Drinking Water Annual Report" will be available on the external website for the Community and will have the data updated yearly.

These documents were developed in consultation with RiskEdge (Drinking Water Quality Consultant) and MRWC Communication Team. The Annual Report provides the Community with information on results of drinking water testing in Mudgee, Gulgong and Rylstone as well improvements made to the water supply systems over the last year. The Factsheet provides information on the monitoring program, the Australian Drinking Water Guidelines and has a schematic flowchart of the 3 water supply systems.

Having these 2 documents available on the website will go some way in satisfying the requirements of Element 8 (Community involvement and awareness) of the Australian Drinking Water Guidelines Framework for Management of Drinking Water Quality.

The need to keep the Community informed about Water Quality was also identified in the Drinking Water Improvement Plan (Task 179: Annual report to be published on Website).

Community Plan implications

Theme	Protecting Our Natural Environment
Goal	Provide total water cycle management
Strategy	Maintain and manage water quantity and quality

Strategic implications

Council Strategies

Not applicable

Council Policies

The Drinking Water Quality Policy highlight the need to promote community participation in decision making processes and ensure that community expectations are considered. Having these 2 documents available on the website will give the community information on the drinking water quality.

Legislation

Not applicable

Financial implications

Not applicable

Budget Year	Operating Performance Ratio	Own Source Revenue	Building & Infrastructure Renewal
2019/20	-	-	-
Future Years	-	-	-

Associated Risks

Not applicable

FRANCOISE PIELTAIN
WATER QUALITY OFFICER

JULIAN GEDDES
DIRECTOR OPERATIONS

23 March 2022

Attachments: 1. Drinking Water Annual Report 2021.
2. Drinking Water Factsheet.

APPROVED FOR SUBMISSION:

BRAD CAM
GENERAL MANAGER

ANNUAL DRINKING WATER QUALITY REPORT 2021

MID-WESTERN REGIONAL COUNCIL



OVERVIEW

Council's report card



Health results

100% compliance with Australian Drinking Water Guidelines (ADWG) achieved.



Aesthetic results

100% compliance with ADWG achieved for Mudgee and Rylstone, and 92% for Gulgong.



Events and improvements

- High zone Mudgee, Flirtation Hill Gulgong and Clandulla reservoirs have been upgraded/refurbished
- Unlined cast iron mains in Gulgong are causing occasional clarity issues. Replacement of these mains is progressing well with around 13km replaced to date

Verification monitoring of distribution systems

Council is committed to providing the communities of Mudgee, Gulgong, Rylstone, Kandos, Charbon and Clandulla with safe, secure, reliable and high quality water. This annual report is produced to inform the community of the quality of the drinking water over the course of the year.



HEALTH MEASURES



E.coli

A gut bacterium. Used as an indicator of fresh faecal contamination of water.



Fluoride

Improves dental health.



Free chlorine

Disinfection of the water. At higher levels it can cause taste, odour and health problems.



Manganese

Occurs naturally in water. Concentrations over 0.5mg/L can cause health concerns.



AESTHETIC MEASURES



pH

Indication of how acidic/basic the water is. pH less than 6.5 may be corrosive. pH greater than 8.5 may cause scale and taste problems.



Turbidity

A measure of the relative clarity of the water. Turbidity is caused by particles suspended in the water.



Iron

Occurs naturally in water. High concentrations stain laundry and fittings.



60-200

Hardness

Caused by calcium and magnesium. 60-200mg/L indicates good quality water.



