

Government Inquiry into the North Island Severe Weather Events

Water New Zealand

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Introduction

Water NZ is a national not-for-profit organisation which promotes the sustainable management and development of New Zealand's three waters (drinking water, wastewater and stormwater).

Water NZ is the country's largest water industry body, providing leadership and support in the water sector through advocacy, collaboration and professional development.

Its ~3,000 members are drawn from all areas of the water management industry including regional councils and territorial authorities, consultants, suppliers, government agencies, academia and scientists.

Water Sector Coordination Entity

The Water SCE is a national organisation for planning for, and coordinating a response to, a major water incident or emergency.

- Water NZ, (and, unofficially, the WSMG committee, and Taumata Arowai) are currently the SCE. First activated during Gabrielle Response
- Future membership is proposed as
 - A representative from each of the WSEs – Tier 2 or 3 Emergency Management role.
 - The Manager Response and Resilience (or equivalent future role) at Taumata Arowai.
 - The National Lifeline Utility Coordinator (NEMA).

The Water SCE has the following key roles:

- leading the development and exercising of the National Water Emergency Plan, supported by all WSEs (future)
- providing a single point of contact, sector liaison and coordination between the National Coordination Centre (or Lead Agency) and the water sector,
- coordinating resources across the sector.

Water sector under Schedule 1 Part B of the Civil Defence Emergency Management Act 2002

Lifeline Utility Entities from CDEM Act 2002 Act-

- An entity that supplies or distributes water to the inhabitants of a city, district, or other place.
- An entity that provides a wastewater or sewerage network or that disposes of sewage or storm water.

Emergency Management Bill 2023 definitions:

- **critical infrastructure** means assets, systems, networks, and services that are necessary for the provision of public services and are essential to public safety, national security, economic security, or the functioning and stability of New Zealand.
- **critical infrastructure entity** means—
 - (a) an entity that the Minister recognises under section 50(a); or
 - (b) an entity that is a part of a critical infrastructure sector

critical infrastructure sector means a sector that the Minister recognises under section 50(b)

- Water Service Entities are considered critical infrastructure entities (Water Services Entity Act 2023 and Water Services Legislation Act 2023)

**Flood control schemes are not explicitly identified as a lifeline service or entity, critical infrastructure sector or regional councils Flood Protection as critical infrastructure sector.

Water sector coordination during the events includes the following parties -

- Local / Unitary councils
 - Water and drainage teams (local and neighboring)
 - Staff and equipment shared from across the country
- Regional Councils
 - Flood Protection / Rivers Managers (forecasting and hydrology)
- Local/regional CDEM Groups – including NZDF
- Lifeline Utilities
- NEMA
- Water SCE
- Contractors and consultants – local and national
 - Staff and equipment shared from across the country
- Communities

In thinking about what worked well....

- In these events, as with previous emergency events – earthquakes and flooding, multiple emergency management groups and staff from across the county mobilise to head to other areas to assist with responding to forecast flooding events. This is not mandated in legislation, but demonstrates the innate understanding, awareness and comradery that underlies and drives local government emergency management responses.
- Local authorities are closely connected to their communities and are well-placed to understand the local risks and nuances and activated emergency responses and delivery in ways that suit local circumstances and communities' needs, this includes community volunteers.
- Smaller councils' responses rely heavily on established relationships with trained community volunteers with local knowledge and experience.
- The relationships and camaraderie within the water sector demonstrated the above qualities. The water industry demonstrated it has an array of resources and relationships which allowed quick sourcing equipment and plant and multi-function support.
- Iwi/Māori also demonstrated the significant (again unlegislated) contribution and speedy mobilisation they make to managing a response to an emergency event. Opening the marae, providing kai and kinship.

Does Water NZ have any preparedness plans in place for emergencies?

Business continuity plans and preparedness are essential for each network.

- The WSE prepare a register of critical assets, services and sites, and customers and their contacts
- Water SCE to maintain national database of critical spares and emergency equipment (and people to operate)
- Built in storage in pump stations and treatment plants
- Identify critical dependencies and interdependencies between infrastructures in advance of events.
This reinforces the need for a common appreciation of the overall resilience objective between each critical infrastructure.

Clarity is needed around the decision making roles and responsibilities during events

- Standardising situation reports from water utilities.
- WSE must fully resource Emergency and Incident Mgmt. teams from Day 1.
- With CIMS training across all WSE staff.
- Recognised importance of crisis leadership skills and operational experience in emergency management and ability to have robust communications with all parties, internal and external.
- WSE and Water SCE actively participate in regional lifeline utility and CDEM training exercises, gain understanding of other lifelines and to build pre-event relationships maintained
- Clarify Taumata Arowai's role in emergency management, beyond incident management
- Central government support to increase the capability and capacity of the water sector workforce.

Were relevant entities able to obtain the necessary and relevant data it needed to make its decisions?

- Local councils / water services know their networks, critical and big users and risks. Locally making decision based on a mix of evidence and asset manager knowledge and relationships (contractors etc) worked well.
- Regional or national reporting and decision making things become less clear. Not all organisations responsible (NEMA-LUC-SCE) for response had access to the same information.
- The water sector was unable to produce /provide nationally or regionally consistent reliable stats or maps of core equipment failures.
- In Hawkes Bay, there was confusion with what was happening, when and where, in the region. There was minimal coordination and communication between neighboring Emergency Operations Centres (EOC) and the Group's Emergency Control Centre (ECC).

