



# **Drinking Water Quality Management Plan Report**

*McKinlay Shire Council*

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**2021-2022**

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# 1 Introduction

This annual report has been prepared in accordance with section 142 of the *Water Supply (Safety and Reliability) Act 2008* (the Act). The purpose of this annual report is to provide the Water Supply Regulator with information on the overall performance of the DWQMP for the period 1 July 2021 to 30 June 2022.

McKinlay Shire Council is a registered service provider with identification (SPID) number 00084.

The report includes the activities undertaken over the financial year in the operation of our drinking water service to protect public health, drinking water quality summaries and summary of our performance implementing our approved DWQMP.

## 2 Summary of scheme/s operated

McKinlay Shire Council (MSC) is responsible for the management of four (4) water supply systems, these include;

- Julia Creek
- McKinlay
- Kynuna; and
- Nelia

The water supply for each township is sourced from deep bores tapping the Great Artesian Basin (GAB). Julia Creek, McKinlay and Nelia do not have any treatment processes.

The Kynuna Township has a multistage filtration system installed to minimise the level of iron and manganese in the town's water supply. This system consists of an activate medium and membrane filtration network that achieves a high level of suspended mineral filtration.

A summary of the current demands on these schemes is provided in Table 1 below.

**Table 1 – List of Drinking Water Schemes**

Scheme Name and Community Served	Operator	Current Figures				Projected in 10 years		
		Permanent Population served	Seasonal & Transit Population	Connections	Demand (kL/d)	Permanent Population Served	Connections	Demand (kL/d)
Julia Creek	MSC	*511	<5000	359	**1,685	511	359	***1,685
McKinlay	MSC	*12	<150	56	**105	12	56	***105
Kynuna	MSC	*14	<75	35	**186.9	14	31	***14
Nelia	MSC	*2	<20	8	**13.6	2	8	***15

\* Permanent Population served is based on 2016 census data.

\*\* Demand (kL/d) Current Figures include seasonal and transit population usages.

\*\*\* Demand (kL/d) Projected in 10 years figures are not altered at this stage due to economic downturn. Figures will be updated in further reviews

### **3 DWQMP implementation**

Council conducted its regular review of the DWQMP in March 2022. A part of this review was to address the two additional conditions set out in the Department of Regional Development, Manufacturing and Water, Water Supply Regulations ('the regulator') Information Requirement Notice issued on the 15 February 2021.

All amendments made to the plan are outlined in Section 7 of this report.

## 4 Verification monitoring - water quality information and summary

Council undertake sampling on all four (4) water supply schemes monthly and send through the samples to Townsville Water Laboratory for analysing. A summary of the results is identified in the table below:

**Table 2 – Drinking water quality performance - verification monitoring**

Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
All Schemes	E. coli	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	Less than 1 E. coli/100ml	One (1) – McKinlay February 2022	*Further information in relation to noncompliant sample is discussed in Section 5 of this report.
All Schemes	Thermotolerant Coliforms	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	TC should not be detected in any 100ml sample of drinking water. If detected, immediate investigation of potential sources of faecal contamination should occur	One (1) Kynuna  Five (5) McKinlay	*Majority of the TC detections were low. Investigations into these detections found that cross contamination was the likely cause.

Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
All Schemes	pH	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	6.5 – 8.5 Aesthetic Limit	Two (2)	*Detected in McKinlay samples. Limits are just over the max aesthetic limit of 8.5
All Schemes	TDS	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	No guideline value (good palatability, should not exceed 600mg/L)	Nil	*Detected in McKinlay Bore samples. Limits are just over 600mg/L
All Schemes	Colour	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	15HU Aesthetic Limit	Six (6)	*Detected in Kynuna samples. Exceedance limits range from 17-27 HU.
All Schemes	Turbidity	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month	5NTU	Twenty-two (22)	*Detected in Kynuna samples. Filtration has assisted in minimising levels.

Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
		<b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	Aesthetic Limit		
All Schemes	Aluminium	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	0.2mg/L Aesthetic Limit	Nil	Nil
All Schemes	Silica	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	80mg/L Aesthetic Limit	Nil	Nil
All Schemes	Boron	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	4mg/L Aesthetic Limit	Nil	Nil

Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
All Schemes	Ammonia	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	0.5mg/L Aesthetic Limit	Eight (8)	*Detected in McKinlay samples. Limits are just over 0.5mg/L
All Schemes	Iron	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	0.3mg/L Aesthetic Limit	Twenty-five (25)	*Detected in Kynuna Township Samples. Filtration has assisted in minimising levels. *Detected in Nelia in Apr 22 and Julia Creek in Jan 22
All Schemes	Manganese	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	0.5mg/L Health Limit  0.1mg/L Aesthetic Limit	One (1) Health Kynuna Bore – <b>raw source water</b>  Twenty-two (22) Aesthetic	*Detected primarily in Kynuna bore samples. Detected in the reticulation samples in Feb 22 and Jun 22. *Detected in Nelia samples with limits just over 0.1mg/L.



Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
All Schemes	Sodium	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	180mg/L Aesthetic Limit	Seventeen (17)	*Detected in McKinlay samples. Exceedance limits vary from month to month and can range from 186-237
All Schemes	Chloride	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	250mg/L Aesthetic Limit	Nil	Nil
All Schemes	Copper	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	2mg/L Health Limit 1mg Aesthetic Limit	Nil	Nil

Scheme name	Parameter	No. of samples required to be collected (as per the approved DWQMP)	No. of samples actually collected and tested	Water quality criteria (i.e ADWG health guideline value)	No. of non compliant samples	Comments
All Schemes	Fluoride	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	<b>Julia Creek</b> 2 per month <b>McKinlay</b> 2 per month <b>Kynuna</b> 2 per month <b>Nelia</b> 1 per month	1.5mg/L Health Limit	Twenty-four (24)	*Julia Creek Township has limits around 3mg/L and has an open incident with the Regulator. Monthly testing results are sent through by email. Exceedances over 3mg/l are updated through Council's website.

**Table 3. *E. coli* compliance with annual value – Julia Creek, McKinlay, Kynuna & Nelia**

Drinking water scheme: Julia Creek

Year	2021 to 2022											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	2	2	2	2	2	2	2	2	2	2	2	2
No. of samples collected in which <i>E. coli</i> is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12 month period	24	24	24	24	24	24	24	24	24	24	24	24
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compliance with 98% annual value	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Drinking water scheme: McKinlay

Year	2021 to 2022											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	2	2	2	2	2	2	2	2	2	2	2	2
No. of samples collected in which <i>E. coli</i> is detected (i.e. a failure)	0	0	0	0	0	0	0	3	0	0	0	0
No. of samples collected in previous 12 month period	32	32	24	24	24	24	24	24	24	24	24	24
No. of failures for previous 12 month period	2	2	0	0	0	0	0	3	3	3	3	3
% of samples that comply	93.8%	93.8%	100.0%	100.0%	100.0%	100.0%	100.0%	87.5%	87.5%	87.5%	87.5%	87.5%
Compliance with 98% annual value	NO	NO	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO

Drinking water scheme: Kynuna

Year	2021 to 2022											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	2	2	2	2	2	2	2	2	2	2	2	2
No. of samples collected in which <i>E. coli</i> is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12 month period	24	24	24	24	24	24	24	24	24	24	24	24
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compliance with 98% annual value	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Drinking water scheme: Nelia

Year	2021 to 2022											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	1	1	1	1	1	1	1	1	1	1	1	1
No. of samples collected in which <i>E. coli</i> is detected (i.e. a failure)	0	0	0	0	0	0	0	0	0	0	0	0
No. of samples collected in previous 12 month period	12	12	12	12	12	12	12	12	12	12	12	12
No. of failures for previous 12 month period	0	0	0	0	0	0	0	0	0	0	0	0
% of samples that comply	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compliance with 98% annual value	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

## 5 Incidents reported to the regulator

The following section summarises incidents notified to the Regulator in accordance with sections 102 and 102A of the Act, detailing:

- Incidents reported during the year, including the preventive actions that were undertaken

A summary of incidents is detailed in the table below:

