

A faint background image shows a street in Ipswich, Queensland, submerged in floodwater. Buildings, trees, and streetlights are visible through the water. A yellow curved line and a white rectangular frame highlight the title area in the foreground.

FEB-MAR  
**2022**  
IPSWICH FLOOD REVIEW

**Operational Review Report**

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## Executive Summary

In late February and early March 2022, Southeast Queensland was subjected to a devastating flood. This event had significant consequences across the Ipswich Local Government Area, resulting in prolonged activation of the Local Disaster Management Group, Local Disaster Coordination Centre and Local Recovery and Resilience Group.

In a demonstration of commitment to continuous improvement and transparency, Ipswich City Council resolved to undertake a flood review which included community consultation and publishing the report in the public domain. This report, titled Feb-Mar 2022 Flood Review, is the outcome of this commitment.

Ipswich has a high flood risk and flooding will occur again, with a severe flood likely. This review captured the lessons from the 2022 flood response to inform initiatives that will improve outcomes/minimise adverse disaster consequences for the Ipswich community, economy, environment, and infrastructure as well as for responders in future events.

**Ipswich's flood risk is highlighted by its representation in the 20 most at-risk federal electorates to climate extreme in the nation. Electorate of Wright – No 5 and electorate of Blair – No. 20**

The review included analysis and review of over 740 documents/records and over 50 websites containing numerous documents. Seven debrief sessions were facilitated for responders and four for the community forums. A total of 31 people involved in response and recovery were interviewed individually. The review recognises and outlines the significant improvements that have been implemented since the flood.

The recommendations in this review intend to further contribute towards the objectives of disaster management in Ipswich:

- Strive to safeguard people, property, and the environment from disaster impacts
- Empower and support local communities to manage disaster risks, respond to events and be more resilient.

The recommendations are categorised across People, Process, Organisation, Support, Technology and Training.

In summary, the review found organisational structures, resources, documents and processes are in place to effectively manage disasters. Areas for improvement were mainly related to refinement in their deployment.

On a strategic level this included:

- Setting the strategic direction, priorities and expectations from the start and providing the endorsements/resources to implement them across the organisation
- Formalising the human/social network
- Reassessing future city planning of key affected areas
- Exploring opportunities to further enhance disaster preparedness within high-risk communities
- Optimising and aligning community disaster information

On an operational level this included:

- Enhancing methods to detect/monitor impacts
- Reviewing wording/methods for warnings and notifications
- Improving the flood mapping resources and processes
- Refining the LDCC organisational structure to avoid fatigue risks and improve specialist support across response and recovery
- Building capabilities through training in impact monitoring, Guardian IMS and hazard mapping

## List of Recommendations

1. Organisation: Revise the LDCC structure and reallocate EMU as an advisory role.
2. People: Explore opportunities to optimise use of skills and align resourcing for the various LDCC functions to the Branches in Council (see figure 4 for an example)
3. Training: Train Incident Controllers/LDCC Commanders within Council (Branch Manager level) to lead the operational response.
4. People: Formalise roles and responsibilities in managing internal/organisational crises and disaster management. Ensure the agreed structure is resourced to deliver on both objectives.
5. Organisation: Develop an integrated framework for Council's crisis management, business continuity, disaster management and emergency response functions with supporting integrated emergency response and business continuity plans. Build internal awareness and competency across Branches to implement and execute the plans.
6. Training: Establish baseline training requirements for Council staff involved in disaster response, including the use of technology-based systems.
7. Training: Implement a Guardian IMS training program to support LDCC personnel.
8. Technology: Formalise the new dynamic form processes in procedures and include in LDCC induction training.
9. Process: Formalise the disruption/impact assessment and reporting requirements for Council based assets and facilities during a crisis/disaster, including the existing reporting initiatives. Include this in the respective plans (crisis, business continuity, disaster management).
10. Technology: Develop an online Common Operating Picture that can be easily shared across the LDCC, LDMG and LRRG using business-as-usual software, such as the Microsoft suite (SharePoint, Teams).
11. Organisation: Council executives to determine and advise an optimal staffing/resourcing model to provide event-based flood intelligence to decision makers, responders and the community.
12. People: Council executives to explore sourcing of a dedicated catchment/floodplain management resource to assist in flood mapping, in addition to supporting resources to build internal capabilities and redundancies.
13. Process: Council executives to seek advice as to liability exposure in providing flood intelligence during a flood response for the individual officers.
14. Technology: Council to pursue technological improvements to its forecast system to provide more timely creation of flood maps.
15. Technology: Council to pursue an interactive mapping platform that accurately and easily conveys known flood risks prior to a disaster event to the community.
16. Training: Council to work with other local governments and the state government to develop a flood literacy resource or program.
17. Training: EMU to reflect on community feedback to inform community flood information/communication improvements.
18. Process: Replicate the WFSB disaster preparedness planning and annual exercising process across all branches/sections.
19. Training: Provide education to emergency services and the community regarding the opening of closed roads and the associated risks prior to a safety inspection being undertaken.
20. Training: Explore opportunities to provide evacuation centre management support through the recently established Ipswich Human/Social network.
21. Process: Council to review the number and locations of centres available during a flood event and the standard to which they can operate, considering: accessibility, risks, capacity, resources, service levels and availability of partner agency/human social network support.
22. Training: Council executive to confirm organisational responsibility, resources and training to provide evacuation centre staff during a disaster.
23. Process: Council to develop a security policy for evacuation centres and secure/train the resources to provide the required services.
24. Training: Council to develop a training module on how to manage evacuee challenges, including people who are drug and alcohol affected, have mental health issues or are distressed due to trauma.
25. Process: Formalise the Memorandum of Understanding between the Ipswich Show Society and Ipswich City Council regarding the use of the Ipswich Showgrounds as an evacuation centre.
26. Process: Establish an evacuation centre-specific animal management plan.
27. Organisation: Identify and train sufficient capability and capacity to undertake public information, warnings and associated functions in a holistic manner, including on-ground support to the LDMG Chair, media releases, social media, updates to customer service and issue warnings.

28. Process: Roster public information and warnings personnel to be present in the LDCC where possible.
29. Process: Develop a communication strategy at the start of every disaster event using the template that has been developed.
30. Organisation: Review the out-of-hours customer contact centre arrangements and implement measures to ensure a consistent level of service during a disaster between the service during office hours, as well as out of hours.
31. Process: Ensure internal communication with field-based staff is considered in the communication strategy by the Public Information cell in the LDCC.  
List stakeholders: community, Councillors, agencies, staff, suppliers, partners and service providers.
32. Process: Consider use of boosted social media posts for official warnings at Watch and Act or Emergency Warning levels.
33. Process: Council to conduct a Business Impact Analysis to inform what services should continue during disaster response and recovery. This information will inform planning and allow for swift redeployment of staff to support disaster operations with coordination and in field activities.
34. Process: Council to review the fatigue monitoring process to include a responsibility for monitoring and managing fatigue for each key role.
35. People: Council to consider incentives to encourage staff to undertake duties during disaster events.
36. People: Council to consider inclusion of disaster operations in position descriptions.



### Acknowledgment of Country

Phoenix Resilience and Ipswich City Council respectfully acknowledge the Traditional Owners as custodians of the land and waters we share. We pay our respects to their Elders past, present and emerging, as the keepers of the traditions, customs, cultures and stories of proud peoples.

## Background

As a result of the Mayoral Motion in April 2022, Council resolved to undertake a review of the 2022 flood event, including public participation and submissions, by:

- Publishing Flood Review 2022, including preparation, planning, emergency response and communications effectiveness.
- Conducting public forums and seeking residents' feedback on all aspects of the flood event, including preparation, emergency response, post-event response and future flood mitigation measures.
- Making submissions and public hearings public in the interests of transparency, except where privacy or operational sensitivity requires confidentiality.
- Developing a final report and plan of action for Council consideration, including suggested actions for all levels of government, before the December 2022 Ordinary Council meeting.

The first objective is to develop a report and strategic action plan for Council and other levels of government (through advocacy) related to the prevention of, preparedness for, response to and recovery from the flooding that impacted the City of Ipswich in February/March 2022.

The second objective is to develop a report and operational action plan related to Council operations and business continuity related to the prevention of, preparedness for, response to and recovery from the flooding that impacted the City of Ipswich in February/March 2022, and disasters generally.

### **The reports will consider the perspectives of:**

- Community and businesses
- Council disaster operations
- Council business continuity measures
- Disaster Management Groups
- Other levels of government

### **The overarching outcomes for this review are to:**

- Provide insight and assurance as to Council's and other entities' capacity and capability to respond to flood events
- Provide an opportunity for community to give input and feedback to feel valued and heard
- Provide insight into community resilience, expectations regarding disaster and flood events
- Educate and inform the community and stakeholders about disaster management systems and personal preparedness

The review is consistent with the approach outlined in the Lessons Management Handbook 2019, by the Australian Institute of Disaster Resilience, and considers prevention, preparedness, response and recovery against current leading practice, such as:

- The Standard for Disaster Management in Queensland
- Previous Inspector-General of Emergency Management reviews
- Queensland Flood Commission of Inquiry
- IGEM Review South East Queensland Rainfall and Flooding – February to March 2022 Review

## Aim

This review will capture the lessons from the 2022 flood response to inform initiatives that will improve outcomes/minimise adverse disaster consequences for the Ipswich community, economy, environment and infrastructure as well as for responders in future events.

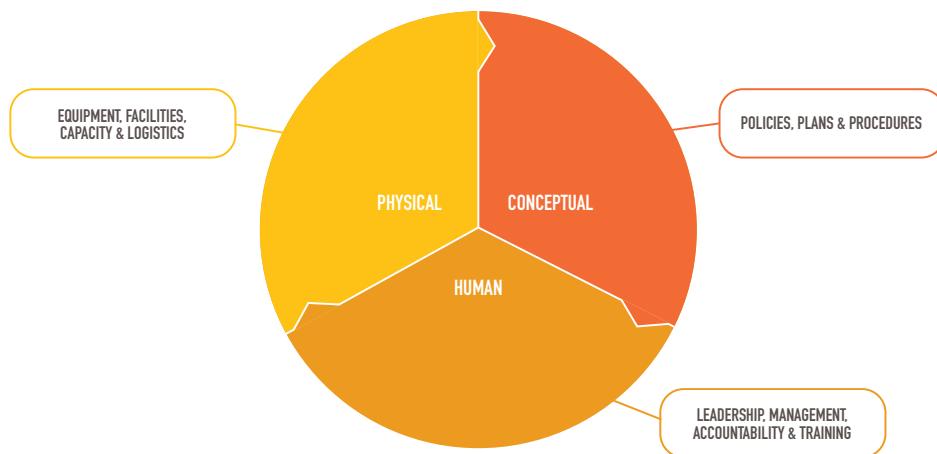
## Objectives

Several overall objectives have been set for this review:

1. Capture and analyse feedback and insights from the community and other key stakeholders
2. Reflect on plans, processes, resources, capabilities and technology dedicated to the response
3. Review decisions and outcomes
4. Formulate improvement opportunities

## Methodology

When working to establish cause, we considered three dimensions.