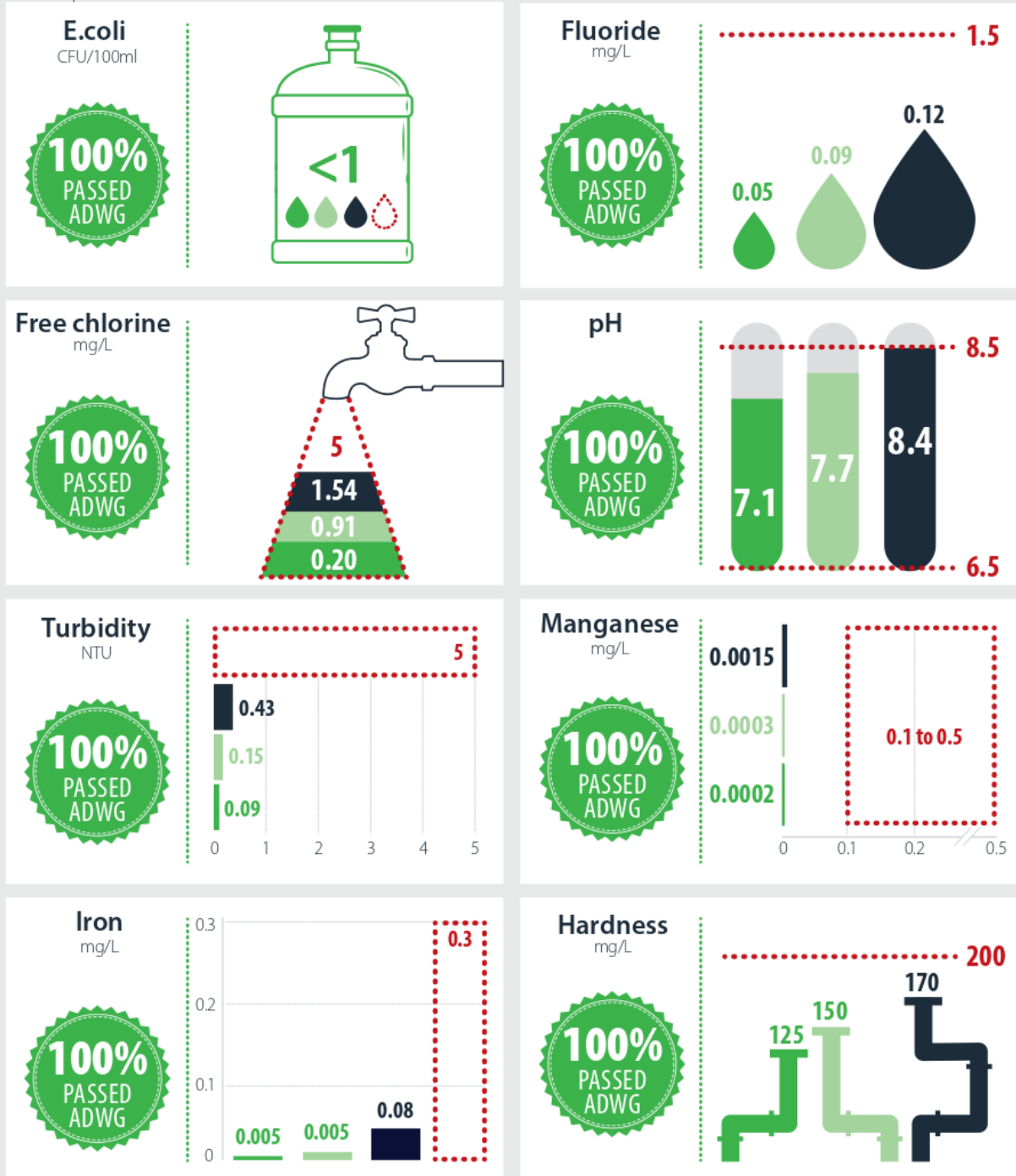
Manganese

Occurs naturally in water. Concentrations over 0.1mg/L can cause taste and staining.

DRINKING WATER RESULTS – MUDGEE

..... Australian Drinking Water Guideline (ADWG) Value ■ Minimum ■ Median ■ Maximum

