

Item 10: Operations

10.1 Drinking Water Annual Report and Factsheet

REPORT BY THE WATER QUALITY OFFICER
TO 15 MARCH 2023 ORDINARY MEETING
GOV400103, 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.**
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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.

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.

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 two 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 highlights the need to promote community participation in decision-making processes and ensures that community expectations are considered. Having these two documents available on the website will give the community information on their drinking water quality.

Legislation

Not Applicable

Financial implications

Not Applicable

Associated Risks

Not Applicable

FRANCOISE PIELTAIN
WATER QUALITY OFFICER

JULIAN GEDDES
DIRECTOR OPERATIONS

14 February 2023

Attachments: 1. Drinking Water Annual Report 2022.
2. Drinking Water Factsheet.

APPROVED FOR SUBMISSION:

BRAD CAM
GENERAL MANAGER

ANNUAL DRINKING WATER QUALITY REPORT 2022

MID-WESTERN REGIONAL COUNCIL



OVERVIEW

Council's report card



Health

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



Aesthetic

100% compliance with ADWG achieved for Mudgee and Gulgong, and 98% for Rylstone.



Events and improvements

- The unusual amount of rainfall in the region led to a precautionary boil water alert in Rylstone (Mar 22) as well as taste and odour issues in Mudgee and Gulgong (Dec 22)
- Unlined cast iron mains in Gulgong are causing occasional clarity issues. Replacement of mains is progressing well with around 12.5km replaced to date
- PLC board and Ferric delivery system upgraded at Mudgee water plant. Activated carbon and soda ash delivery systems upgraded at Rylstone water plant
- Mudgee fluoride delivery system failed and is currently not operational due to WHS concerns. System audited at the end of 2022 and now at planning stage to be replaced, followed by replacement of Gulgong and Rylstone fluoride systems

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 issues.



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.