Data collection and analysis for this review followed the OILL PROCESS (Observation, Insights, Lessons Identified, Lessons Learned) outlined in the Australian Institute for Disaster Resilience, Lessons Management Handbook and the Inspector-General Emergency Management, Queensland Disaster Management Lessons Management Framework.

The report recommendations are coded to follow the P2OST2 evaluation method.

<b>People</b>	Roles, responsibilities, accountabilities, skills
<b>Process</b>	Plans, policies, procedures, processes
<b>Organisation</b>	Structure
<b>Support</b>	Infrastructure, facilities, maintenance
<b>Technology</b>	Equipment, systems, standards, security, interoperability
<b>Training</b>	Capability, qualifications, skill levels

## February to March 2022 Flood Review

### Overview and Context (Part I)

The review process included the following project management steps:



Figure 1. Project Management Steps

### Stakeholder Engagement

For this review, key stakeholders were consulted through survey, feedback forums, workshop or direct interview.



#### 2022 Ipswich Floods Review - Flood Review Listening Tour - Rosewood and Surrounds

⌚ 31 Aug 2022 6:00 PM - 31 Aug 2022 7:30 PM  
📍 Rosewood State School, Rosewood State School, School Street, Rosewood QLD, Australia

Share your experience to help support our community to be ready and resilient for future flood events.



#### 2022 Ipswich Floods Review - Flood Review Listening Tour - Ipswich, East Ipswich, Bundamba and Surrounds

⌚ 13 Sep 2022 6:00 PM - 13 Sep 2022 7:30 PM  
📍 United Sports Club, United Sports Club, Joyce Street, East Ipswich QLD, Australia

Share your experience to help support our community to be ready and resilient for future flood events.



#### 2022 Ipswich Floods Review - Flood Review Listening Tour - Goodna and Surrounds

⌚ 14 Sep 2022 6:00 PM - 14 Sep 2022 7:30 PM  
📍 Goodna State School, Goodna State School, Albert Street, Goodna QLD, Australia

Share your experience to help support our community to be ready and resilient for future flood events.



#### 2022 Ipswich Floods Review - Flood Review Listening Tour - Karalee and Surrounds

⌚ 15 Sep 2022 6:00 PM - 15 Sep 2022 7:30 PM  
📍 Karalee State School, Karalee State School, Arthur Summervilles Road, Karalee QLD, Australia

Share your experience to help support our community to be ready and resilient for future flood events.

Figure 2. Four community forums were conducted<sup>1</sup>

<sup>1</sup> <https://www.shapeyouripswich.com.au/flood-review>

## February to March 2022 Flood Review

### Overview and Context (Part I)

We considered a range of documents for the review.

Standards and Guidelines	Relevant plans	Related reviews and studies
<ul style="list-style-type: none"> <li>• Queensland Emergency Management Assurance Framework (EMAF)</li> <li>• Queensland Strategy for Disaster Resilience</li> <li>• Queensland Flood Risk Management Framework</li> <li>• Standard for Disaster Management in Queensland (IGEM)</li> <li>• Australian Institute for Disaster Resilience (AIDR) – National Emergency Risk Assessment Guidelines (NERAG) Handbook</li> <li>• AIDR – Australian Emergency Management Arrangements Handbook</li> <li>• AIDR – Community Recovery Handbook AS/NZS 31000:2018 Risk Management – Guidelines</li> <li>• Australasian Inter-service Incident Management System (AIIMS) 2017</li> </ul>	<ul style="list-style-type: none"> <li>• Queensland State Disaster Management Plan</li> <li>• Ipswich Integrated Catchment Plan</li> <li>• Ipswich Floodplain Management Strategy</li> <li>• Ipswich City Council Local Disaster Management Plan (LDMP)</li> <li>• Ipswich City Council LDMP – Sub Plans</li> <li>• Evacuation Centre Sub Plan</li> <li>• Evacuation Process Sub Plan</li> <li>• Managing Animals and Livestock Sub Plan</li> <li>• Isolated Communities Sub Plan</li> <li>• Public Information and Warnings Sub Plan</li> <li>• Recovery Sub Plan</li> <li>• Dam Emergency Action Plans</li> </ul>	<ul style="list-style-type: none"> <li>• IGEM Review South East Queensland Rainfall and Flooding – February to March 2022 Review</li> <li>• Deloitte (QRA): The Social, Financial And Economic Costs of the 2022 South East Queensland Rainfall and Flooding Event</li> <li>• Brisbane River Catchment Flood Study</li> </ul> <p>Other records considered:</p> <ul style="list-style-type: none"> <li>• BoM Brisbane River Model Reports</li> <li>• Watch &amp; Act Warnings</li> <li>• Facebook and social media posts</li> <li>• Public media reports</li> <li>• Situation Reports</li> <li>• Incident Action Plans</li> </ul>
<b>Feedback data considered</b>		<ul style="list-style-type: none"> <li>• LRRG and Task Force Event Debriefs</li> <li>• Divisional Councillors Feedback Report</li> <li>• Evacuation Centre – Ipswich Show Society Debrief</li> <li>• Evacuation Centre – ICC Staff Debrief</li> <li>• LDMG &amp; LRRG – We want your observations survey</li> <li>• Media and Comms Debrief report</li> <li>• Survey ICC Staff – We want your observations Survey</li> <li>• Public Surveys – Public Listening Tours</li> <li>• 2022 Ipswich Floods Review – Shape Your Ipswich Online Survey Report</li> <li>• Feedback data considered: Consultation with state and federal MPs by the Mayor and EMU representative</li> </ul>

We also considered the following relevant legislation:

- Disaster Management Act 2003 (Qld) and Disaster Management Regulation 2014 (Qld)
- Water Supply (Safety and Reliability) Act 2008 (Qld)

**In all, the review included analysis and review of over 740 documents and records and over 50 websites containing numerous documents. Seven debrief sessions were facilitated for responders, and four for the community. A total of 31 people involved in the response and recovery were interviewed individually.**

## Ipswich Flood Risk Profile

The City of Ipswich Floodplain Management Strategy defines Ipswich's flood risk profile:

- Ipswich is a city with a complex flood story due to its location on both the floodplains of the Bremer and Brisbane Rivers. The Bremer River is an important part of the much larger Brisbane River catchment (13,570km<sup>2</sup> in size) and river levels are also influenced by tides from Moreton Bay.
- Flooding has always been a natural occurrence in the region and this was recorded as early as 1824 by the explorer John Oxley. While riverine floods usually dominate, flooding also occurs along the many local creeks, as well as numerous overland flow paths which exist. In terms of rainfall, Ipswich typically receives approximately half its average yearly rainfall (900mm) in the months of December to March.
- The majority of the Ipswich Local Government Area (LGA) lies within the lower Bremer River floodplain. The upper catchment areas lie within the Scenic Rim floodplain whilst the north-eastern and northwestern parts are located directly on the Brisbane River floodplain. The Brisbane River also forms the city's north-eastern boundary. The Bremer River catchment has a total size of approximately 2,030km<sup>2</sup> with a 100km river length from its source in the Scenic Rim to the Brisbane River.
- A number of major creeks flow into the Bremer River within Ipswich, namely the Western (Franklin Vale), Warrill (Purga), Ironpot, Mi Hi, Deebing and Bundamba Creeks. The Six Mile, Goodna, Woogaroo and Sandy Creeks flow directly into the Brisbane River along the city's north-east boundary. Black Snake Creek, which flows through the township of Marburg, also feeds into the Brisbane River at Fernvale.
- Urban development in Ipswich has historically been concentrated along the Bremer River and the eastern creeks, primarily along the Deebing, Bundamba, Six Mile, Goodna and Woogaroo Creeks. The City is currently experiencing a high level of urban development in the Ripley Valley area (Bundamba Creek), Springfield area (Woogaroo Creek) and Redbank Plains as well as Collingwood Park areas (Six Mile Creek). This level of growth has been acknowledged in the recently adopted Advance Ipswich (the plan) with the state forecasting a population growth to 435,000 people by the year 2031 from the current population of approximately 233,302 ([Estimated Resident Population \(ERP\) | City of Ipswich | Community profile](#)).