Note: Graphs not to scale

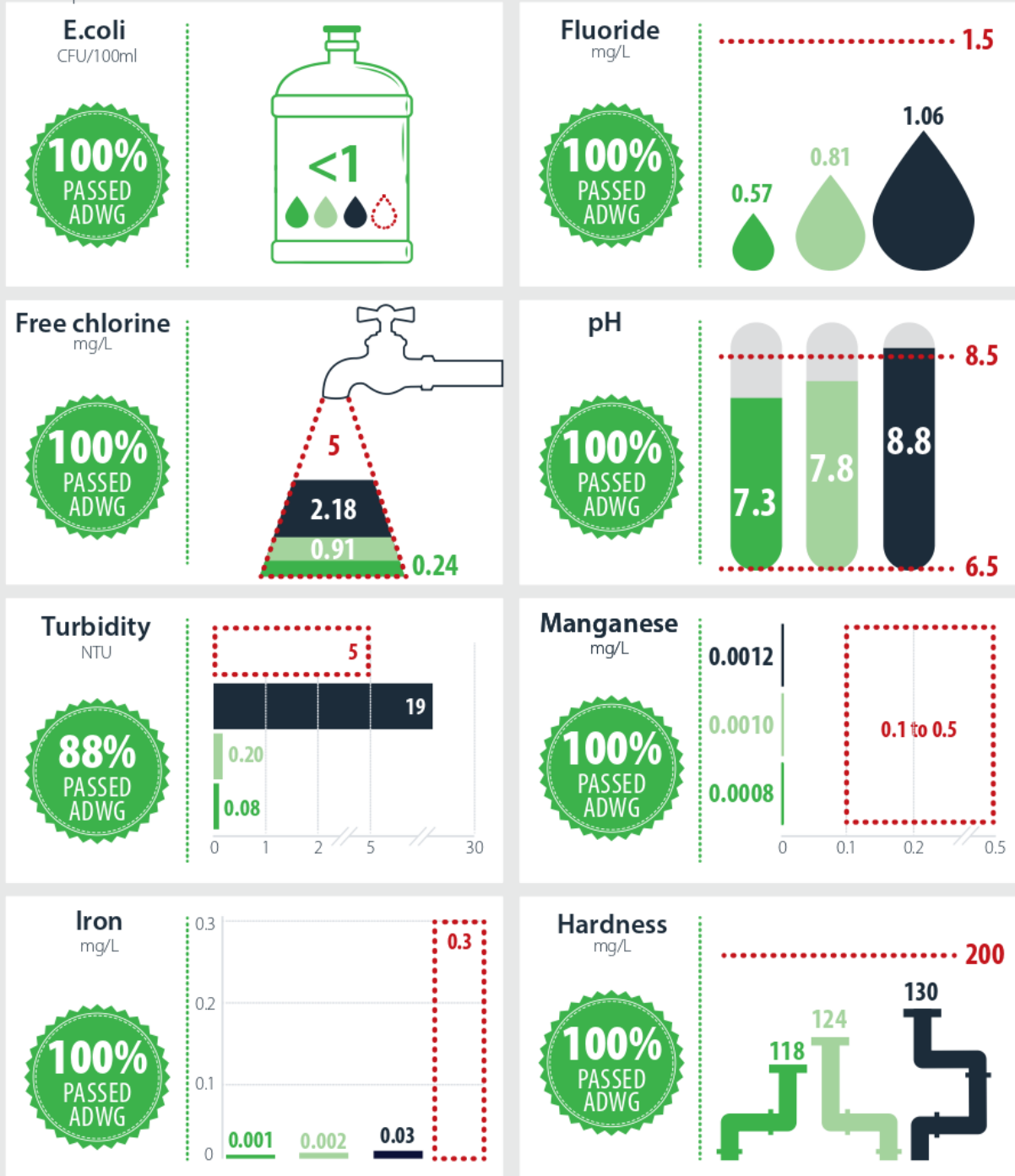


Source: Results from Weekly Verification monitoring – NSW Health Database

DRINKING WATER RESULTS – GULGONG

..... Australian Drinking Water Guideline (ADWG) Value ■ Minimum ■ Median ■ Maximum