**Table 4 – Incidents reported to the regulator**

Incident date	Incident Reference	Scheme / location	Parameter / issue	Preventive actions
01/02/2022	DWI-84-22-09453	McKinlay Bore, Landsborough Highway, MCKINLAY QLD 4823	E.coli	<ul style="list-style-type: none"> <li>• Boil Water Alert was issued to the Community as a precaution only due to the detection only being from the bore sample.</li> <li>• Regular flushing of lines.</li> <li>• Inspections were undertaken of storage tank and piping to ensure it was vermin proof.</li> <li>• Follow up sampling was undertaken as required.</li> <li>• Investigations into the source of contamination found that the sample was taken from the tap installed on a stock line only that has very limited use.</li> <li>• New tap installed directly off the bore for future sampling.</li> <li>• QLD Health requested Council collect regular fortnightly samples to show that E. coli contamination has been eliminated.</li> </ul> <p><b>*PLEASE NOTE THIS INCIDENT WAS CLOSED ON THE 9 JUNE 2022</b></p>

## 6 Customer complaints

McKinlay Shire Council received a total of two (2) complaints over the course of the 2021-2022 Financial Year. These were relating to dirty water and low pressure in the Kynuna Township. The media in the filters were changed in March 2022 which have stopped the dirty water/low pressure complaints. Further treatment options are currently being considered.

All registered complaints were addressed in a timely manner and were closed off.

**Table 5 – List of customer complaints about water quality**

<b>Scheme</b>	<b>Health concern</b>	<b>Dirty water</b>	<b>Taste and odour</b>	<b>Low Pressure</b>
Kynuna		2		1
<b>Total</b>		<b>2</b>		<b>1</b>



## 7 DWQMP review outcomes

Council conducted its regular review of the DWQMP in March 2022. A part of this review was to address the two additional conditions set out in the Department of Regional Development, Manufacturing and Water, Water Supply Regulations ('the regulator') Information Requirement Notice issued on the 15 February 2021.

The final DWQMP was submitted to the Department on the 29 April 2022. The following sections of the plan were reviewed and amended:

- \* Registered service details - Population figures
- \* Details of infrastructure for providing the service - Updated schematics, infrastructure details and water scheme details
- \* Identify hazards and hazardous events - Updates to complaints, water quality sampling tables and organisation chart
- \* Information gathering – water quality and catchment characteristics – Updates to Appendix C, Water Monitoring Data
- \* Assessment of Risks - Risk Assessment tables created and updated for all four schemes
- \* Risk management measures/RMIP - Risk Management Improvement Program updated – see table 6 below
- \* Operation and maintenance procedures - Operational procedures reviewed and updated where appropriate
- \* Management of incidents and emergencies – Updates to Appendix D, Incident & Emergency Response Plan
- \* Service wide support – information management, Operational monitoring and Verification monitoring – minor amendments to text
- \* Updates to Appendix E – Water Sampling Locations
- \* Updates to Appendix F – Drinking Water Quality Policy

Email Acknowledgment was received from the Department on the 27 May 2022 advising that Council's application was received and is currently being considered.

Below is a copy of the updated Risk Management Improvement Program.

**Table 6 – Risk Management Improvement Program**

Risk Assessment Item No. (if applicable)	Scheme component / sub-component	Hazard/ hazardous event	Priority	Action(s)			Target date/s	Estimated cost  (not required by OWSR but important for DWSP)	Responsibility
				interim	short-term	long-term			
JC01, K01, M01, N01	Julia Creek, Kynuna, McKinlay and Nelia	Bacteria and viruses in water / Contamination of water	Medium	Incubator to be calibrated prior to commencement of testing	Training for WSO  Purchasing of Colilert Sachets	Implement monthly Colilert sampling and additional sampling during any events	<b>Interim</b>  November 2022  <b>Short-term</b>  January 2023  <b>Long-term</b>  February 2023	\$3000 / year	Environmental & Regulatory Services Team Leader
K02, K04	Kynuna	Contamination/Damaged or inadequately cased bore  Bore Failure/Limited Supply	High	Funding received for construction of new bore	Tender documents released to market	Construction of new bore	<b>Interim</b>  Completed  <b>Short-term</b>  Completed – September 2022  <b>Long-term</b>  End of February	\$450,000	Director of Engineering and Environmental Regulatory Services