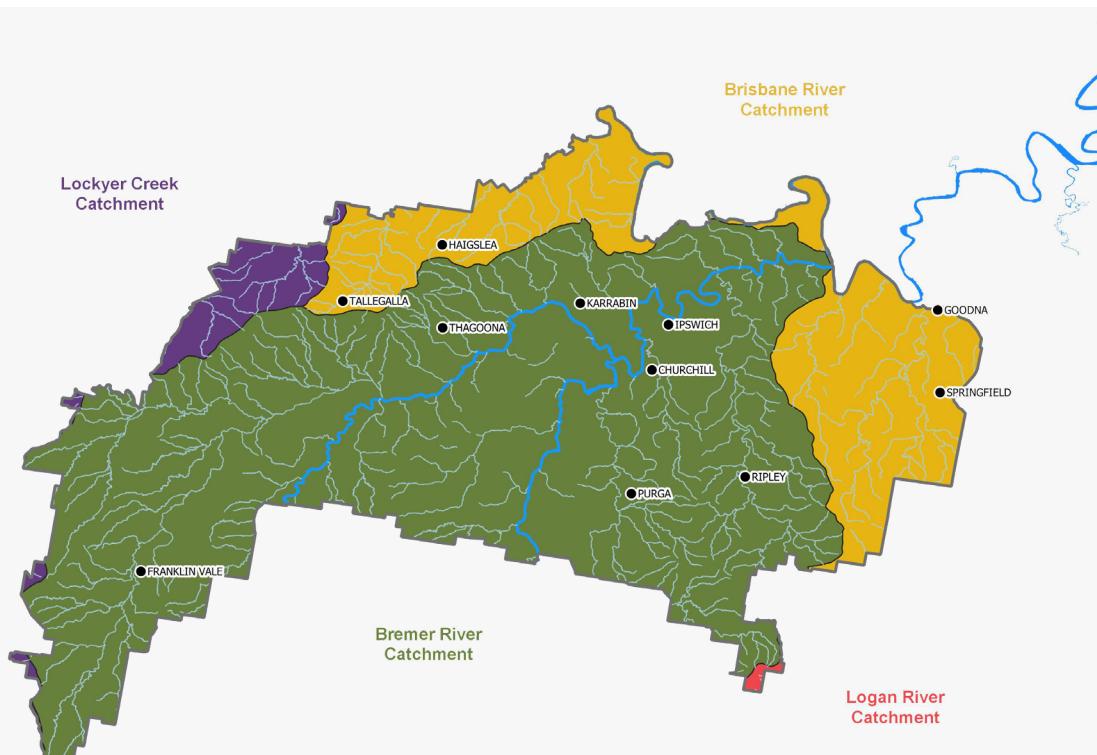


Figure 3. Major catchments within the Ipswich LGA

## February to March 2022 Flood Review

### Overview and Context (Part I)

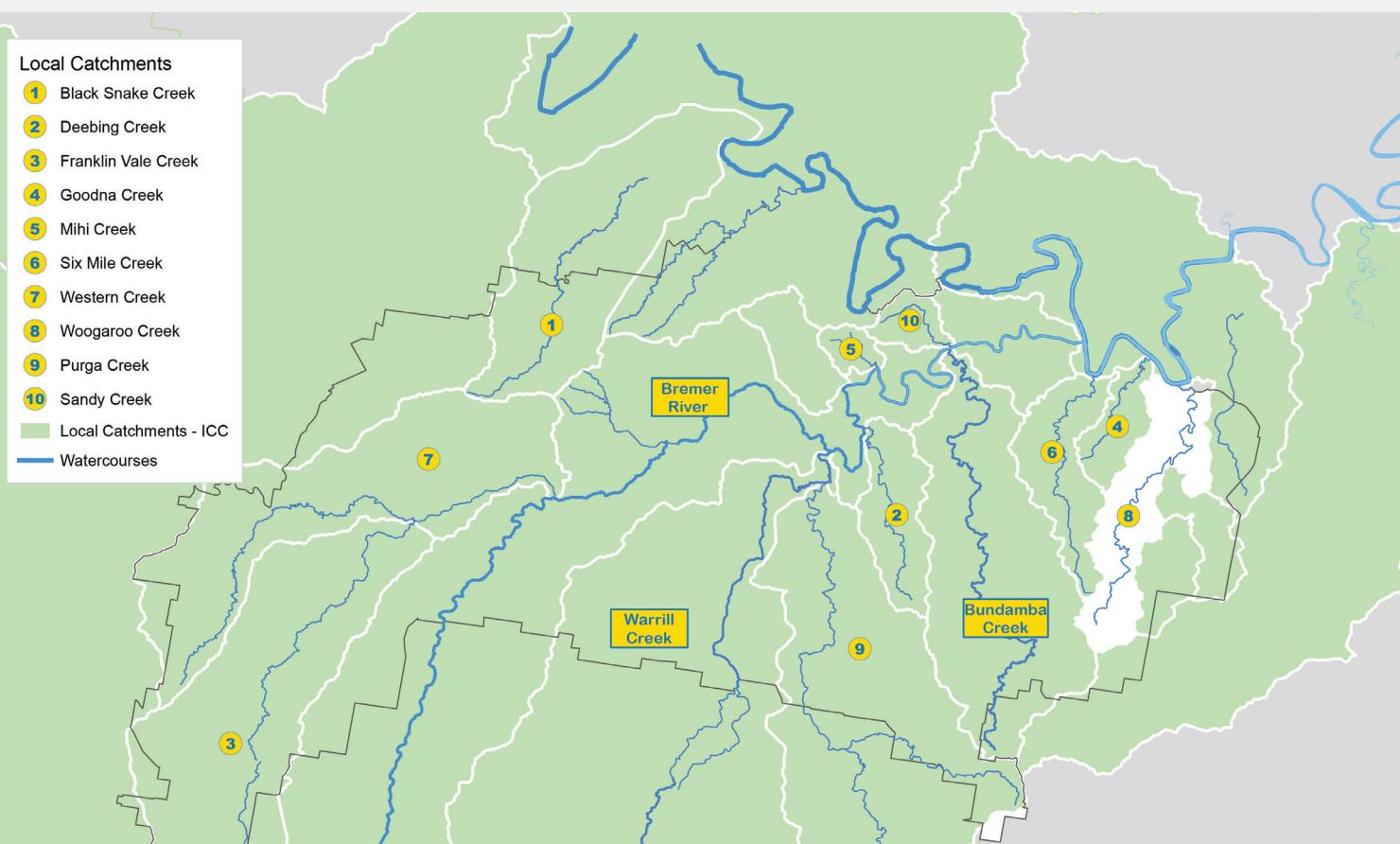


Figure 4. Catchments and sub-catchments within the Ipswich LGA

Ipswich has a high flood risk. As per the list of the top 20 most at risk federal electorates to climate extremes 2030:

- No. 5 electorate of Wright – Parts of Ipswich LGA – 13.6% of properties are high risk
- No. 20 electorate of Blair – Parts of Ipswich LGA – 7.1% of properties are high risk

The February/March 2022 was the fourth most severe flood to affect the area since recording commenced.

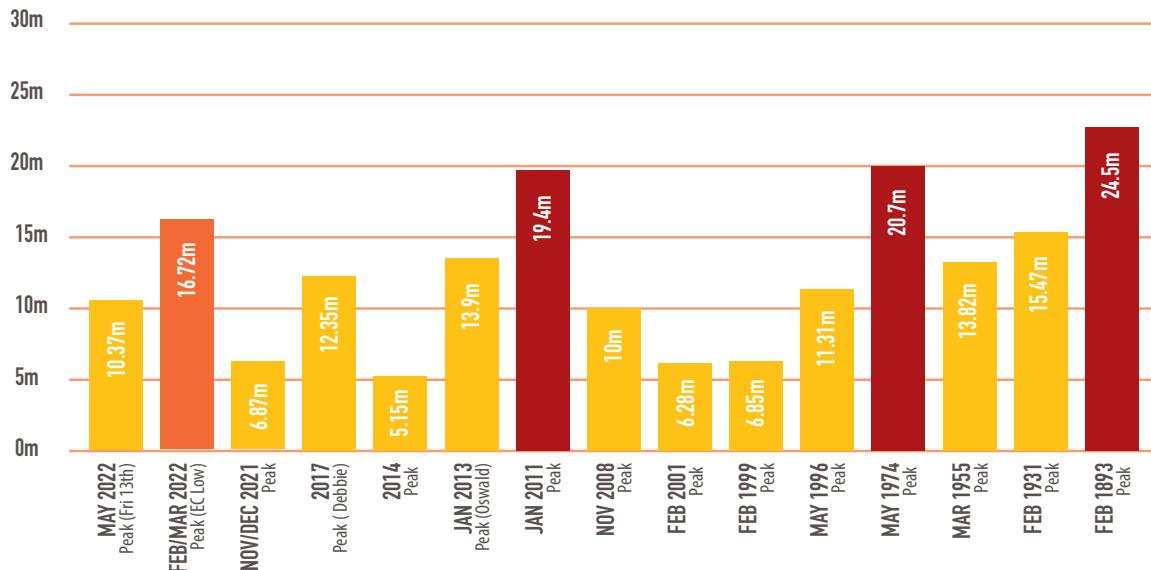


Figure 5. Flood levels – comparative analysis – Ipswich (David Trumpy Bridge)

## The 2022 Flood Event

The February/March flooding event was significant and had unique characteristics. It was widespread, covering an area from Gympie to Northern New South Wales. Due to climate drivers including La Nina, wet weather conditions continued from 2021 to 2022, resulting in high levels of soil saturation. These pre-conditions resulted in a flooding event with overland flow, creek and riverine flooding impacts. The volume of rain was unprecedented, exceeding previous Ipswich rainfall records. A new record for daily rainfall at Wivenhoe Dam was set at 314.6mm on 26 February, which was 65.8mm higher than the previous record set during the 2011 flood event. The Amberley gauge recorded 935.8mm over the summer period, 111.2mm higher than the 2011 record and more than twice the average summer rainfall for this location.

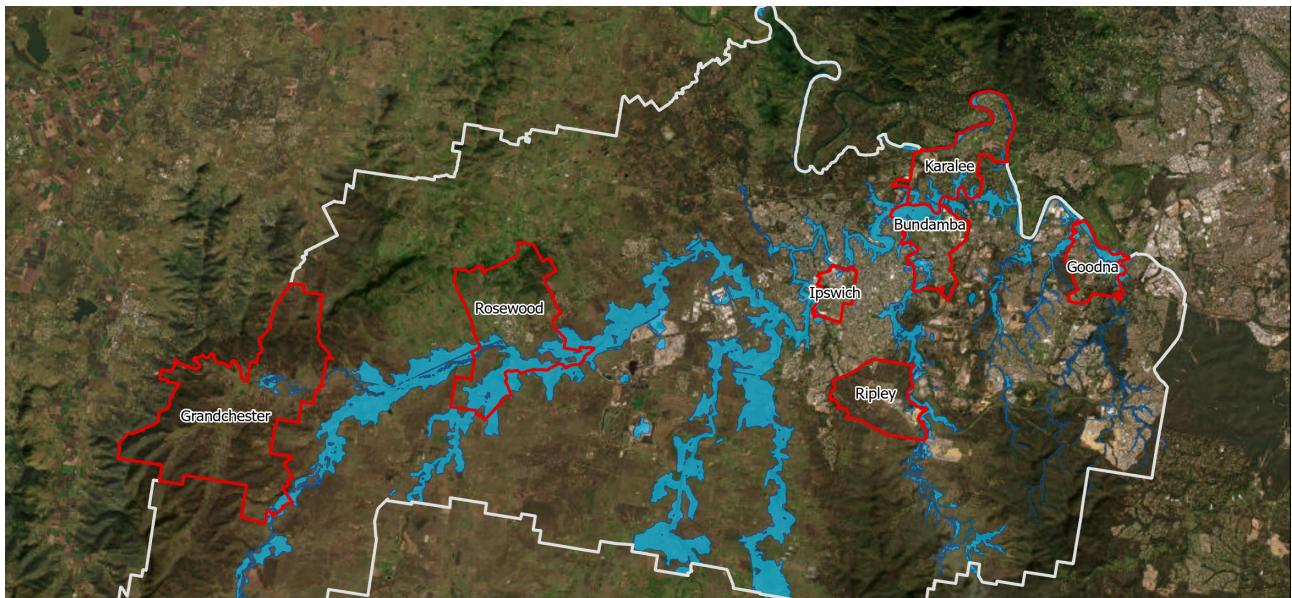


Figure 6. Ipswich Local Government Area flood extent

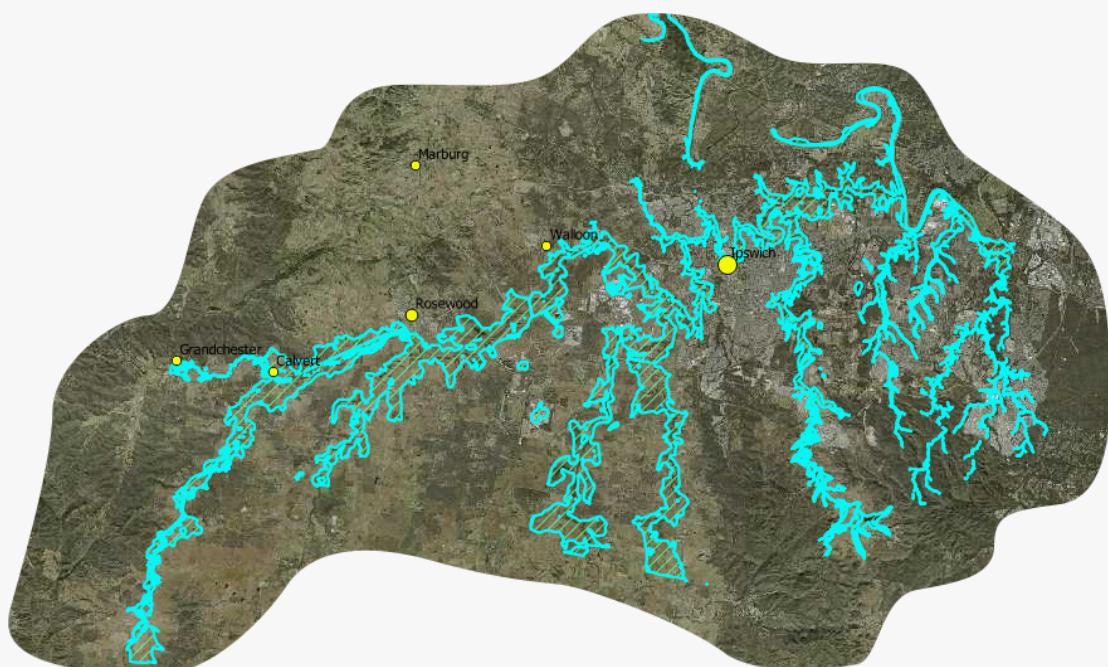


Figure 7. Ipswich indicative flood extent 2022 flooding (Ipswich flood intelligence data)

