



Drinking Water Quality Management Plan Report

McKinlay Shire Council

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SPID: 00084

2022-2023

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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 2022 to 30 June 2023.

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 submitted an amendment application to the Department of Regional Development, Manufacturing and Water (the regulator) on the 12 April 2022. The Regulator issued Council with an Information Requirement Notice on the 11 July 2022 requesting additional information so that further consideration can be given to Council's amendment application. These are outlined in Section 7 of this report.

Council provided the requested information to the Regulator on the 16 September 2022.

The Department approved Council's amended DWQMP, version 4 on the 15 December 2022 subject to the following conditions:

- * Provide the regulator copies of the bore integrity and reservoir inspection reports undertaken for each of the schemes, on a quarterly basis, for the next 12 months, by email within 5 business days after each designated quarter ends; and
- * After re-implementing Colilert testing in inhouse laboratory in March 2023 and increasing E.coli monitoring frequency from April 2023, review and update the verification monitoring section of DWQMP and apply to the regulator for an amendment by agreement under section 99A of the Act, to incorporate these changes. In addition, please ensure to include lead and cadmium metals testing in the verification monitoring, as detailed in the DWQMP to be conducted annually.

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. Council commenced in house Colilert testing in June 2023.

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	<p>Julia Creek 2 per month *6 per month in June only</p> <p>McKinlay 2 per month *6 per month in June only</p> <p>Kynuna 2 per month *6 per month in June only</p> <p>Nelia 1 per month *2 per month in June only</p>	<p>Julia Creek 2 per month *6 per month in June only</p> <p>McKinlay 2 per month *6 per month in June only</p> <p>Kynuna 2 per month *6 per month in June only</p> <p>Nelia 1 per month *2 per month in June only</p>	Less than 1 E. coli/100ml	Nil	Nil
All Schemes	Thermotolerant Coliforms	<p>Julia Creek 2 per month *6 per month in June only</p>	<p>Julia Creek 2 per month *6 per month in June only</p>	TC should not be	One (1) Nelia	TC detections were low.

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
		McKinlay 2 per month <i>*6 per month in June only</i> Kynuna 2 per month <i>*6 per month in June only</i> Nelia 1 per month <i>*2 per month in June only</i>	<i>June only</i> McKinlay 2 per month <i>*6 per month in June only</i> Kynuna 2 per month <i>*6 per month in June only</i> Nelia 1 per month <i>*2 per month in June only</i>	detected in any 100ml sample of drinking water. If detected, immediate investigation of potential sources of faecal contamination should occur	One (1) Kynuna One (1) McKinlay	
All Schemes	pH	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	6.5 – 8.5 Aesthetic Limit	Ten (10)	*Detected in McKinlay samples. Limits are just over the max aesthetic limit of 8.5
All Schemes	Colour	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	15HU Aesthetic Limit	Nine (9)	*Detected in Kynuna samples. Exceedance limits range from 18-62 HU.

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	Turbidity	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	5NTU Aesthetic Limit	Fourteen (14)	*Detected in Kynuna samples. Filtration has assisted in minimising levels. Further treatment scheduled in late 2023
All Schemes	Aluminium	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	0.2mg/L Aesthetic Limit	Nil	Nil
All Schemes	Silica	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	80mg/L Aesthetic Limit	Nil	Nil
All Schemes	Boron	Julia Creek 2 per month McKinlay 2 per month Kynuna	Julia Creek 2 per month McKinlay 2 per month Kynuna	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
		2 per month Nelia 1 per month	2 per month Nelia 1 per month			
All Schemes	Ammonia	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	0.5mg/L Aesthetic Limit	Seven (7)	*Detected in McKinlay samples and Julia Creek sample. Limits are just over 0.5mg/L
All Schemes	Iron	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	0.3mg/L Aesthetic Limit	Twenty-four (24)	*Detected in Kynuna Township Samples. Filtration has assisted in minimising levels.
All Schemes	Manganese	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	0.5mg/L Health Limit 0.1mg/L Aesthetic Limit	Twenty-five (25) Aesthetic	*Detected primarily in Kynuna bore samples. Detected in the reticulation samples in Jan 23 and May 23. *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	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	180mg/L Aesthetic Limit	Twenty-three (23)	*Detected in McKinlay samples. Exceedance limits vary from month to month and can range from 183-240
All Schemes	Chloride	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	250mg/L Aesthetic Limit	Nil	Nil
All Schemes	Copper	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 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	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 1 per month	Julia Creek 2 per month McKinlay 2 per month Kynuna 2 per month Nelia 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	2022 to 2023											
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	6
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	28
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	2022 to 2023											
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
No. of samples collected	2	2	2	6	6	6	4	4	2	2	2	6
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	28	32	36	38	40	40	40	40	44
No. of failures for previous 12 month period	1	1	1	1	1	1	1	0	0	0	0	0
% of samples that comply	95.8%	95.8%	95.8%	96.4%	96.9%	97.2%	97.4%	100.0%	100.0%	100.0%	100.0%	100.0%
Compliance with 98% annual value	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES

Drinking water scheme: Kynuna

Year	2022 to 2023											
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	6
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	28
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	2022 to 2023											
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	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	12	12	12	12	12	12	12	12	12	12	12	13
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

No incidents were reported in the 2022-23 Financial Year.

Council submitted Investigation Reports for failure to meet E. coli 98% rolling compliance value in McKinlay and Julia Creek. Council has maintained 100% compliance for the 2022-23 Financial Year in Julia Creek and has maintained 100% compliance in McKinlay since February 2023.

6 Customer complaints

McKinlay Shire Council received a total of three (3) complaints over the course of the 2022-2023 Financial Year. These were relating to dirty water and low pressure in the Kynuna Township and low pressure in Julia Creek.

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

Table 5 – List of customer complaints about water quality

Scheme	Health concern	Dirty water	Taste and odour	Low Pressure
Kynuna		1		1
Julia Creek				1
Total		1		2

7 DWQMP review outcomes

Council submitted an amendment application to the Department of Regional Development, Manufacturing and Water (the regulator) on the 12 April 2022. The Regulator issued Council with an Information Requirement Notice on the 11 July 2022 requesting additional information so that further consideration can be given to Council's amendment application. The conditions are as follows:

1. Statistically analyse water quality data and provide means value

Council's response: Section 3.1 of the DWQMP updated and includes new sampling data tables for each scheme

2. Update references to the department and the regulator in the plan to reflect the new Department of Regional Development, Manufacturing and Water (DRDMW)

Council's response: Section 3.1.3, Table 5.5 and Table 2.6 and Great Artesian Basin (GAB) Characteristics section of DWQMP updated to reflect the new title

3. Define "unacceptable" risk level in plan's risk assessment

Council's response: Amended first paragraph of Section 5.1 and included defined acceptable risk levels table and minor changes to Table 5.2

4. Define what is meant by "unserviceable storages" and clarify how reservoir inspection and maintenance can be carried out on these storages

Council's response: The risk assessment tables for Julia Creek, Kynuna and McKinlay were amended to: "Storage Tank Failure" to replace "unserviceable storages". Council will continue to monitor the tanks conditions daily in Julia Creek and monthly in Kynuna and McKinlay and repair or provide capital investment as necessary

Other minor changes made to all risk assessment tables. All risks have been given an item number and new Risk Reduction actions have been developed for some items

RMIP section also updated to add these new risk reduction actions in Risk Assessment tables and updates to timeframes

5. Provide copies of the last two years of monthly inspection reports, as well as the most recent internal inspection reports for each of the treated water storages

Council's response: Checklists provided. Quality Assurance document sent for the refurbishment of the Julia Creek Water Tower

6. Provide "Appendix H" as mentioned in the amended DWQMP

Council’s response: This section of the plan has been removed and all references throughout the plan have been updated

7. State the “version number”, “date last reviewed” and the “process for maintaining the document” for all operational procedures listed in the plan

Council’s response: Table 5.2 Operational Procedures has been amended to include version numbers, date last reviewed, frequency of review and responsible position for review and implantation. 2 new paragraphs included under the table to reference when the procedures are reviewed, who reviews them and where they are located

8. Explain what is meant by the term “visual checks for turbidity” as listed in Operational Monitoring and Reporting Program

Council’s response: Amended to “turbidity” and the monitoring details have been updated. Other minor amendments made to the table