Risk Assessment Item No. (if applicable)	Scheme component / sub-component	Hazard/ hazardous event	Priority	Action(s)			Target date/s	Estimated cost (not required by OWSR but important for DWSP)	Responsibility
				interim	short-term	long-term			
							2023		
JC03, M02, N02	Julia Creek, McKinlay and Nelia	Contamination/Damaged or inadequately cased bore	Low	Daily and monthly checks	Repair damage as required	Bore replacement if required	<b>Interim</b> Ongoing <b>Short-term</b> When required <b>Long-term</b> When required		Water & Sewerage Officer
JC04, K03, M03, N03	Julia Creek, Kynuna, McKinlay and Nelia	Contamination/Loss of Supply/Sabotage/Vandalism	Low	Nil	Daily and monthly checks	Repair damaged security fencing as required	<b>Interim</b> Nil <b>Short-term</b> Ongoing		Water & Sewerage Officer

Risk Assessment Item No. (if applicable)	Scheme component / sub-component	Hazard/ hazardous event	Priority	Action(s)			Target date/s	Estimated cost (not required by OWSR but important for DWSP)	Responsibility
				interim	short-term	long-term			
							<b>Long-term</b> When required		
K06, M06	Kynuna and McKinlay	Contamination/Poor Water Quality/Vermin	Medium	Nil	Monthly checks	Repair bird proofing as required	<b>Short-term</b> Ongoing <b>Long-term</b> As required		Water & Sewerage Officer
K05	Kynuna	High iron and manganese levels	High	Regular cleaning and/or replacement of cartridge filters	Replacement of media in IRS4000 filters	Replacement of media in IRS4000 filters  Replacement of riser pipe screen  Consider additional treatment	<b>Interim</b> Ongoing <b>Short-term</b> Completed in March 2022 <b>Long-term</b> Media – 2 to 3 years  Riser pipe screen – every 12	\$6000/annum for purchase of media and riser pipe screen	Director of Engineering and Environmental Regulatory Services / Environmental & Regulatory Services Team Leader

Risk Assessment Item No. (if applicable)	Scheme component / sub-component	Hazard/ hazardous event	Priority	Action(s)			Target date/s	Estimated cost (not required by OWSR but important for DWSP)	Responsibility
				interim	short-term	long-term			
						options	months  Consider additional treatment options – 2023		
NA	Kynuna	Fall from Heights / Contamination of Water	High	Nil	Tender documents to be released to market	New Platform to be erected around high-level tank to enable proper visual and internal inspections	<b>Short-term</b>  End of October 2022  <b>Long-term</b>  End of December 2022	\$50,000	Director of Engineering and Environmental Regulatory Services
K07, M07	Kynuna and McKinlay	Storage Tank Failure/Structural damage to tank	Medium	Nil	Continue to monitor storage tank condition on a daily/monthly basis	Capital Replacement if required	<b>Short-term</b>  Ongoing  <b>Long-term</b>  As required		Director of Engineering and Environmental Regulatory Services / Environmental & Regulatory Services Team Leader

Risk Assessment Item No. (if applicable)	Scheme component / sub-component	Hazard/ hazardous event	Priority	Action(s)			Target date/s	Estimated cost (not required by OWSR but important for DWSP)	Responsibility
				interim	short-term	long-term			
JC09, K10, M09	Julia Creek, Kynuna and McKinlay	Storage Tank Failure/Structural damage to tank	Medium	Nil	Continue to monitor storage tank condition on a daily/monthly basis	Capital Replacement if required	<b>Short-term</b> Ongoing  <b>Long-term</b> As required		Director of Engineering and Environmental Regulatory Services / Environmental & Regulatory Services Team Leader
JC10, JC14, JC15, JC18  K11, K13, K14, K15, K16, K19  M10, M12, M13, M14, M15, M18  N05, N07, N08, N09, N10, N12	Julia Creek, Kynuna, McKinlay and Nelia	Documentation/Operating Procedures	Medium	Amendments made to current procedures to reflect current operations	Annually review procedures to ensure accurate content	Continue to review procedures as required	<b>Interim</b> Completed – March 2022  <b>Short-term</b> Ongoing  <b>Long-term</b> Ongoing		Environmental & Regulatory Services Team Leader / Water and Sewerage Officer