## February to March 2022 Flood Review

Overview and Context (Part I)

### Response Activity

From Wednesday 23 February to Wednesday 9 March 2022, Ipswich City Council activated its Local Disaster Coordination Centre (LDCC) in response to the unfolding situation. The Local Recovery and Resilience Group (LRRG) activated on Sunday 27 February 2022 and, while the group formally stood down on Thursday 8 September in relation to this event, recovery activities are ongoing at date of review publication. Since the flood event the Flood Intelligence Centre (FIC) has been absorbed into the LDCC as a functional cell to maximise efficiency.

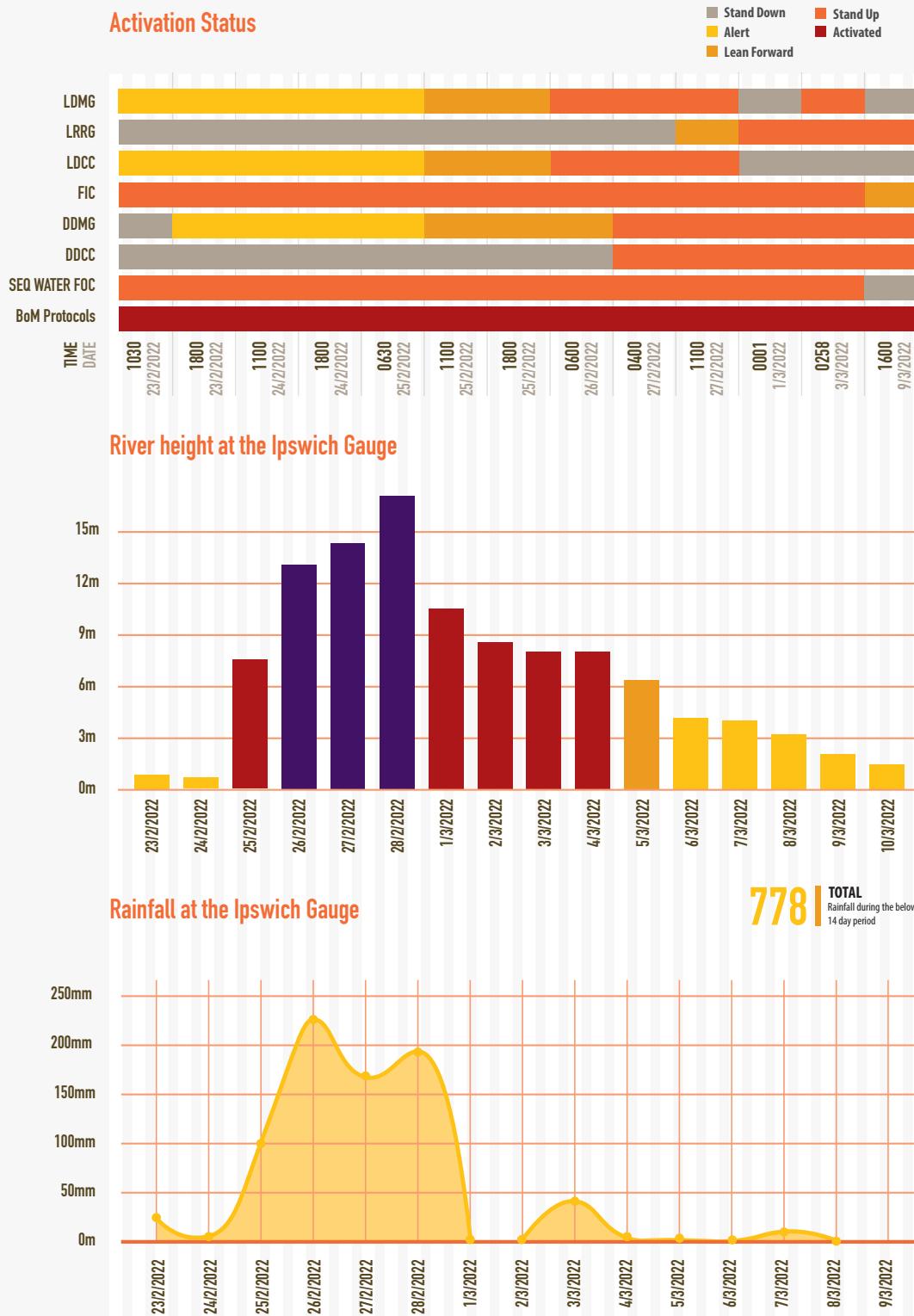


Figure 8. Feb/March 2022 flood event overview

## Summary of Warnings and Alerts



Figure 9. Summary of warnings and alerts

Although the Australian Warning System had not yet been implemented for flood in Queensland, Ipswich City Council proactively used the AWS symbology and templates during this event to deliver warnings on its disaster dashboard and social media platforms

## February to March 2022 Flood Review

### Overview and Context (Part I)

### Response Timeline

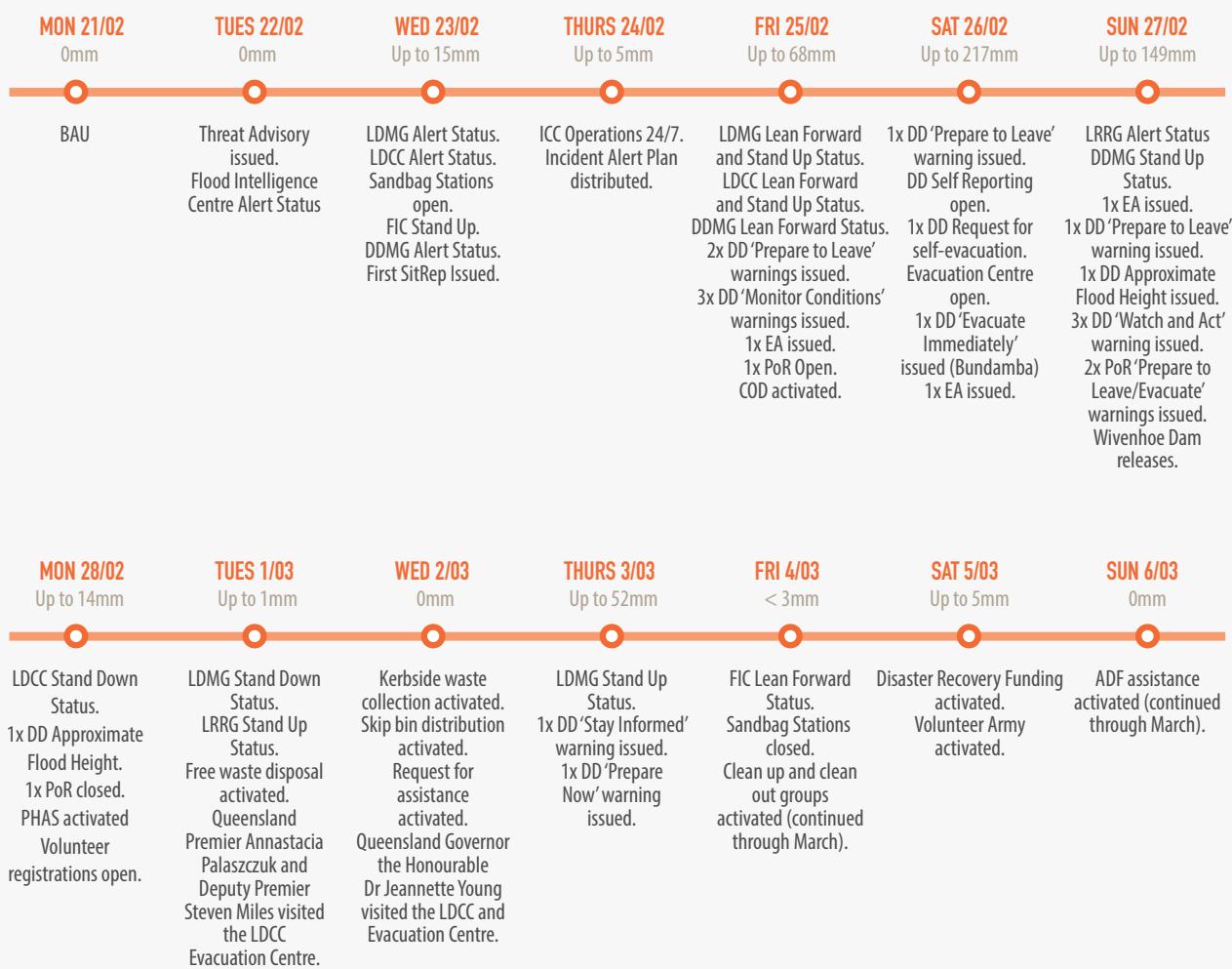


Figure 10 . Response timeline of events<sup>2</sup>

Ipswich City Council, State-Government, community organisations and Local Recovery and Resilience Group and Task Force members came to the aid of the community and worked tirelessly to meet community needs. It is also essential to acknowledge the individuals, community groups and businesses who supported each other throughout this event. One evacuation centre was managed by Council, two places of refuge were opened and supported by Council, and two Recovery Hubs were led by the Department of Communities, Housing and Digital Economies (DCHDE), with Council support. They even received evacuees from two neighbouring LGAs.

Community needs in relation to waste collection were addressed swiftly and a contractor engaged for kerbside collection effectively redirected to assist council crews with flood clean up. Australian Defence Force (ADF) support was also valuable and appreciated.

Community sentiment in relation to coordination of spontaneous volunteers was better than previous events. As of 14 March 2022, 933 volunteers had registered for the city's flood clean up via Volunteering Queensland. All field crews were on the ground as soon as the water receded to restore roads.

The new Local Disaster Coordination Centre with improved resources and facilities at 1 Nicholas Street provided a productive work environment.