What parts of the system could be improved to mitigate risks?

Strengthen national sector coordination, in major emergency, between WSE, CDEM groups and NEMA.

- The recognition of the water sector as a Critical Infrastructure, and Water Service Entities as Critical Infrastructure Entities, in the Emergency Management Bill definition, and the roles and discipline this ensues, is welcomed.
- WSE must use the CDEM /CIMS structure, training, systems, and tools – including template procedures for responses for common events.
- WSE must participate in lifelines training, coordination and planning (and provide a liaison in CDEM EOCs/ECCs when appropriate) to develop and maintain strong relationships with other lifeline utilities and CDEM Groups. This will support strong multi-agency relationship building, understanding and testing of their response arrangements, resulting in a more coordinated responses and recovery.
- Business continuity plans and preparedness are essential for each network.
- Nationally consistent policy, standards, metadata and operating platforms would ease the response and responders from other areas.
- Central guidance and funding for business case preparation and investment decision making on water infrastructure recovery.
- Map the two way situational intelligence, reporting lines and lifelines coordination processes between water service entities and CDEM EOCs/ECCs and when appropriate NCMC (National Crisis Management Centre)

2. what parts of the system could be improved to mitigate risks?

Proactive co-investment in resilience now, will reduce longer-term community risk to tolerable levels.

- There is a need to expand the definition of critical water infrastructure to include river control and flood protection schemes, including their flow and rain gauge monitoring network.
- Introducing measures for protection from liability for personnel outside of a state of emergency or transitional period.
- Planning for, funding, and delivering major renewal programmes for vulnerable networks,
- Fast track government co-investment in flood protection schemes and mandate funding associated with the flood protection projects.
- Climate and natural hazard risk assessment and their management should inform capital expenditure forecasts, operational budget for clean up and recovery, and staff resourcing. Specifically, the 2024 AMPs and LTPs.
- Secure funding and financing investments to address service level shortfalls as part of newly mandated Stormwater Management Plans.
- There is significant need for new, central funding arrangements to deliver the current and future levels of for three water services. The ratepayer funded status quo is not sustainable.
- Investment in nature-based solutions is another way to proactively invest in resilience.
- Te Mana o te Wai needs to be understood when managing land use and water wellbeing.

1 Activities that would have been beneficial

Effective stormwater management aligns investments decisions with those around land use.

- Recent flooding and storm events have illustrated an unambiguous need for land use planning decisions and choices to take into account climate risk.
- There are currently institutional barriers (internally between council departments, and between councils, and other agencies) to land use management and holistic stormwater catchment planning process being implemented.
- Opportunities for the new water entities to coordinate stormwater management at the regional level with land use planning at the local level.
- Need for deliberate conversations regards retiring and relocate assets and services in high hazard areas, understanding how long do we anticipate the need to service such communities.

Spatial and adaptation planning must include land-use planning restrictions on high risk susceptible land.

Most prudent, yet contentious, is ensuring no new development on, and long-term retreat from, high risk coastal, low lying and slip-prone areas.

- Peacetime prioritisation and sequencing of planning controls (e.g. setbacks, minimum floor levels, onsite detention, WSUD) as well as direct capital investment and expenditure.
- Strengthen the accountabilities and legislative and policy links between the management and operation of stormwater systems, land use planning, and development.
- Including stop banks under the Building (Dam Safety) Regulations 2022

2 Activities that would have been beneficial

Governance

- A Minister for Water is suggested, as this would increase coordination and consistent policy making and information sharing currently spread over many Ministries or agencies.
- Strengthen the accountabilities between land use planning controls and design standards. This should happen through the Spatial Planning Act.
- Cross party agreement to guarantee long-term progress that is essential for network resiliency.

Communication

- Clear, consistent, timely comms from WSE to keep communities informed
- WSE should have prepared public messaging for range of events, including but not limited to -
 - Don't enter, play or swim in flood water.
 - Conserve water, boil water notices, do not use notices....
- Ensure plans have communication protocols for informing regulatory agencies about providing support for private water schemes.
- Councils must have community discussions about the level of risk people are willing and able to tolerate, and the costs that should be incurred to manage these.

Roles & responsibilities across “wai”

	Freshwater	Drinking	Wastewater	Stormwater	Economic regulation	Consumer Protection
REGULATOR	REGIONAL COUNCILS	TAUMATA AROWAI	REGIONAL COUNCILS	REGIONAL COUNCILS	COMMERCE COMMISSION	COMMERCE COMMISSION
OVERSIGHT	MINISTRY OF ENVIRONMENT	DEP. OF INTERNAL AFFAIRS	TAUMATA AROWAI	TAUMATA AROWAI	MINISTRY OF BUSINESS INNOVATION & EMPLOYMENT	MINISTRY OF BUSINESS INNOVATION & EMPLOYMENT
POLICY	MINISTRY OF ENVIRONMENT	MINISTRY OF HEALTH	MINISTRY OF ENVIRONMENT	MINISTRY OF ENVIRONMENT	MINISTRY OF BUSINESS INNOVATION & EMPLOYMENT	MINISTRY OF BUSINESS INNOVATION & EMPLOYMENT