

Risk Deep Dive Attachment

Risk #2, Disruption to Essential Service Delivery, February 2026

1. What is the risk?

RISK #2	Risk Owner and Risk Description	Inherent Risk Rating	What are we already doing?	Key Risk Indicators			Status of Risk		
							Residual Risk Rating	Risk Appetite	What can we do to reach appetite / strengthen our position?
DISRUPTION TO ESSENTIAL SERVICE DELIVERY	GM Operations	Extreme	<ul style="list-style-type: none"> Performance and condition assessments of all assets Regulatory oversight by Taumata Arowai, NZTA, WRC Strategies, operational risk assessments and registers, SOPs, compliance monitoring, emergency response plans, staff training and development Shared service support from Co-Lab for RAMM updates (reading data) Technical response support (via ready response consultants) for water and wastewater operations (necessary in the absence of a 24/7 process control centre) Technology in place - scada, telemetry, reporting etc Business continuity plans and demand management strategy in place (but requiring review) 	Performance and condition data held in RAMM and other asset management records	Trends in outages and failures of assets and/or technology	Trends / patterns in level of occurrence of external events that may cause or contribute to outages (Weather events etc.)	Very High	High	<p>Council is currently operating outside of assessed appetite.</p> <p>Appetite is considered achievable if the following mitigations are successfully introduced:</p> <ul style="list-style-type: none"> Approval of Water Services Delivery Plan (WSDP) by the Minister of Local Government with Water and Wastewater ownership and management transferred to a new Waikato Waters entity Fully developed operations maintenance strategies in place and funded Review and re-adoption of Business Continuity Plans Improved workforce capacity and capability via cadetship programmes and other potential joined up solutions
							Tolerance		
							Outside of Appetite		

2. Is there a gap between the residual risk rating and risk appetite?

There is a gap between the residual risk rating (Very High), and Council's risk appetite (High). The reasons for this are as follows:

- **essential nature of the service with failure having a severe consequence** – external threats, regulatory and compliance pressures
- **aging infrastructure** – pipes, treatment plants, pump stations and the transportation network are at increased vulnerability and likelihood of failure
- **external threats** – earthquakes, floods, increasing severity and occurrence of severe weather events, power outages and cyber-attacks outside our control
- **regulatory and compliance pressures** – stringent water and wastewater standards / regulations (Taumata Arowai and Waikato Regional Council). Any system failure is now a high priority risk
- **complexity** – reliance on a stretched workforce and competition in engaging key suppliers

Whilst a number of the above causes are inherent, longer term this gap could be partially bridged by the implementation of costly interventions such as:

- **Multiple Redundant Systems** – backup pumps, alternative treatment facilities, emergency power supplies, and bypass systems, to reduce the likelihood of total failure.
- **Advanced Predictive Maintenance & Monitoring** – real-time SCADA monitoring, AI-based predictive analytics, and condition-based maintenance reducing the risk of unexpected failures.
- **Extensive Emergency Preparedness** – detailed contingency plans, rapid response teams, and emergency contracts with suppliers and repair services.
- **Stronger Investment in Upgrades & Resilience** – Ongoing **capital investment** in upgrading infrastructure (rather than reactive fixes) can shift the risk downward.

While investing in building in redundancy, advanced systems and emergency preparedness for some parts of the system may reduce the residual risk ranking, the likelihood of a "Medium" or "Low" residual risk rating, especially for water and wastewater infrastructure is exceptionally rare, and would require significant investment in capital upgrades, technology and contingency planning over a sustained period of time.

There needs to be careful consideration in balancing/comparing significant, potentially unaffordable short-term investment, against the likelihood and consequences of catastrophic failure of major infrastructure resulting in prolonged disruption to core services.

The likelihood of the gap between the residual risk rating (Very high), and the risk appetite (High) being significantly reduced in the short term is unlikely.

Can and should risk appetite be increased? Yes, but rarely, and only with strong justification, tight controls, time limits, and proper approvals.

Should it be increased here? Only if legal, public health and safety, and environmental guardrails are met and existing treatments cannot feasibly reduce risk in time to protect critical outcomes. The guardrails in question are likely to be exceedingly difficult to meet.

3. Is the risk and its consequences fully understood?

Failure of essential services, infrastructure, or systems remains one of Council's most significant enterprise risks due to its direct impact on public health and safety, statutory compliance, environmental and cultural values, financial sustainability, and community trust.

Council carries non-delegable legal obligations to provide safe, reliable water, wastewater, stormwater and other lifeline services, and failure can result in contamination events, major overflows, environmental harm, and breaches of Te Mana o te Wai and consent conditions, outcomes that cannot be lawfully or ethically tolerated.

