

FNQ AND TOWNSVILLE MUTUAL AID INITIATIVE

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KEYWORDS

Safety and wellbeing, mutual aid, collaboration, risk, safety culture

ABSTRACT

Force majeure is a French term meaning "superior force." It is defined as an event with superior or irresistible force or an event that cannot be reasonably anticipated or controlled.

Queensland's active cyclone season routinely brings extreme levels of rain and flooding, often causing severe – and at times catastrophic – damage to water and wastewater infrastructure across the state. This is where the Mutual Aid Coordination Centre (MACC) steps in.

The MACC in Queensland coordinates assistance from various agencies and organisations during disaster events, primarily focusing on water and wastewater infrastructure recovery. The MACC is activated at the invitation of local governments and regional authorities to provide sector-specific specialist resources, equipment, and support to water service providers.

Unitywater responded to the MACC's call to arms by deploying team members to provide critical aid and support. This aid included repairing and reconnecting water and wastewater services to flood affected communities of Mossman and Port Douglas - after ex-tropical Cyclone Jasper in December 2023, and later in Townsville for post flood recovery in February 2025. Unitywater's deployment to both events has deeply reinforced the MACC ethos, with a strong sense of camaraderie emerging across the affected utilities that were supported.

INTRODUCTION

The Mutual Aid Coordination Centre (MACC) is a sub-committee of the Water Services Sector Group (WSSG), the coordinating body for risk, security, and resilience activities within the Australian water sector.

Mutual aid refers to the voluntary sharing of people, equipment, and expertise between utilities during emergencies. The MACC's role is to collect, coordinate, and allocate requests and offers of assistance through appropriate emergency management processes.

Given the volatility of Queensland's climate, water and wastewater networks are highly vulnerable to extreme weather events such as cyclones and widespread flooding. Ensuring rapid restoration of services is not only critical for community resilience but also essential to safeguarding public health.

DEPLOYMENT/S

In December 2023, following Cyclone Jasper and widespread flooding, the MACC called on water utilities to assist Far North Queensland in restoring a water network decimated by floodwaters. Water levels were critical, with only intermittent supply available to Mossman and Port Douglas.

Unitywater was contacted on Christmas Eve and asked to support the FNQ response. On Boxing Day, an initial team of five team members were deployed (5 replacement team members were deployed 2 weeks later) to relieve exhausted local crews and work alongside Urban Utilities, who had arrived several days earlier. Each Unitywater member was paired with a local council employee and tasked with a range of critical repairs—from washed-out mains that left communities isolated and without water, to infrastructure breaks across Mossman and Port Douglas. Given daytime temperatures in the high 30s to low 40s and humidity reaching 99%, teams were closely monitored for fatigue and hydration throughout the deployment.

To further support both local and visiting teams, Unitywater and Urban Utilities transported service vehicles, equipment, and supplies 1700K'S to support and equip the region. This ensured crews were well stocked, fully resourced, and able to operate independently and remotely. Importantly, the deployment concluded without any injuries or incidents involving team members or local council staff.

In February 2025, the MACC was activated to support Townsville following a severe weather event caused by two tropical lows in North Queensland. The Australian Bureau of Meteorology reported rainfall totals comparable to cyclonic conditions. Although the systems did not officially develop into cyclones, some areas recorded up to 300 mm rainfall in 24 hours, with isolated totals exceeding 600 mm. Across February and March, rainfall surpassed 1,600 mm in parts of the region.

Unitywater crews arrived in Townsville on 10 February to support fatigued local council employees and immediately began tackling a backlog of more than 500 outstanding wastewater overflows. These overflows had inundated many homes—some repeatedly over consecutive days—along with widespread blockages and breaks. The network was severely compromised, receiving inflows up to five times its design capacity.

Event	Date Deployed	Location	Staff Deployed	Key Tasks Performed	Conditions/Notes
Cyclone Jasper (FNQ)	26 Dec 2023	Mossman & Port Douglas	10	Water main repairs, reconnection of isolated areas, infrastructure restoration	Extreme heat/humidity, no injuries
Townsville Flooding	10 Feb 2025	Townsville	9	Wastewater overflow response, blockages, break repairs	1600+ mm rainfall, deployment shortened due to Cyclone Alfred

Unitywater's participation in MACC deployments delivered not only essential community benefits but also measurable organisational value:

- **Enhanced capability and skills:** Staff developed critical expertise in disaster response, asset recovery, and operating in extreme conditions, strengthening Unitywater's overall resilience.
- **Workforce engagement:** Participation fostered pride, purpose, and camaraderie among team members, supporting staff retention and reinforcing Unitywater's values-driven culture.
- **Reputation and trust:** Active involvement in mutual aid demonstrated sector leadership and reinforced Unitywater's standing as a reliable partner in the Queensland water industry.
- **Knowledge transfer:** Lessons learnt from Far North Queensland and Townsville have directly informed Unitywater's own emergency management planning, improving preparedness for future local events.
- **Collaborative advantage:** Stronger inter-utility relationships were forged, creating networks that will accelerate mutual aid responses and knowledge sharing in future crises.
- **Risk awareness:** Real-world exposure to large-scale flooding events highlighted vulnerabilities and drove enhancements in Unitywater's risk management and resilience frameworks.