9. Update amended DWQMP to include newly adopted Drinking Water Policy V2

Council’s response: Amended policy has been included in plan

The Department approved Council’s amended DWQMP, version 4 on the 15 December 2022 subject to the following conditions:

- * Provide the regulator copies of the bore integrity and reservoir inspection reports undertaken for each of the schemes, on a quarterly basis, for the next 12 months, by email within 5 business days after each designated quarter ends; and
- * After re-implementing Colilert testing in inhouse laboratory in March 2023 and increasing E.coli monitoring frequency from April 2023, review and update the verification monitoring section of DWQMP and apply to the regulator for an amendment by agreement under section 99A of the Act, to incorporate these changes. In addition, please ensure to include lead and cadmium metals testing in the verification monitoring, as detailed in the DWQMP to be conducted annually.

Council commenced in house Colilert sampling in June 2023.

Below is a copy of the updated Risk Management Improvement Program (RMIP)

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
				short-term	long-term			

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
				short-term	long-term			
JC01, K01, M01, N01	Julia Creek, Kynuna, McKinlay and Nelia Bore Water	Bacteria and viruses in water / Contamination of water	High	*Quotes being sourced for replacement incubator/colilert tests and improvements to Julia Creek Laboratory by purchasing stainless steel bench tops, storage cupboards for storage of sample bottles and repairs to internal walls *Repairs to Hickman, Scour and Tower bore heads	Implement monthly/twice monthly/weekly Colilert sampling and additional sampling during any events in addition to laboratory samples	Short-term Laboratory All works completed. Internal wall repairs to be investigated – estimated completion date: December 2023 Repairs End of July 2023 Long-term Completed	Approx. \$10,000 for initial laboratory set up	Environmental & Regulatory Services Team Leader/Water and Sewerage Officer
JC04	Julia Creek Bore Water	Contamination / Loss of Supply	High	Install padlock on Lions Park Bore gate	Ensure compounds are secured at all times	Short Term Completed Long Term Ongoing	\$500.00	Environmental & Regulatory Services Team Leader/WSO

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
				short-term	long-term			
JC10, K14, M13, N06	Julia Creek, Kynuna, McKinlay and Nelia Reticulation Network	Water Quality / Build-up of sediments and slimes	High	Establish Air Souring Program (Source quotes from qualified contractors)	Plan for Regular Air Scouring Program	Short-term December 2023 Long-term Ongoing	\$50,000	Director of Engineering and Environmental Regulatory Services / Environmental & Regulatory Services Team Leader
JC11	Julia Creek Reticulation Network	Contamination / Aged or corroded infrastructure	High	Section replacements 1 st section – Goldring Street	Full Replacement	Short-term End of June 2023 Long-term 2030	\$100,000/annum	Director of Engineering and Environmental Regulatory Services
JC12	Julia Creek Reticulation Network	Contamination / Infiltration and ingress from backflow	Medium	Installed backflow connections to 100 properties	Capital Works Program for remaining household connections	Short-term Completed – March 2021 Long-term End of June 2023	\$100,000	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
				short-term	long-term			
JC09, JC13, JC14, JC17, K13, K15, K16, K18, K21, M14, M16, M17, M20, N05, N07, N08, N09, N10, N12	Julia Creek, Kynuna, McKinlay and Nelia	Documentation / Operating Procedures	Medium	<p>Development of new procedures for 'Sodium Hypochlorite Handling/Storage Procedure' and 'Water Tower Works Inspection Procedure'</p> <p>Update checklists to include additional inspection items including more detail on storage tanks and bore heads</p> <p>Amend 'Reservoir Integrity and Bore Head Maintenance Procedure' and 'Kynuna Treatment Plant Procedure' to reflect correct processes</p>	Continue to review procedures annually and as required	<p>Short-term</p> <p>Checklists – Completed</p> <p>New procedures adopted end June 2023</p> <p>Long-term</p> <p>Ongoing</p>		Environmental & Regulatory Services Team Leader / Water and Sewerage Officer
JC18, K22, M21, N13	Julia Creek, Kynuna, McKinlay and Nelia Regulatory	Training / Inadequately trained staff	Medium	Consider enrolling additional staff member in Certificate III in Water Industry Operations Course	Refresher training to be provided at least annually			