Risk Assessment Item No. (if applicable)	Scheme component / sub-component	Hazard/ hazardous event	Priority	Action(s)			Target date/s	Estimated cost (not required by OWSR but important for DWSP)	Responsibility
				interim	short-term	long-term			
JC11, K12, M11, N06	Julia Creek, Kynuna, McKinlay and Nelia	Reticulation Network/Water Quality/Build-up of sediments and slimes	High	Monthly HPC Testing  Flushing when required	Establish Air Souring Program	Plan for Regular Air Scouring Program	<b>Interim</b>  Ongoing  <b>Short-term</b>  November 2022  <b>Long-term</b>  Ongoing	\$20,000	Director of Engineering and Environmental Regulatory Services / Environmental & Regulatory Services Team Leader
K08	Kynuna	Storage Tank/Water Quality/Build-up of sediments and slimes	Medium	Annual Cleaning Program	Audit annual cleaning program	Continue Annual Cleaning Program for Storage Tanks	<b>Interim</b>  November 2022  <b>Short-term</b>  Ongoing  <b>Long-term</b>  Ongoing		Water and Sewerage Officer

Risk Assessment Item No. (if applicable)	Scheme component / sub-component	Hazard/ hazardous event	Priority	Action(s)			Target date/s	Estimated cost (not required by OWSR but important for DWSP)	Responsibility
				interim	short-term	long-term			
JC16, K17, M16	Julia Creek, Kynuna and McKinlay	Customer Complaints/Flow variability, inadequate pressure, water quality	High	Nil	Monitor complaints	Continue to monitor and follow up on causes of complaints as per procedures	<b>Short-term</b> Ongoing  <b>Long-term</b> Ongoing		Environmental & Regulatory Services Team Leader
JC19, K20, M19, N13	Julia Creek, Kynuna, McKinlay and Nelia	Inadequately trained staff	High	General induction covering procedures performed for new staff members	Enrol WSO in Certificate III in Water Industry Operations Course	Additional Training when required	<b>Interim</b> Completed  <b>Short-term</b> Completed in April 2022  <b>Long-term</b> Ongoing		Environmental & Regulatory Services Team Leader
JC12	Julia Creek	Reticulation/Contamination/Aged or corroded infrastructure	High	Ongoing Monitoring	Section replacements  1 <sup>st</sup> section – Goldring Street	Full Replacement	<b>Interim</b> Ongoing  <b>Short-term</b> 2023  <b>Long-term</b> 2030	\$100,000/annum	Director of Engineering and Environmental Regulatory Services



Risk Assessment Item No. (if applicable)	Scheme component / sub-component	Hazard/ hazardous event	Priority	Action(s)			Target date/s	Estimated cost (not required by OWSR but important for DWSP)	Responsibility
				interim	short-term	long-term			
JC13	Julia Creek	Reticulation/Contamination/Infiltration and ingress from backflow	Medium	Nil	Installed backflow connections to 100 properties	Capital Works Program for remaining household connections	<b>Short-term</b> Completed – March 2021 <b>Long-term</b> 2023	\$100,000	Director of Engineering and Environmental Regulatory Services
NA	Julia Creek, Kynuna, McKinlay and Nelia	Asset Management	High	Obtain funding for the development of Asset Management Plans for all infrastructure	Tender documents released to market	Asset Management Plan developed	<b>Interim</b> Completed – August 2022 <b>Short-term</b> October 2022 <b>Long Term</b> January 2023	\$147,500	Director of Engineering and Environmental Regulatory Services

## **8 DWQMP audit findings**

No audits were undertaken during the 2021-2022 Financial Year.

Pursuant to subsection 99(2)(c) of the Water Supply (Safety and Reliability) Act 2008, regular audits of the approved Drinking Water Quality Management Plan are required at specified intervals. The next regular audit of Council's plan must be completed by **12 March 2025**.