Collectively, these outcomes demonstrate how Unitywater's involvement in mutual aid aligns with its strategic objectives of building resilient operations, fostering workforce excellence, and strengthening community trust—ensuring the organisation is better prepared for both regional and local challenges.

CONCLUSION

The Australian water sector's mutual aid model demonstrates the strength of collaboration during crises. Unitywater's deployments to FNQ and Townsville illustrate both the challenges and successes of cross-sector

support. While deployments involve risk, the collective benefits—restored services, enhanced resilience, and shared learning—reinforce the importance of the MACC’s role and the “utilities supporting each other” ethos.

LESSONS LEARNT AND CRITICAL SUCCESS FACTORS

- **Preparedness and coordination**: Mobilisation must remain flexible, with detailed planning and clear communication.
- **Health, Safety and resilience**: Ensuring deployed team members are appropriately vaccinated to mitigate risks from waterborne and flood-related diseases such as melioidosis. Equally important is to manage acclimatisation, psychosocial stress, and fatigue risks proactively.
- **Fatigue management**: Establish rosters and enforce fatigue parameters for all deployed teams.
- **Escalation protocols**: Ensure clear pathways for stand-down decisions to protect both responders and service continuity.

FUTURE DIRECTIONS / RECOMMENDATIONS

- **Cross-utility training**: Joint exercises and simulations to ensure interoperability.
- **Formalise mobilisation frameworks** – Develop SOPs for inter-regional deployments.

REFERENCES

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Diagram 2

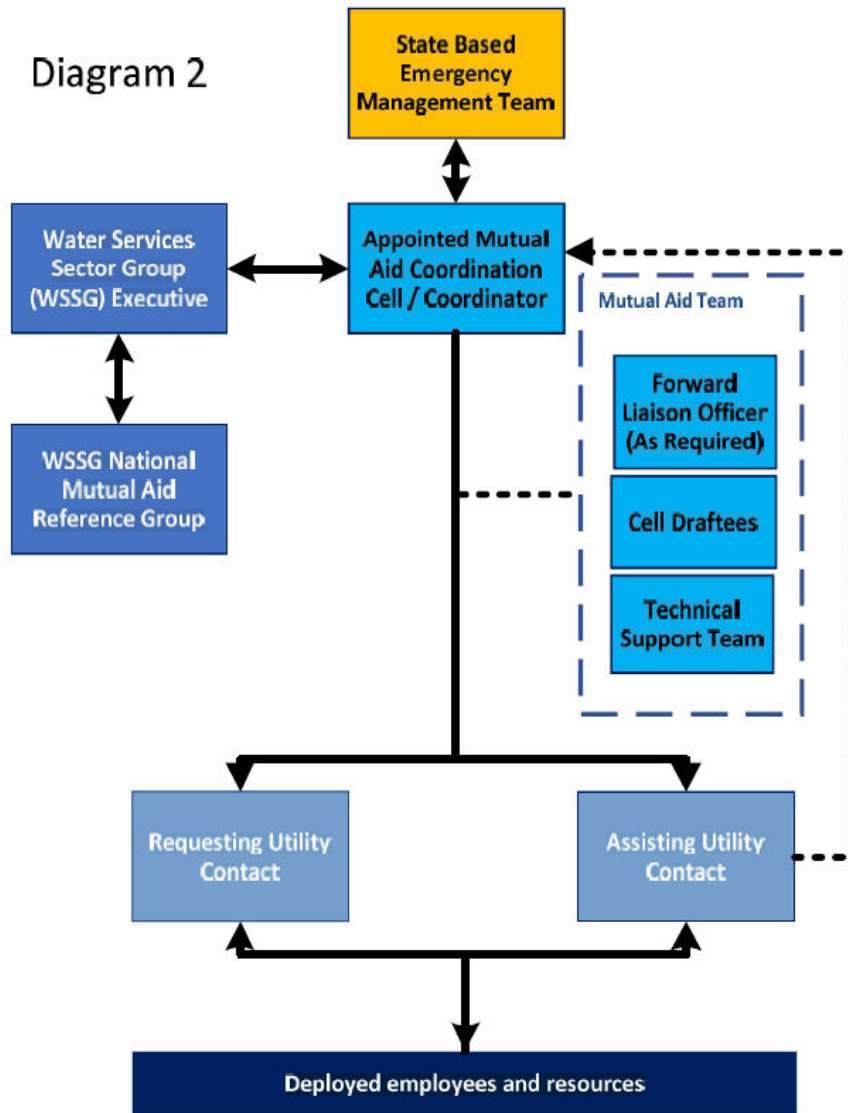


Figure 1: Structure of the Mutual Aid Coordination Cell process (Water Service Sector Group, 2021)



Figure 2 – Repair location, Mossman Qld.



Figure 3 – Repairs underway, Mossman Qld.



Figure 4 – A member of the Mossman Community showing her appreciation to our team members.



Figure 5 – Unitywater team members meeting the Governor General, Her Excellency the Honourable Dr Jeannette Young in Townsville