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
				short-term	long-term			
	Requirements			Additional training to be provided to Water Supply Staff in SWIMLocal Software, incident reporting, Kynuna Water Treatment Plant operation, and turbidity testing				
JC19, K23, M22, N14	Julia Creek, Kynuna, McKinlay and Nelia Bore Water	Opportunistic pathogens / Legionella and Naegleria	Medium	Prepare Fact Sheet in consultation with the Public Health Unit to issue to the community on ways to minimise exposure Organise for annual test of Naegleria	Continue to sample annually and update community as required	Short Term Completed Completed Long Term Ongoing	\$600.00/annually for sampling requirements	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
				short-term	long-term			
K05	Kynuna Water Quality	Poor Water Quality / High iron and manganese levels	High	Cleaning and/or replacement of cartridge filters / Monitor monthly sample results	<p>Replacement of media in IRS4000 filters every 2-3 years</p> <p>Replacement of riser pipe screen every 12 months</p> <p>Installation of additional Puretec filters, timed automated backwash system, decommissioning of disk filters, installation of new stainless steel pipe work, flow meters and new pressure meters</p> <p>Purchase hand-held turbidity meter and review turbidity limit in Verification Monitoring Program to align with ADWG and/or reputable water industry standards. Develop a turbidity target</p>	<p>Short-term Ongoing</p> <p>Long-term</p> <p>Media March 2024</p> <p>Riser pipe screen to be replaced in upgrade works</p> <p>Additional treatment options End of December 2023</p> <p>Turbidity Meter Meter purchased. Expected to be</p>	<p>\$6000/annum for purchase of media and riser pipe screen</p> <p>\$25,000 for additional treatment options</p>	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
				short-term	long-term			
					that aligns with the filtration system design	fully operational by August 2023 Review turbidity limits/set targets End of December 2023 when new filtration unit comes online		
K07/M07	Kynuna and McKinlay Storage Tank	Bacteria and viruses in water / Contamination of Water	High	Obtain quotes from specialised tank cleaning contractors Update checklists to include more checks (condition of roof bolts, rivets, edging and hatches) Conduct	Implement Annual tank cleaning program	Short-term Tank Cleaning completed at McKinlay and ground tank at Kynuna. Valve to be installed so that elevated tank can be isolated for diving. Water temp exceeds 60 degrees		Environmental & Regulatory Services Team Leader/WSO

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
				short-term	long-term			
				inspections twice per month Replace existing mesh and install new mesh on overflow pipes to tanks at McKinlay		Long-term To be considered again in June 2024		
K08	Kynuna Storage Tank	Fall from Heights / Contamination of Water	High	Tender documents to be released to market for new stairs/platform at Kynuna	New Platform to be erected around high-level tank to enable proper visual and internal inspections	Short-term Early July 2023 Long-term End of December 2023	\$50,000	Director of Engineering and Environmental Regulatory Services
M08	McKinlay Storage Tank	Fall from Heights / Contamination of Water	High	Engage structural engineer to assess and report on repairs to tin platform	Engineering concept and design for ground tanks with pumps	Short-term Completed Long-term End of December 2023	\$50,000	Director of Engineering and Environmental Regulatory Services/ Environmental & Regulatory Services Team Leader/WSO

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
				short-term	long-term			
NA	Julia Creek, Kynuna, McKinlay and Nelia	Asset Management	High	Tender documents released to market	Asset Management Plan developed	Short-term Completed Long Term End of June 2023	\$147,500	Director of Engineering and Environmental Regulatory Services
NA	Kynuna and McKinlay	Removal of redundant equipment	Medium	Organise the removal of old standpipe at McKinlay and old pipework at Kynuna	Ensure facilities are tidy	Short-term July 2023 Long Term Ongoing		WSO
NA	All schemes	Radiological Testing	Medium	Contact QHSS to organise sampling of all bores	Annual sampling on all bores	Short-term Completed. Testing to be conducted in August 2023 Long Term Ongoing		Environmental & Regulatory Services Team Leader

8 DWQMP audit findings

No audits were undertaken during the 2022-2023 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**.