Hardness

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



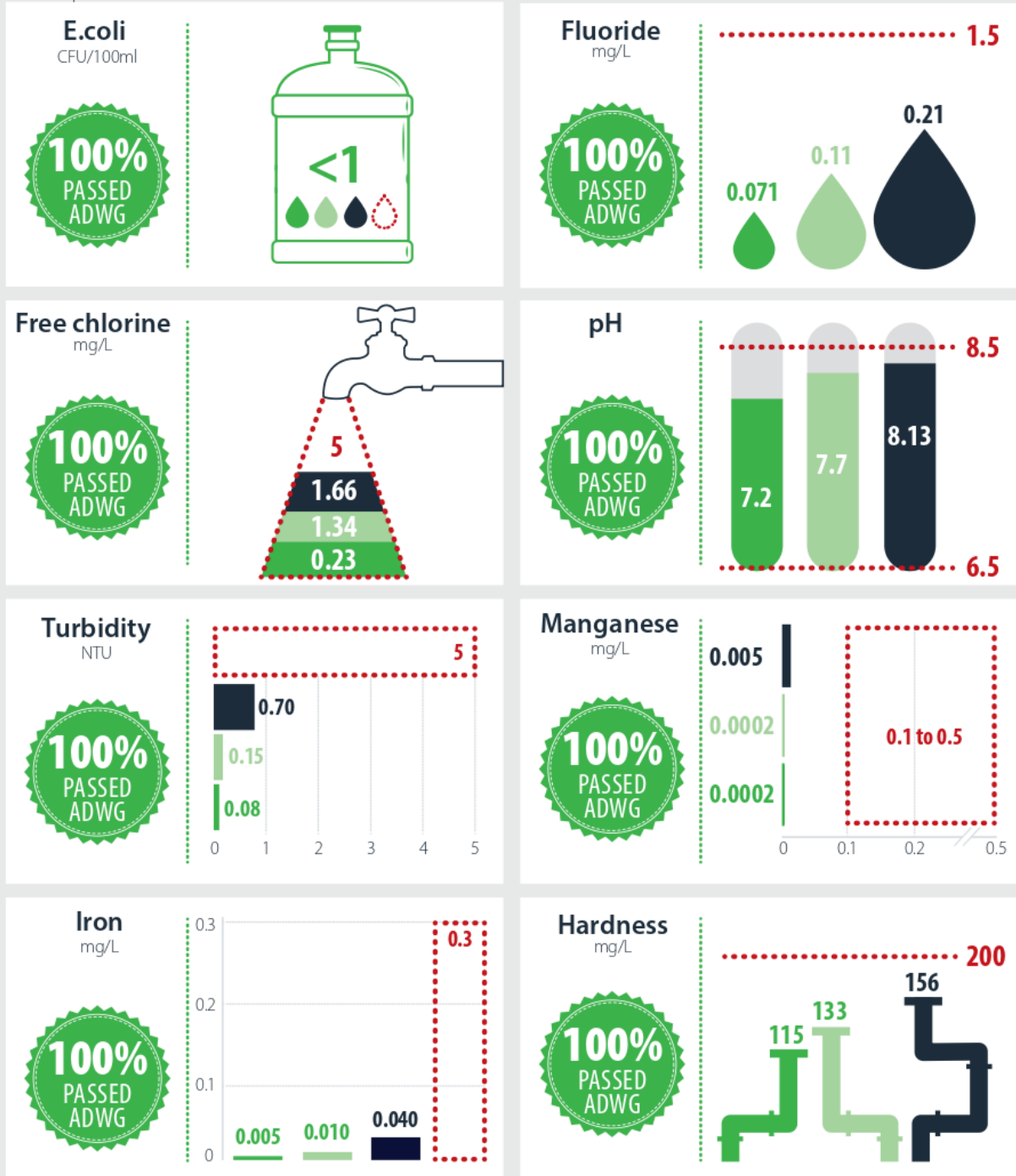
Manganese

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

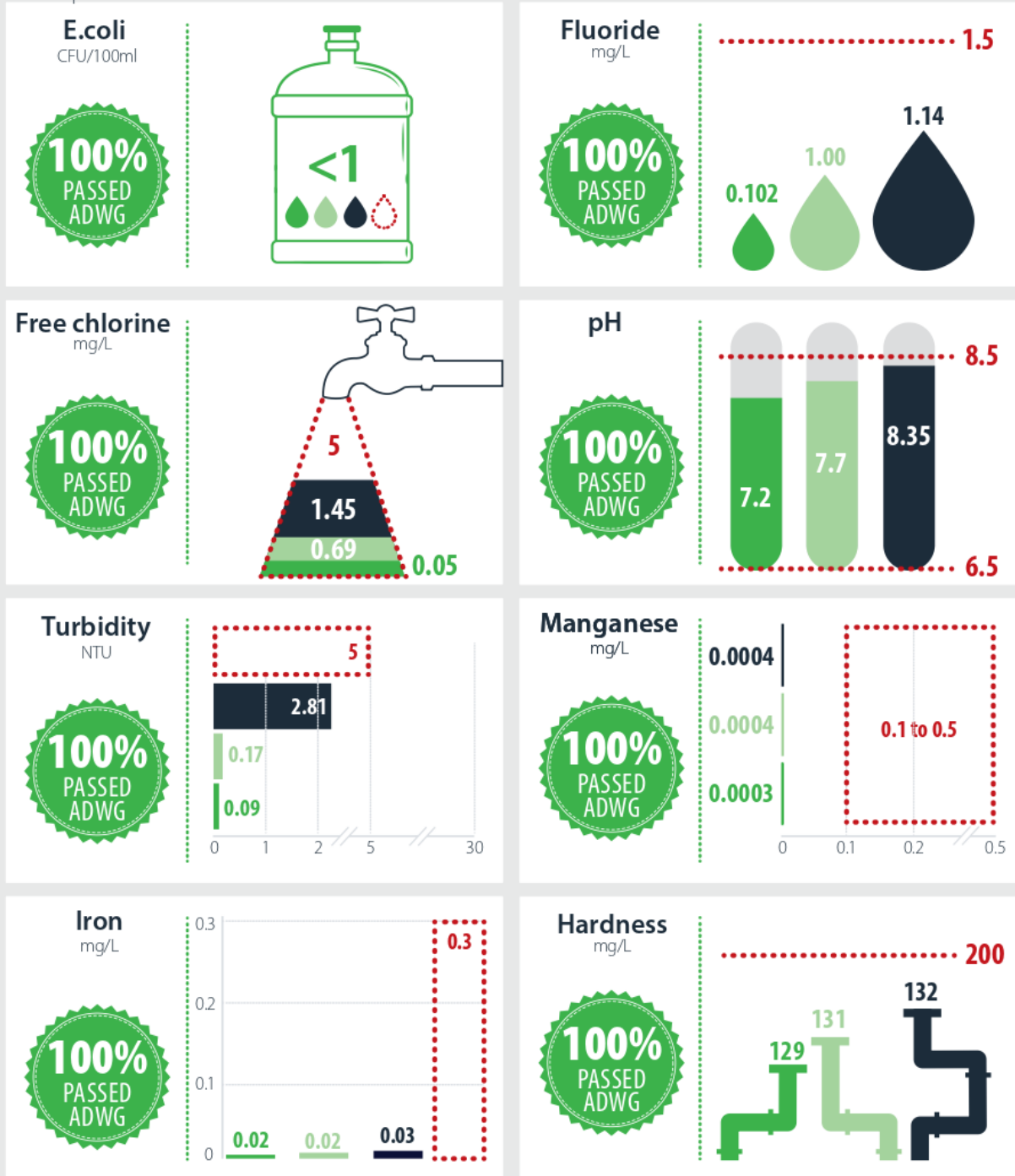


Source: Results from Weekly Verification monitoring – NSW Health Database

DRINKING WATER RESULTS – GULGONG