Note: Graphs not to scale

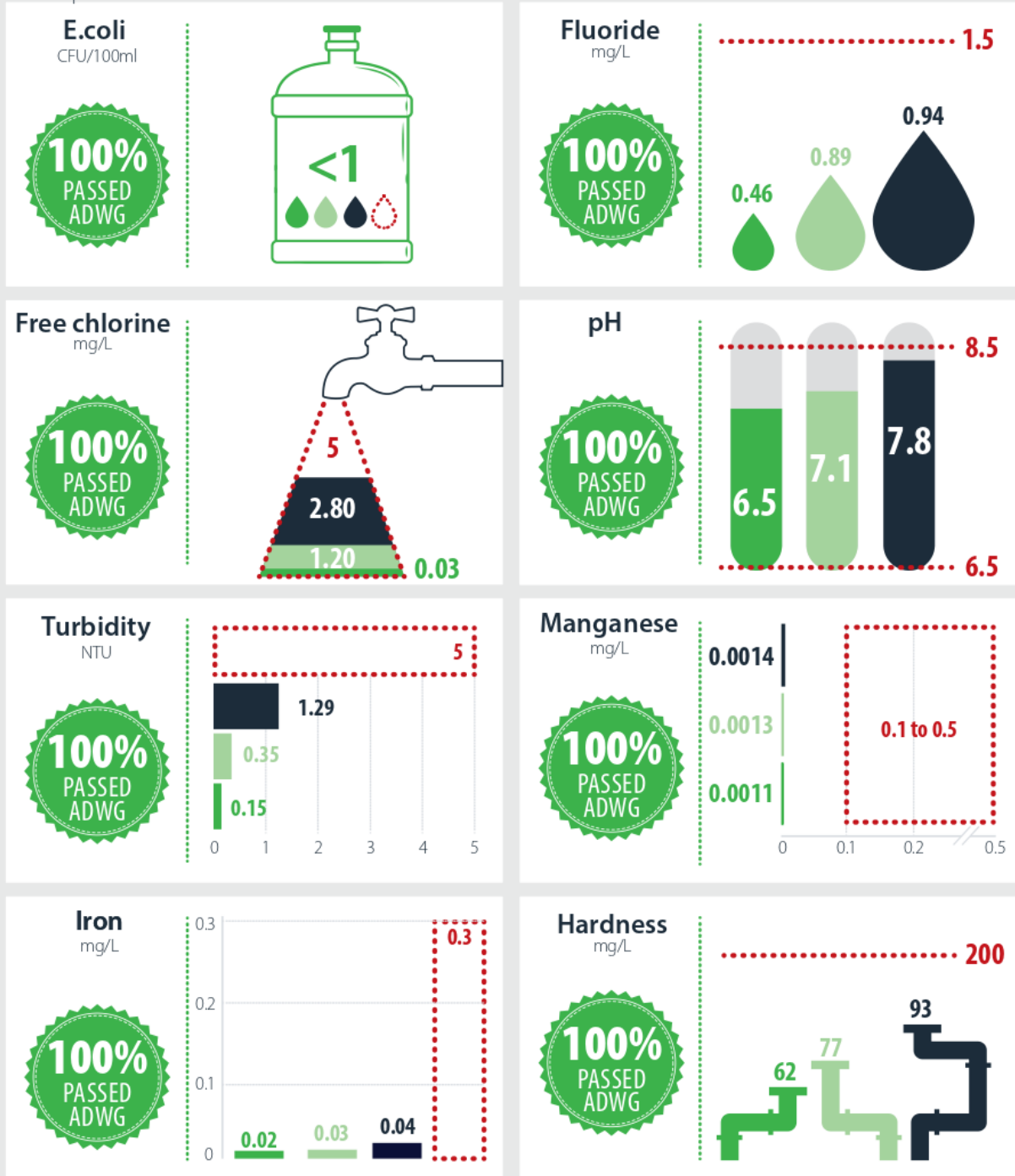


Source: Results from Weekly Verification monitoring – NSW Health Database

DRINKING WATER RESULTS – RYLSTONE

..... Australian Drinking Water Guideline (ADWG) Value ■ Minimum ■ Median ■ Maximum

Note: Graphs not to scale



Source: Results from Weekly Verification monitoring – NSW Health Database

Drinking water

Council provides drinking water to communities within Mudgee, Gulgong, Rylstone, Kandos, Charbon and Clandulla. Council complies with its own Drinking Water Management System (DWMS), meeting the requirements of the Public Health Act 2010 and its regulations, and the Australian Drinking Water Guidelines.

OVERVIEW

Council is committed to providing its residents with safe, secure, reliable and high quality drinking water. To ensure this, Council's Drinking Water Management System requires a range of quality, safety and aesthetic tests be regularly undertaken from the point of collection to the household tap.

WATER MONITORING

A comprehensive monitoring program from catchment to tap has been developed in consultation with NSW Health, testing over 35 characteristics including turbidity, colour, micro-organisms and chemicals.

Samples are analysed on site and at accredited laboratory service providers including the NSW Forensic and Analytical Science Service. Monitoring occurs online, daily, weekly, monthly and annually (depending on criticality).

Samples are taken from Rylstone Dam, Cudgegong River, Burrundulla Bores, at the three water filtration plants, and from 38 locations through our water distribution systems.

WHAT IS THE AUSTRALIAN DRINKING WATER GUIDELINES?

- An authoritative reference on what defines safe, good quality water, how it can be achieved and how it can be assured
- A nationally accepted framework for good management of drinking water supplies based on the best available scientific evidence
- Designed to assure fit for purpose drinking water at its point of use
- Cover safety and aesthetic quality of drinking water through a range of values