The consequences of service failure are immediate and far-reaching, disrupting community wellbeing, economic activity, and emergency response capability. Ageing assets, constrained capacity, skills shortages, and increasing climate-related pressures further elevate both the likelihood and consequences of failure. Because Council cannot divest or avoid responsibility for delivering these essential services, the residual risk remains inherently high, warranting its position as a top-tier strategic risk requiring ongoing governance oversight.

If this risk eventuated due to insufficient governance oversight, it would reflect a failure to identify and act on deteriorating service or asset conditions, leading to preventable legal non-compliance, public health or environmental harm, financial impacts, and a loss of community and iwi trust, calling into question the effectiveness of Council's governance and assurance processes.

4. Recent changes to risk context

There are a number of changes in wider context that may impact Council's ability to further mitigate this risk, they include:

- Impending Local Government Structure changes
- Potential Rates capping requirements for Councils that will affect funding capability
- Global warming resulting in increasingly severe and regular adverse weather events
- Transfer of water and wastewater activities to Waikato Waters Ltd (CCO) which will require careful preparation of Council's annual performance expectations of the CCO.

5. What controls are in place, and how do they mitigate the risk?

Control	Why is this control in place and how does it mitigate the risk (preventative or corrective)	Level of effectiveness
Performance and condition assessments of all assets	Corrective – Ops/Assets - The more we know about our assets based on condition and performance the better we can target maintenance and/or predict failure.	Effective
Regulatory oversight by Taumata Arowai, NZTA, WRC	Both preventative and corrective – Ops/Regulators - The regulatory bodies are both as they set standards and monitoring requirements that reduce the likelihood of failure, and it intervene when issues arise to enforce actions that restore compliance and prevent recurrence.	Partially Effective
Strategies, operational risk assessments and registers, SOPs, compliance monitoring, emergency response plans, staff training and development	Preventative – Ops - Together, these measures reduce risk by ensuring that risks are understood, controls are consistent and effective, compliance is maintained, staff are capable, and failures—if they occur—are managed quickly and safely.	Partially Effective
Shared service support from Co Lab for RAMM updates (roading data)	Preventative – Roading - Co-Lab's support ensures RAMM data is accurate, consistent, and compliant, enabling better asset condition visibility, prioritisation, funding assurance, and resilience planning—significantly reducing safety, operational, financial, and compliance risks across the roading network.	Effective
Technical response support (via ready response consultants) for water and wastewater operations (necessary in the absence of a 24/7 process control centre)	Preventative – Ops/Consultants - Ready-response technical support provides critical after-hours coverage, rapid specialist intervention, and informed decision-making that prevent small operational issues from becoming major failures. This is essential for Councils without a 24/7 control centre, significantly reducing safety, compliance, environmental, and service-continuity risks.	Effective
Technology in place – SCADA, telemetry, reporting etc	Preventative – Ops/IT - SCADA, telemetry, and reporting systems reduce risk by providing continuous visibility, early fault detection, rapid response capability, compliance assurance, and data-driven decision-making—making failures less likely and less severe.	Partially Effective
Business continuity plans and demand management strategy in place (but requiring review)	Preventative – Ops - Business continuity plans reduce the impact of failures by ensuring essential services can keep operating during disruptions, while demand management strategies reduce the likelihood of failures by preventing overload, extending asset life, and keeping operations within safe and compliant limits.	Partially Effective

6. Have any incidents occurred that have stress tested the rigor of the above controls?

The recent severe weather event that exposed our infrastructure and response teams to heavy rain, high winds, widespread power outages, limited site access, flooding, and dangerous conditions, over a number of days was a true test of both our staff and infrastructure. Having good knowledge of our infrastructure operability and status leading up to the event enabled us to target pre-event planning to the sites that were most at risk.

We had also made arrangements with contractors for additional generators, and tweaked our staff work rosters to ensure 24-hour coverage, even when our SCADA system went down.

We now have a good incident preparation and response template to expand on for any future similar events.

7. Trends in the Key Risk Indicators

Over the last 6 months, despite the increasing intensity and regularity of adverse weather conditions we have seen a reduction in catastrophic infrastructure failures, we have also seen a steady improvement in the level of our compliance with both Taumata Arowai and WRC, we have built up a high level of trust with both parties who have informed us on a number of occasions that they acknowledge our increased vigilance and attention to ensuring we meet our statutory obligations.

8. What additional controls are planned to further reduce the risk level?

We intend to continue developing our incident response readiness and capability now that we have a framework in place. We will also be looking for improvements in asset condition monitoring and maintenance practices in order to increase infrastructure reliability.

9. Questions from the committee

Questions are invited.