<sup>2</sup> City of Ipswich Severe Weather February 2022 Recovery Plan July to September 2022 Quarter Plan



Figure 11 . Brisbane Road businesses starting to clean up – image provided by ICC

## Impacts

Though Ipswich did not experience any loss of human life in this flood event, the community impact cannot be understated. Flood waters caused devastating damage across the city to over 600 dwellings, almost 300 businesses, more than 250 vehicles, and unquantified losses to livestock and livelihoods. Riverbanks and riparian areas were eroded or destroyed, and entire trees ripped from the ground and carried downstream. Landslips, an unusual phenomenon for Ipswich, occurred at various locations across the city. The Queensland Fire & Emergency Services (QFES) Damage Assessment Dashboard provided a quick overview of the assessed damage caused to buildings within the Ipswich LGA. This dashboard was an effective tool in identifying areas where there were high levels of damage. Figure 12 provides data as at 10 March 2022.

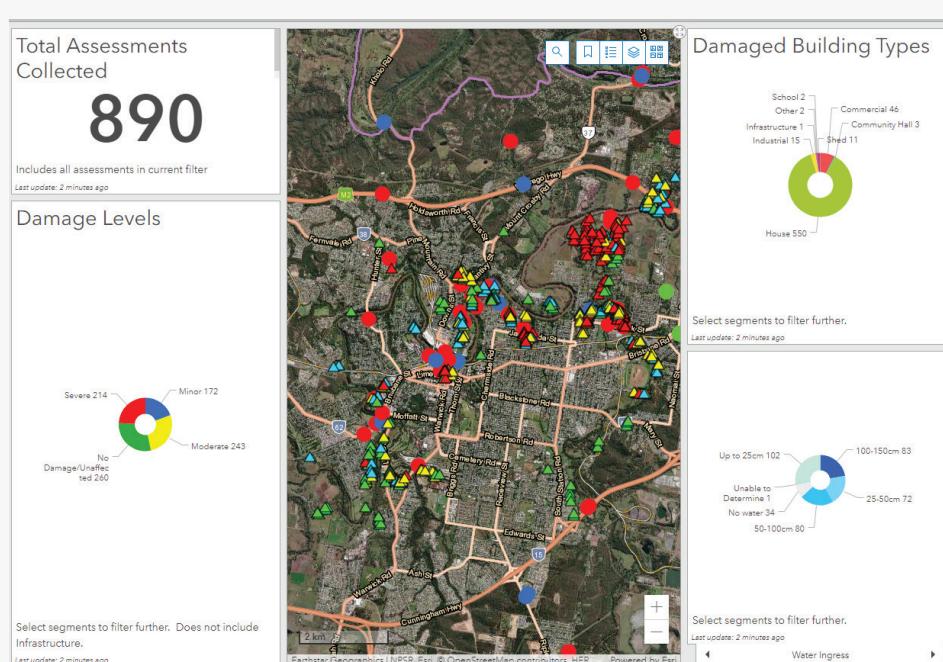


Figure 12 . QFES Damage Assessment Dashboard<sup>3</sup>

<sup>3</sup> Situation Report, 15 March 2022, 16.00.msg

## February to March 2022 Flood Review

### Overview and Context (Part I)

A breakdown of the QFES data into suburbs was a further tool that assisted Ipswich City Council in determining suburbs with the highest needs.

Damage	Minor	Moderate	No Damage	Severe	Grand Total
SUBURB_CALC	Damage (Count All)				
AMBERLEY			1		1
BARELLAN POINT	6	7		1	14
BASIN POCKET	15	3	11		29
BLACKSTONE			5		5
BRASSALL			1	1	2
<b>BUNDAMBA</b>	<b>15</b>	<b>34</b>		<b>62</b>	<b>111</b>
CHURCHILL	3	20	16	2	41
EAST IPSWICH			1		1
GAILES	3	7	7	1	18
<b>GOODNA</b>	<b>40</b>	<b>43</b>	<b>71</b>	<b>70</b>	<b>224</b>
GOODNA EAST		7		2	9
IPSWICH	3	18	6	4	31
KARALEE	7	15			22
LEICHHARDT	1				1
MOORES POCKET	5	2	4		11
<b>NORTH BOoval</b>	<b>13</b>	<b>33</b>		<b>37</b>	<b>83</b>
NORTH IPSWICH	10	8	2	1	21
ONE MILE	5	5	6	1	17
RACEVIEW			7		7
REDBANK	1		4		5
TIVOLI		8	6	4	18
WEST IPSWICH	7	4	4	2	17
<b>Grand Total</b>	<b>134</b>	<b>214</b>	<b>152</b>	<b>188</b>	<b>688</b>

Figure 13. Suburb damage as extracted from QFES Damage Assessment Dashboard<sup>4</sup>

<sup>4</sup> Situation Report, 15 March 2022, 16.00.msg

## February to March 2022 Flood Review

### Overview and Context (Part I)

The Department of Employment, Small Business and Training (DESBT) provided economic impact data of the floods for the Ipswich LGA as of 18 May 2022. This data highlighted the financial impact on businesses.

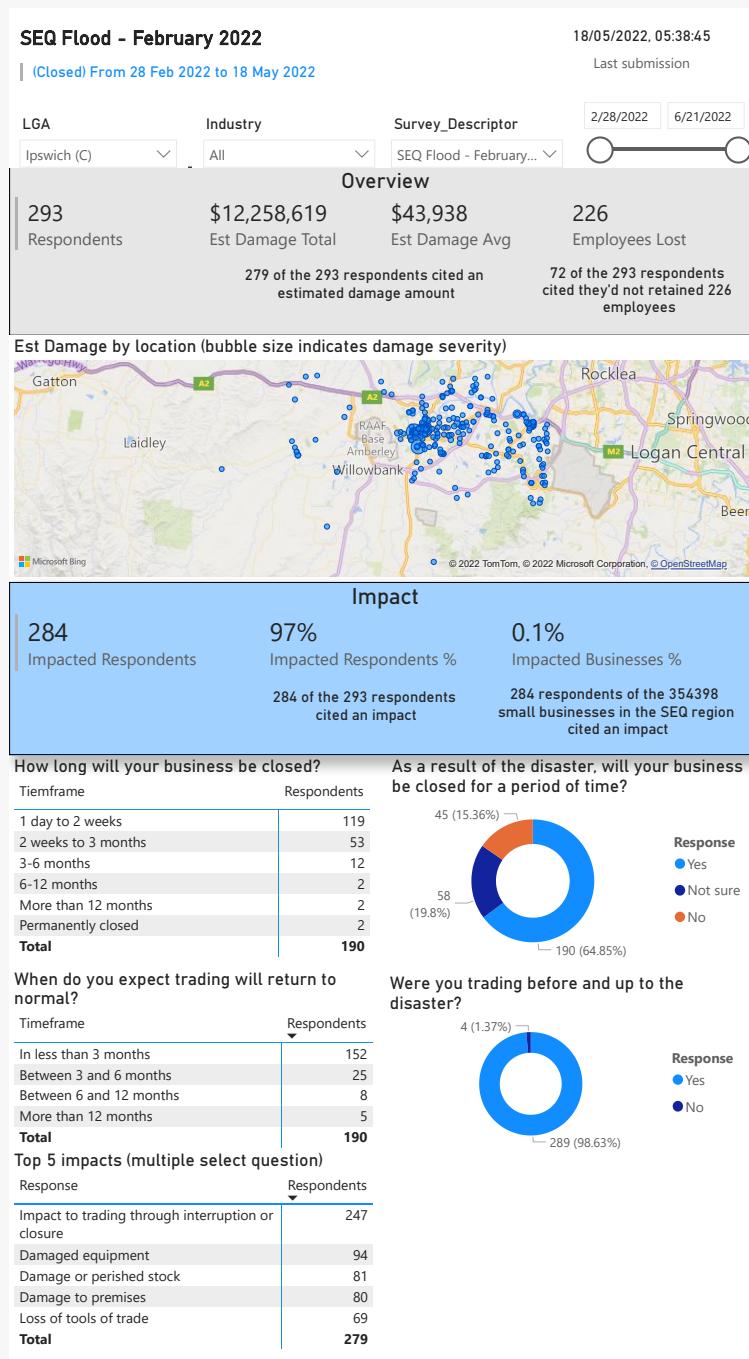


Figure 14. Economic impact data<sup>5</sup>

Roads and bridges were inundated, major water treatment plants and power infrastructure had to be taken temporarily offline, and Colleges Crossing, a significant recreation and tourism location, was destroyed.

## Human/Social

- Displacement of residents – up to 410 residents attended the Ipswich Evacuation Centre at its peak.
- The DCHDE provided temporary accommodation support to 108 residents of Ipswich.
- As at 13 April, 14 Ipswich residents were still accessing temporary accommodation support through DCHDE.
- As at 14 November, the Insurance Council of Australia had received 4,997 claims for Ipswich property (home, contents, motor, building, landlord) to the value of \$127,249,084.
- The DRFA Personal Hardship Assistance Scheme was activated for the Ipswich LGA on 28 February and closed on 26 March.
- As at 26 September, over 7,709 Emergency Hardship Assistance grants had been administered by DCHDE to support Ipswich residents. This includes grants, 15,777 Ipswich residents were provided assistance grants to the value of \$6,292,063.
- Support was provided from several angles:
  - ¤ Community Recovery Hubs were opened at:
    - ¤ Ipswich Trades Hall – 4 Bell Street, Ipswich
    - ¤ Frank McGreevy Function Centre – 112 Brisbane Terrace, Goodna
    - ¤ Recovery Hubs offered a one-stop-shop for people to access disaster recovery services, including information and referrals to support services, information on flood recovery, financial assistance counselling, housing support, emotional, mental health and personal support.
  - ¤ Support services operating from the hubs include the Department of Communities, Housing and Digital Economy, Services Australia, Australian Red Cross, Lifeline, Salvation Army, Insurance Council of Australia, insurance companies, Ipswich City Council and West Moreton Health.
- Resilient Residential Recovery Package – industry and community education program.
- Human and Social Recovery Package – flexible funding grants; community health and wellbeing package; accommodation package; and a community development program.

Eligible residents within the Ipswich LGA were able to apply to the Department for Home Affairs for:

- Disaster recovery payments
- Disaster recovery allowance for New Zealand residents living and working in Australia, that were not eligible for the other support measures.
- Personal hardship assistance scheme
- Essential Services Safety and Reconnection Scheme

## Economy

- Almost 300 businesses in Ipswich were impacted to varying degrees.
- Impacts for those impacted businesses ranged from business interruption, loss of some or all stock, damage to some or all stock and/or damage to premises.
- As at 14 November, the Insurance Council of Australia had received 309 claims from commercial policy holders in Ipswich with total incurred losses to the value of \$26,064,877.
- The average value of damage/loss was estimated to be \$84,352 per business.

Recovery payments were available from the Department of Home Affairs

- Recovery grants of up to \$75,000 for eligible primary producers to help with recovery and reinstatement activities.
- Recovery grants of up to \$50,000 for eligible small businesses to help with recovery and reinstatement activities.