COUNCIL'S REPORT CARD



Health results

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Aesthetic results

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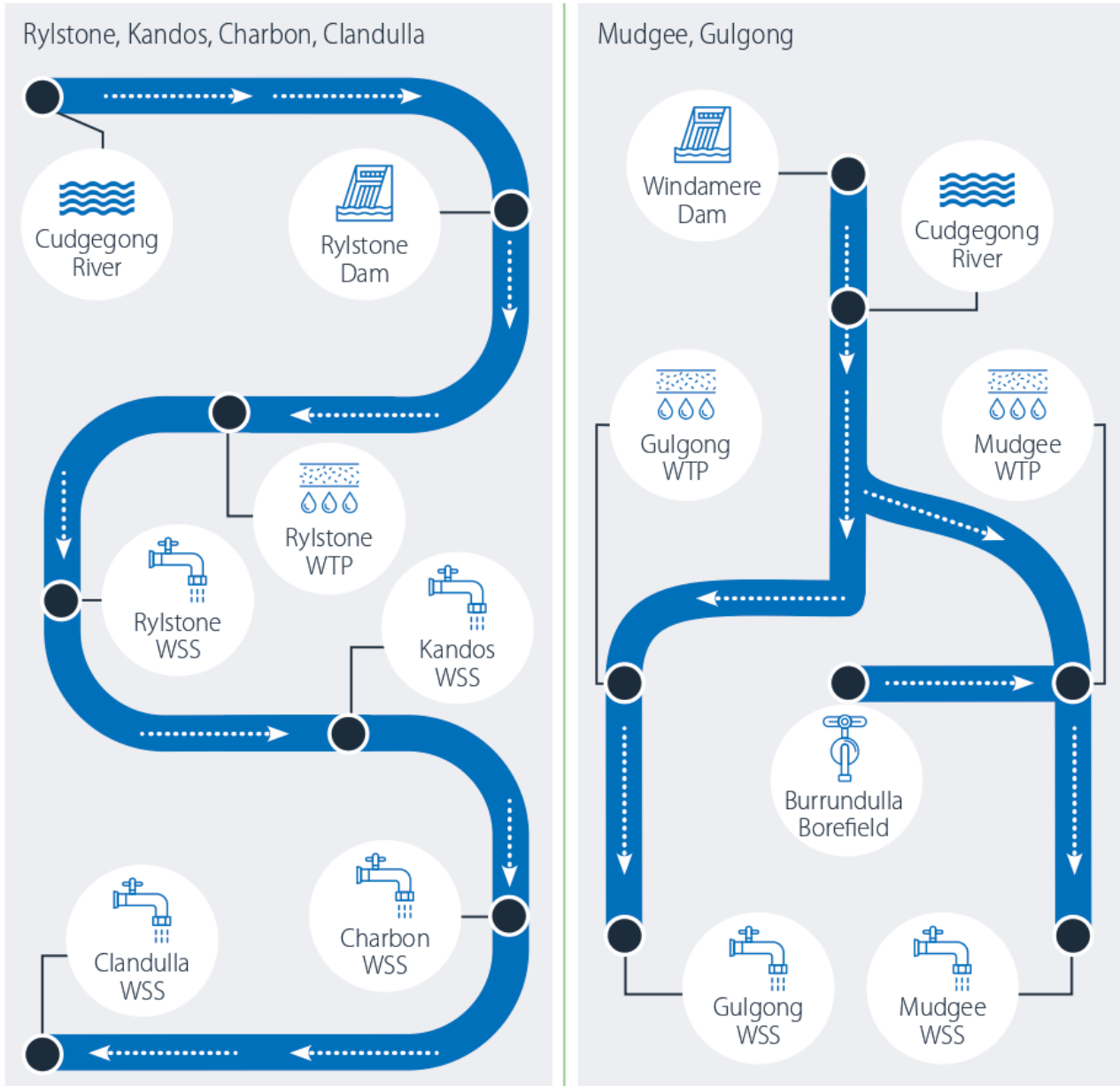
Events and improvements

- Online turbidity meter has been installed upstream from all three treatment plants
- Council committed in 2016 to replacing all cast iron mains in Gulgong over a 10 year period. To date, 12km have been replaced, with 5km to be replaced by 2026



Mudgee Water Treatment Plant

MID-WESTERN REGION WATER SUPPLY SYSTEMS FLOWCHART



WSS = Water Supply System; WTP = Water Treatment Plant

= Source; = Collection; = Treatment; = Distribution

FOR MORE INFORMATION

Visit Council's website midwestern.nsw.gov.au
 Council's Water and Sewer Team are available to assist on 6378 2850 or at council@midwestern.nsw.gov.au

DISCLAIMER

The information contained in this fact sheet is general in nature and should not be relied upon as the complete source of information to be considered. This document is not intended as a substitute for consulting relevant legislation or for obtaining appropriate professional advice relevant to your particular circumstances.