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

Note: Graphs not to scale

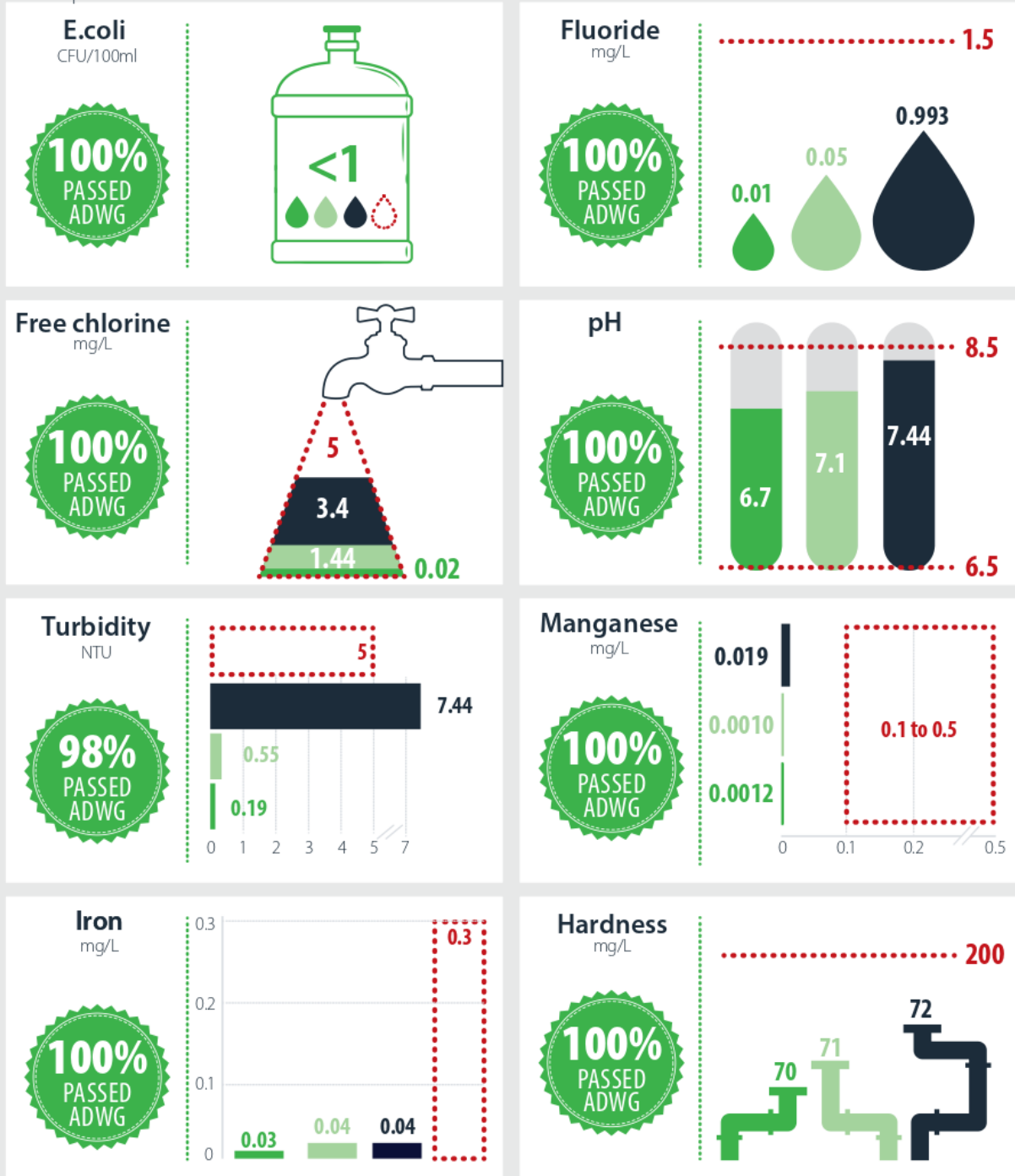


Source: Results from Weekly Verification monitoring – NSW Health Database

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

100% compliance with ADWG achieved.