- Recovery grants of up to \$50,000 for eligible non-profit organisations to help with recovery and reinstatement activities.
- Recovery grants of up to \$20,000 for clean-up, repair and replacement of sports and recreation facilities.
- Economic Recovery Package – industry recovery and resilience officers; small business support package; tourism recovery and resilience package; rural landholder recovery grant program; and medium to large business recovery loans.
- Recovery payments were available from the Department of Small Business and Training:
- Support payments of up to \$20,000 for eligible employers who hire eligible unemployed jobseekers.
- Back to work support payments of up to \$15,000.
- Disaster assistance loans and essential working capital loans for primary producers
- Disaster assistance loans and essential working capital loans for small businesses
- Disaster assistance loans and essential working capital loans for not-for-profit organisations
- Freight subsidies for primary producers.

## Environment

- Resilient household rebuild program; home raising program; voluntary home buy-back program; and property level flood information.
- Public health risks for the community as a result of exposed asbestos to several flood damaged homes and contaminated wastewater spillage from privately owned septic tanks.
- Environmental damage to ecosystems within the Brisbane and Bremer River and impacted creeks.
- Damage to/loss of native animal habitats along waterways due to significant erosion and pollution as a result of floodwater run-off.
- Impacts to natural areas, banks and waterways, culturally significant sites, conservation estates, service trail network, bushland, debris (natural and non-natural), vector control issues.
- Resilient household rebuild program; home raising program; voluntary home buy-back program; and property level flood information.
- Environmental Recovery Package – environmental recovery package; and flood risk management package.
- Clean Up Package – to assist state agencies and local councils with the clean-up, removal and disposal of flood-related debris in impacted communities.
- Impacts from chemical spills and discharged from commercial/regulated premises
- Human health risks of mosquito-borne diseases with pooling water
- Loss of livestock and health impacts of decaying carcasses
- Putrescible waste disposal operations, including impacted pet food business
- The impacts in the Ipswich area were significant as demonstrated in the image below.



Figure 15 . Healthy Land and Water Impact Tool (2022 SEQ Flooding) – Environmental impacts across South-East Queensland, including Ipswich

## Waste Material

Operations for the entire event to 14 March 2022:

- 6,000+ tonnes of waste delivered to landfill – 3x more than usual
- 4,776 visits to Riverview and Rosewood Recycle and Refuse Centres
- Hundreds of tonnes of household items collected as part of Council's free kerbside collection in flooded suburbs

## Infrastructure

- 10 Sporting Facilities
- 17 Parks.
- 4 Community Facilities
- 12 Conservation Estates
- Local Recovery and Resilience Grants to address emerging recovery needs and build community resilience.
- Infrastructure and Built Recovery Package – community and recreational assets program; betterment for roads and transport assets; and local recovery and resilience grants.

## Roadways

- 173 Roads Sealed Impacted
- 331 Unsealed Roads Impacted
- 2 Drainage Structures Impacted
- 3 Flood Monitoring Towers Impacted
- During the peak of the flood, 101 roads were closed across Ipswich (including state-controlled roads).
- Ipswich Council has spent more than \$7 million on flood recovery efforts since the flood. This has seen the filling of about 3,000 potholes plus the repair and reopening of more than 100 roads and bridges.
- In the 2022-2023 financial year, a further \$1.1 million has been set aside to repair about 6,030 potholes.

## Sandbagging

- Operations for the entire event: 72 crew members assisted with filling, loading onto pallets and into resident's cars; 28,000 sandbags were filled, each weighing 20kg.

## Ipswich Flood Response – A Community Perspective

Four Public Listening Tour Forums were held throughout the Ipswich LGA:

- Rosewood and surrounds (31 August 2022) – where 8 persons from the local area attended.
- Ipswich, East Ipswich, Bundamba and surrounds (13 September 2022) – where 21 persons from the local area attended.
- Goodna and surrounds (14 September 2022) – where 10 persons from the local area attended.
- Karalee and surrounds (15 September 2022) – where 16 persons from the local area attended.

During the Public Forums, a number of positive points were identified:

- Council's Disaster Dashboard was noted as being helpful and kept up to date, giving the community a reliable source of information.
- Council was proactive at sharing information, not only on the Disaster Dashboard but also on social media platforms.
- During the event, Council staff and Councillors were perceived to be helpful, provided localised updates and undertook relevant actions if the information could not be issued at that time (e.g. issuing a follow-up call or sending information to residents).
- Council assisted the community in their clean-up efforts by immediately allowing the use of the Council waste facilities for free (e.g. dumps). The deployment of waste trucks into the more heavily impacted communities as soon as the water receded to remove waste reduced the emotional impact of seeing flood damaged property piled up in the street
- Attendees noted that multiple Councillors and Council Officers reached out to the community during and after the flood event and helped them.
- Assistance from non-profits, e.g. Lifeline, were positively regarded by the community.
- The Recovery Hubs were organised quickly and provided a lot of support to community members.

Members of the community identified some areas where improvements could be made:

- Technical terminology used throughout the disaster was hard to understand, so clear messaging is needed through notifications, print material, online and social media.
- Participants would rather be overprepared than underprepared and would like to see Council having equipment ready in identified and potential flooding areas to assist residents with preparations.
- Access to localised flood mapping data was requested.
- Participants may have blocked the number used for emergency announcements. Council could provide awareness that blocking the number in the past will block future announcements and information – need to build awareness about emergency announcement/text and other notifications.
- Due to the high percentage of CALD community members within the Ipswich LGA, accessible and multilingual messaging is needed to ensure it reaches all members of the community.
- Attendees across the Ipswich LGA noted concerns regarding historic Council development approving developments on floodplains.
- Leaving Recovery Hubs open for a longer timeframe was requested, as many residents needed the resources they provided many days after the flood event.
- A central register would help track volunteers in communities to ensure all volunteers are bona fide – many seemed random and residents were worried about being scammed.
- Greater education for residents around where emergency facilities are located and where supplies can be found (i.e. food).
- Establish an official emergency/recovery centre, creating a safe location for those to stay during future flood events in identified vulnerable communities where isolation is known to occur.

## Review Outcomes – Operational

### Incident Management

In Ipswich, disaster response is operationalised through the Local Disaster Coordination Centre (LDCC). The LDCC processes, resources and documents are managed by Council's Emergency Management Unit (EMU). The EMU leadership has been consistent since 2015; however, the team has expanded over the past two years. Since the 2020 Ipswich hailstorm response and subsequent review, many improvements have been implemented, including training roughly 40 LDCC staff, streamlining processes and providing additional resources ranging from improved systems to extra visual displays. This has led to demonstrably enhanced incident management practices during this response, including establishment of a Common Operating Picture, regular room briefs, response review and required adjustments.



Figure 1. LDCC operations during the flood

### Structure

Outside a disaster, the EMU is responsible for disaster impact mitigation, planning and disaster preparedness activities. During a disaster, the EMU is responsible for incident management, stakeholder engagement, supporting response/recovery and providing guidance on processes/systems/documents and compliance requirements. Two leading EMU staff assume a direct role as Incident Controller/LDCC Commander in shifts.

#### Observation:

Under current arrangements, insufficient resources are available to deliver all response and recovery responsibilities, resulting in gaps in providing guidance on processes/systems/documents and compliance requirements. This was particularly evident in the transition from response to recovery. Preferably, the EMU would have coordinated and coached that transition plus ensured inductions were conducted and a central repository of information was established. However, due to the ongoing response needs caused by continuing rain forecasts, this was not possible. All EMU staff were deployed to the LDCC and were unavailable to support the transition to recovery.

Additionally, the EMU is gradually directed towards managing internal consequences of emergencies as well as community emergencies. With finite resources, this takes away from focusing on the community.

**The pressure on EMU staff also introduces concerns in relation to fatigue management. With cascading and compounding disaster events unfolding in recent years, the risk to Council as an organisation is magnified.**

#### Insight:

To allow EMU to focus on providing response and recovery support, as well as sustain its ability to conduct these tasks for an extended period (weeks to months), Council staff could be trained to fulfil the Incident Controller/LDCC Commander role.

#### Insight:

To optimise skill levels in the LDCC it could be beneficial to align functions with the skills in the respective Council Branches. For example, tasks in Public

Information & Warnings align with the skill sets in Coordination and Performance Department, and the skill sets for Logistics and Finance align with Corporate Services Department. (See figure 4)

## Recommendations

1. Organisation: Revise the LDCC structure and reallocate EMU as an advisory role.
2. People: Explore opportunities to optimise use of skills and align resourcing for the various LDCC functions to the Branches in Council (see figure 4 for an example)
3. Training: Train Incident Controllers/LDCC Commanders within Council (Branch Manager level) to lead the operational response.
4. People: Formalise roles and responsibilities in managing internal/organisational crises and disaster management. Ensure the agreed structure is resourced to deliver on both objectives.
5. Organisation: Develop an integrated framework for Council's crisis management, business continuity, disaster management and emergency response functions with supporting integrated emergency response and business continuity plans (see figure 2 below). Build internal awareness and competency across Branches to implement and execute the plans.

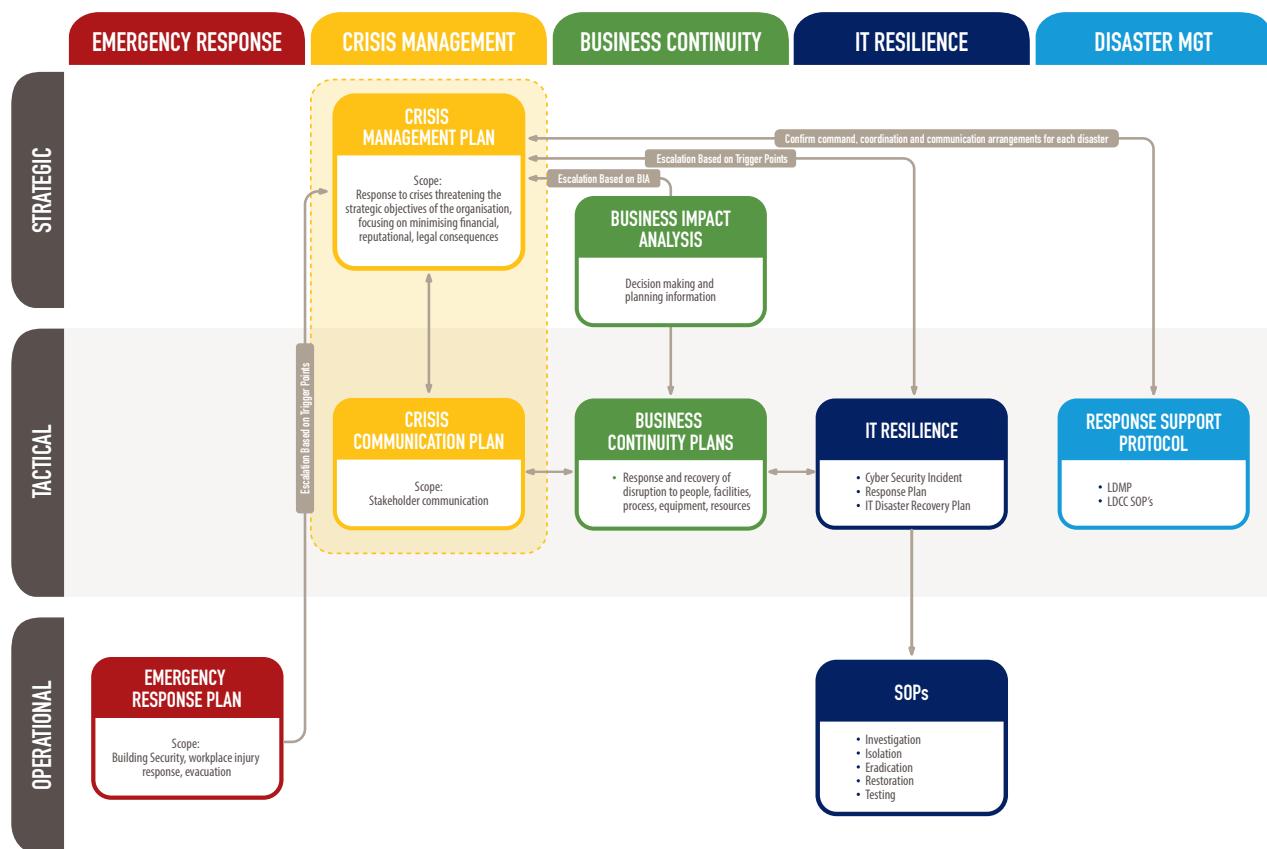


Figure 2. Phoenix Resilience model for the integration of corporate incident management capabilities with disaster management

## Proposed LDCC IMT Structure

LDC: GM Planning & Regulatory Services (Supported by other GM's)  
D/LDC: Manager, Environment & Sustainability (Supported by other BM's)  
Council EM Advisor: EM & Sustainability Manager  
EM Support: EMU Staff

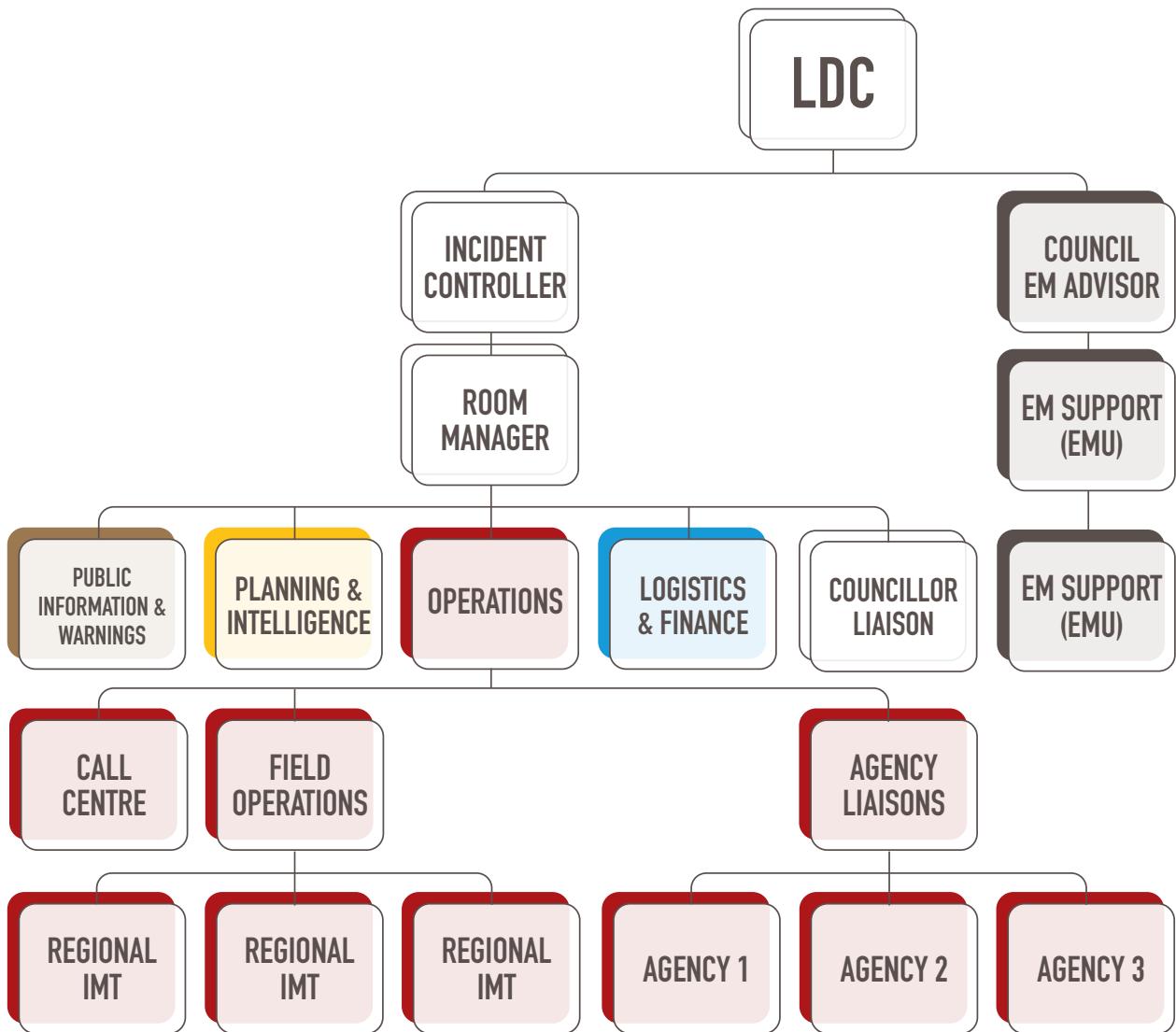


Figure 3. Proposed LDCC structure

## Alignment of Council Departments to LDCC IMT Structure

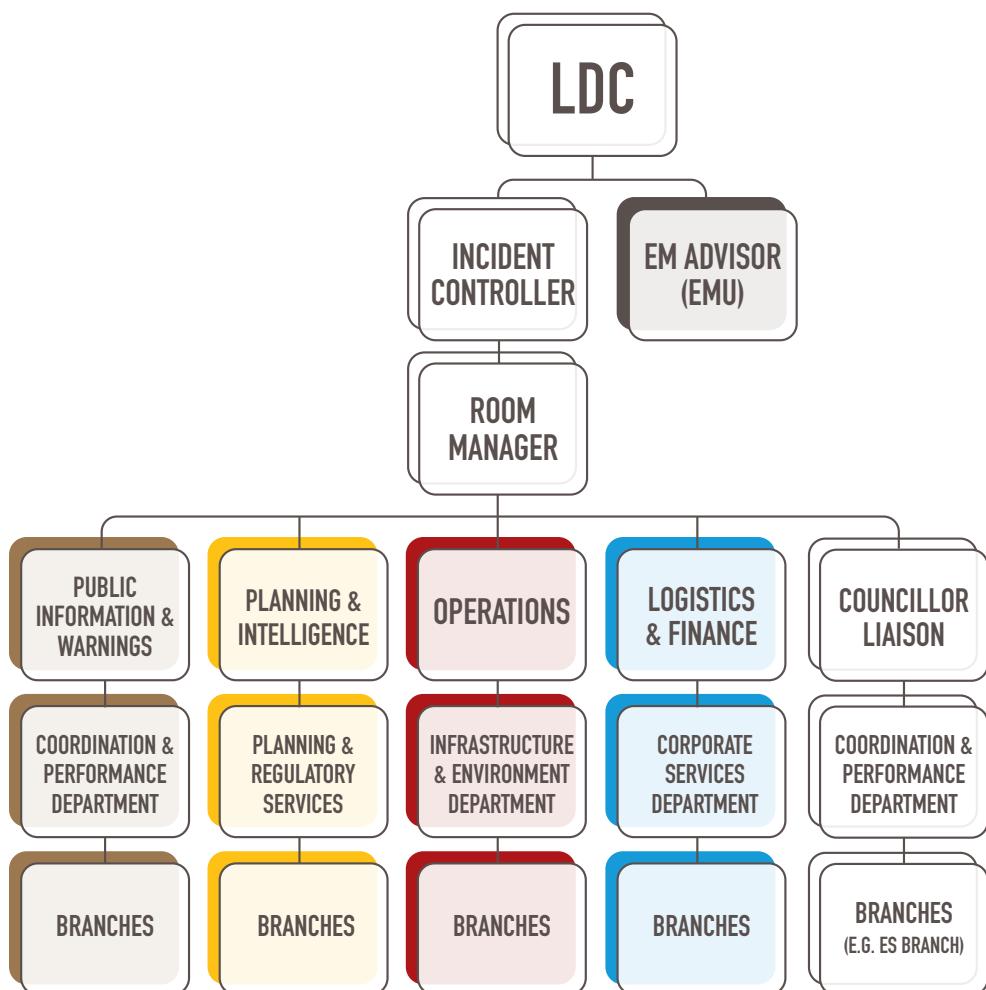


Figure 4. Example of how Council Branches can be aligned to the LDCC structure

## Technology

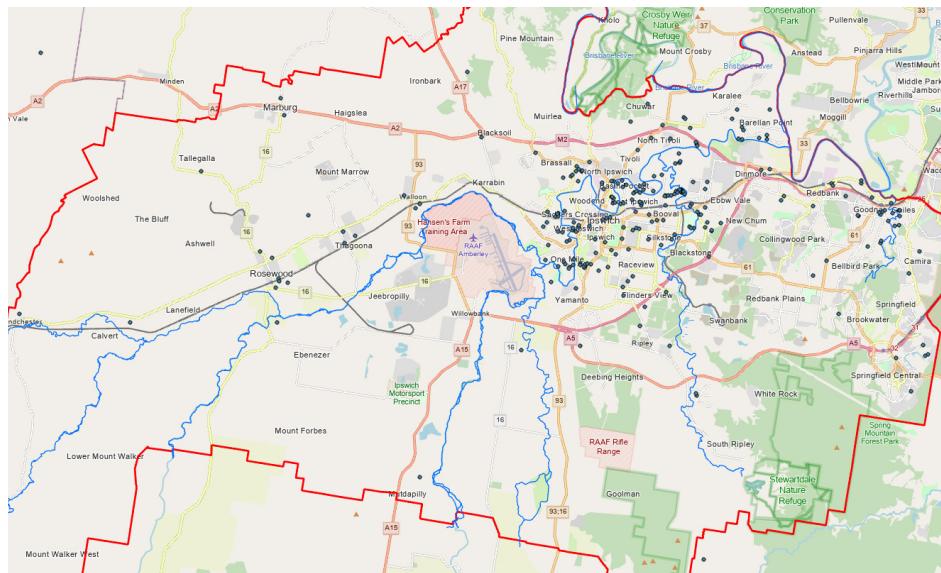
The EMU uses Guardian IMS for recording decisions and actions, as well as impact assessments via dynamic forms. Decisions and actions were recorded sufficiently but could have been more comprehensive.

Guardian IMS was not used consistently by LDCC members to record and manage information. LDCC members have not yet been trained on the upgraded system Guardian IMS and tasks were mainly completed in Excel and Word. Training and further capability building activities are scheduled.