Aesthetic results

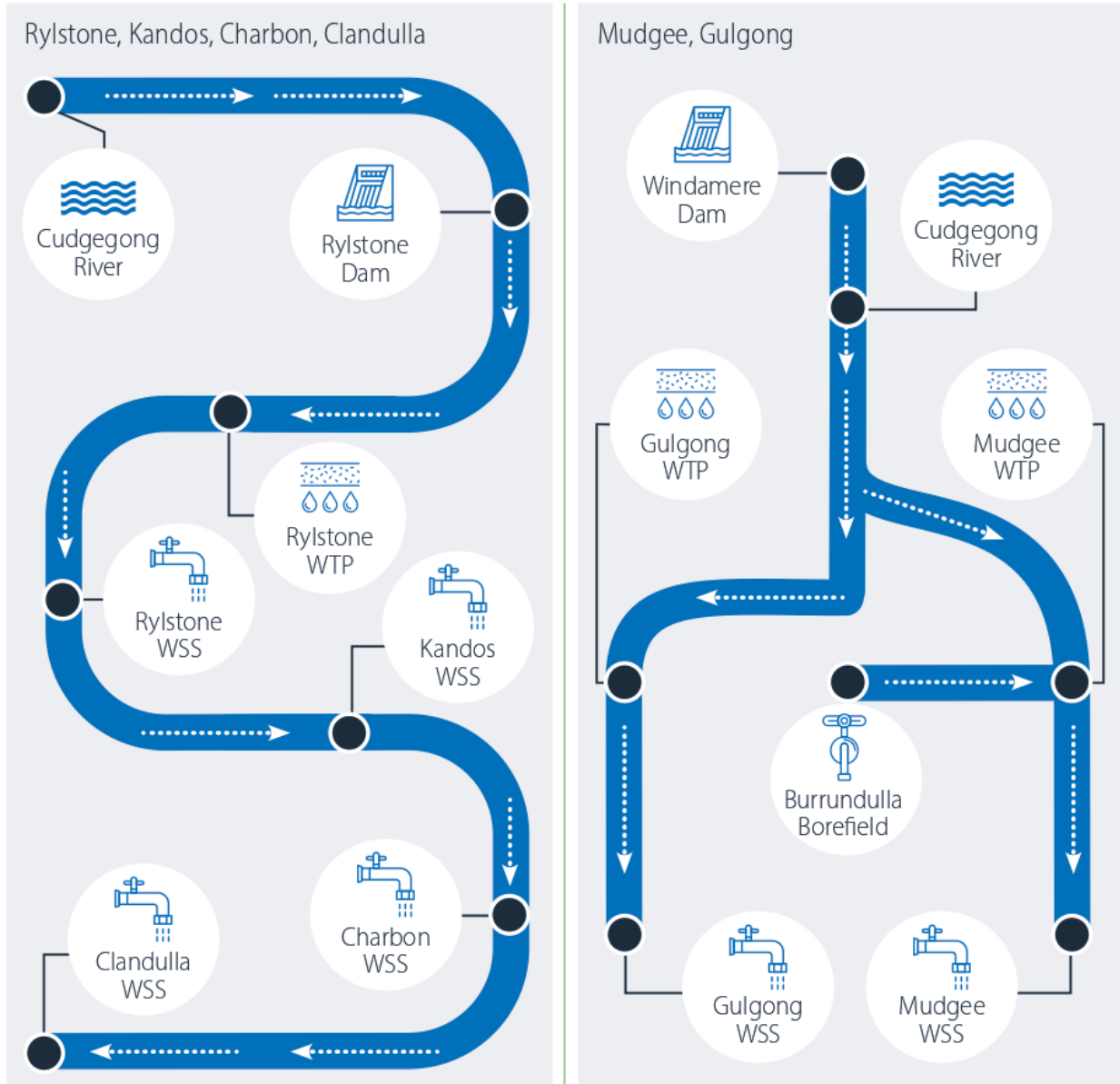
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Events and improvements

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- Unlined cast iron mains in Gulgong are causing occasional clarity issues. Replacement of these mains is progressing well with around 12.5km replaced to date
- In 2022, the PLC board and Ferric delivery system have been upgraded at Mudgee water plant. The activated carbon and soda ash delivery systems were also upgraded at Rylstone water plant
- Mudgee fluoride delivery system failed and is currently not operational due to WHS concerns. The system was audited at the end of 2022 and now at planning stage to replace the Mudgee system followed by replacement of the Gulgong and Rylstone systems

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.