Guardian IMS allows for the development of dynamic forms during an incident, which in this response were used to collect community impact data directly from community members from the time of impact. The addition of a dynamic form to the Ipswich disaster dashboard enabled the community to communicate their impacts, promoted through social media. This was only in the period until the Recovery Hubs (led by the Department of Communities, Housing and Digital Economies (DCHDE)) were established, this was intended to avoid duplication of data gathering. From the 230 submissions, 119 said they were impacted.

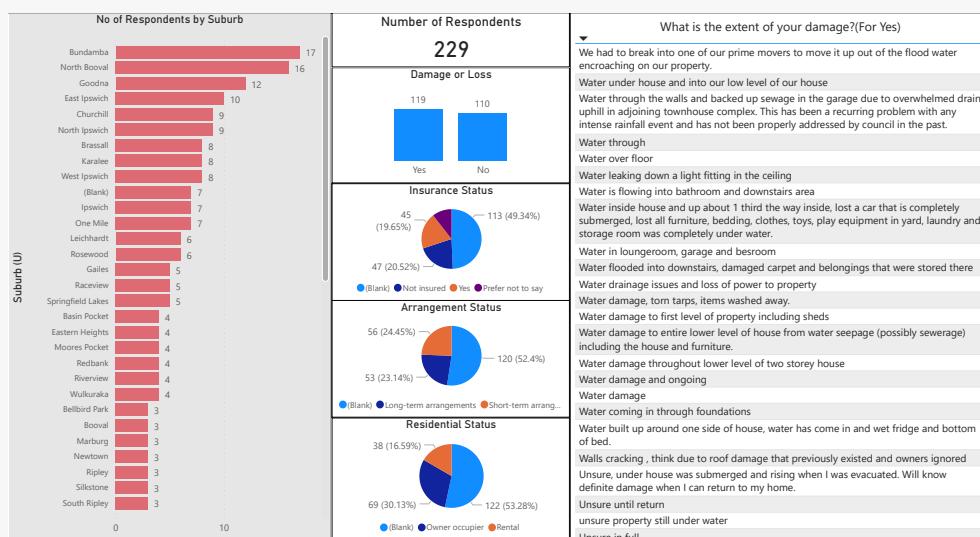
Deploying Guardian IMS to collect rapid impact assessment data helped Ipswich to be the first to release financial hardship allowance payments to the community (via DCHDE).

## Map of Flood Respondents Location



*Figure 5. Respondents' self-assessment locations*

## Flood Respondents Dashboard - Damaged Property Only

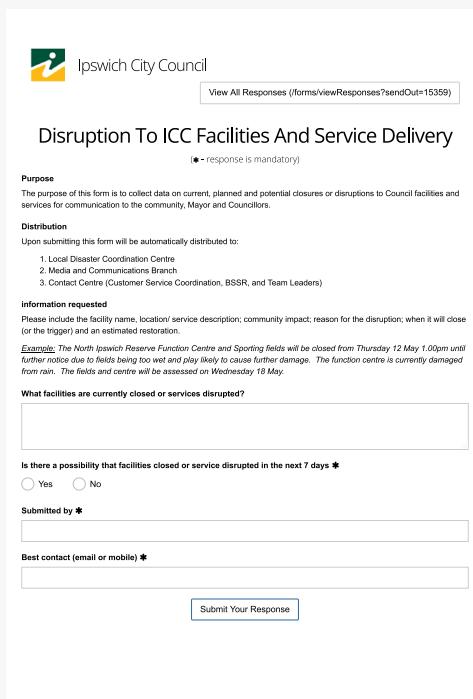


*Figure 6. Respondents' self-assessment locations*

Obtaining situational awareness of the damage to Council's broader assets and facilities was not as cohesive as the community impacts. An opportunity for improvement was identified when conducting impact assessments on Council assets, which are the critical dependencies for executing response and recovery activities.

Since the flood, Council has:

- Set up a reporting scheme and online Council submission form to capture internal impacts affecting disaster response
  - Implemented an internal Branch reporting regime
  - Invested in Guardian IMS improvements, workflows and forms, including Incident Action Plans



The screenshot shows a web-based form titled "Disruption To ICC Facilities And Service Delivery". At the top left is the Ipswich City Council logo. Below it is a "View All Responses" link. The main title is "Disruption To ICC Facilities And Service Delivery" with a note "(•= response is mandatory)".  
**Purpose:** The purpose of this form is to collect data on current, planned and potential closures or disruptions to Council facilities and services for communication to the community, Mayor and Councillors.  
**Distribution:** Upon submitting this form will be automatically distributed to:  
1. Local Disaster Coordination Centre  
2. Media and Communications Branch  
3. Contact Centre (Customer Service Coordination, BSSR, and Team Leaders)  
**Information requested:** Please include the facility name, location/ service description; community impact; reason for the disruption; when it will close (or the trigger) and an estimated restoration.  
**Example:** The North Ipswich Reserve Function Centre and Sporting fields will be closed from Thursday 12 May 1.00pm until further notice due to fields being too wet and play likely to cause further damage. The function centre is currently damaged from rain. The fields and centre will be assessed on Wednesday 18 May.  
**What facilities are currently closed or services disrupted?** (Text input field)  
**Is there a possibility that facilities closed or service disrupted in the next 7 days \*** (Radio button options: Yes, No)  
**Submitted by \*** (Text input field)  
**Best contact (email or mobile) \*** (Text input field)  
**Submit Your Response** (Blue button at the bottom right)

Figure 7. Online reporting tool for Council staff reporting impacts to ICC facilities and services

### **Insight:**

Using technology to conduct community based rapid impact assessment allows for swift response planning and deployment of resources, thereby reducing impacts.

#### Recommendations

6. Training: Establish baseline training requirements for Council staff involved in disaster response, including the use of technology-based systems.
7. Training: Implement a Guardian IMS training program to support LDCC personnel.
8. Technology: Formalise the new dynamic form processes in procedures and include in LDCC induction training.
9. Process: Formalise the disruption/impact assessment and reporting requirements for Council based assets and facilities during a crisis/disaster, including the existing reporting initiatives. Include this in the respective plans (crisis, business continuity, disaster management)

### **Shared Situational Awareness**

When coordinating activities between different groups and agencies, it is essential to have shared situational awareness, which basically means common understanding of the situation and what actions (current and planned) are being taken in response among all responders. In incident management, this is achieved through the Common Operating Picture. This is established in the LDCC through boards, visual displays and maps. However, this works only for responders that are in that room. It becomes more challenging the moment remote responders are involved.

### **Observation:**

The Ipswich Recovery After Action Review (recommendations 14 and 15) identified that various LRRG members were located remotely. Additionally, LDMG members mainly operate remotely and meet via Teams.

### **Insight:**

Having a central repository of all impact information, maps, action plans, sitreps and other relevant documents will allow for coordinated response between the LDCC, LDMG and LRRG (including Task Force members).

## Recommendations

- Technology: Develop an online Common Operating Picture that can be easily shared across the LDCC, LDMG and LRRG using business-as-usual software, such as the Microsoft suite (SharePoint, Teams).

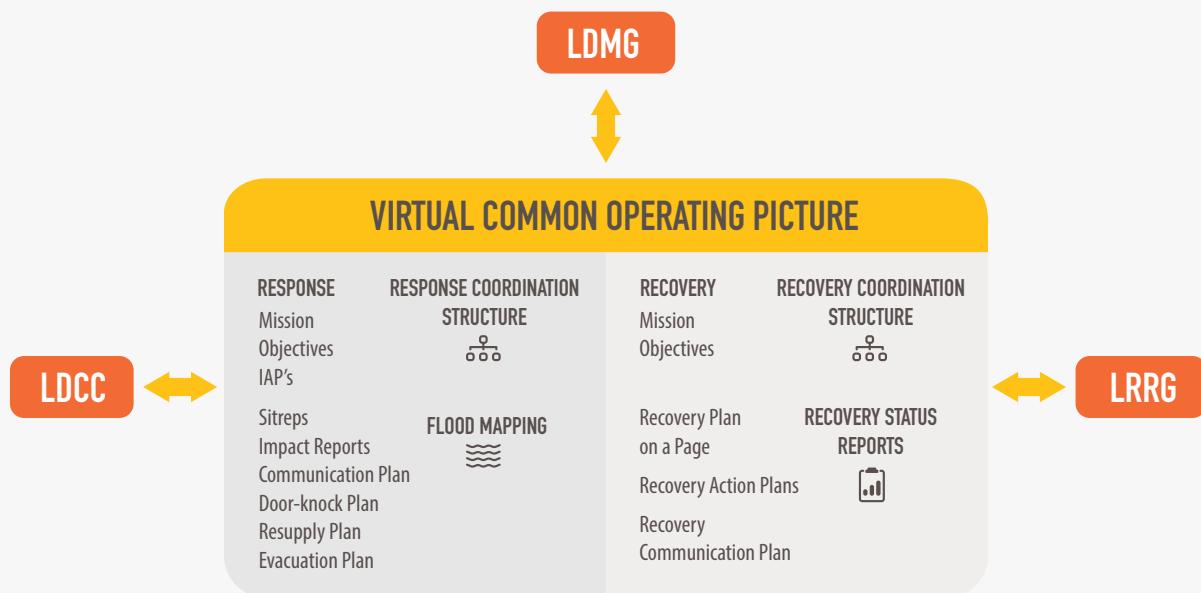


Figure 8. Scope of the Common Operating Picture

## Flood Intelligence and Mapping

### Predictive flood modelling can save lives.

A successful flood emergency response hinges on predictive flood modelling at the time of an event to determine where the actual threat to life and property is located and where resources are best allocated. Indicative maps can assist, but every flood is different. Flood levels are affected by many variables, ranging from soil saturation to location/quantity of rainfall, weather conditions upstream to dam releases.

The flood risk profile of Ipswich indicates regular floods will occur and another severe flood is likely. See also the Ipswich Flood Risk Profile at the start of this report.

There is an expectation from the community and other stakeholders that flood information is provided in a timely manner. However, the review identified various challenges in developing the expected flood information in the required timeframe.

Council has three types of flood mapping available:

- Flood map information: Historic (1974 and 2011) flood maps are available at [Flood map information - historic flood events - Planning & Development \(ipswichplanning.com.au\)](https://www.ipswichplanning.com.au/).
- Flood modelling data: Highly technical information and flood maps in PDF format available at [Floods: Ipswich City Council \(ipswich.qld.gov.au\)](https://www.ipswich.qld.gov.au/floods).
- Interactive mapping produced at the time of a flood event and based on data from the Bureau of Meteorology. This is published on the [Disaster Dashboard \(disaster.ipswich.qld.gov.au\)](https://disaster.ipswich.qld.gov.au).

**Observation:**

The availability of pre-disaster event interactive, fit for purpose and easily consumable flood awareness and risk data is limited. The flood information map includes historic data and the flood studies are not accessible or suitable for general consumption.

**Observation:**

An opportunity exists for improvement in flood level descriptions to the community. Terminology around gauge levels does not provide sufficient guidance to community members on what it means for them. Community members prefer to receive information that states which roads/bridges will most likely be flooded and how it could affect properties and the community.

**Insight:**

Flood literacy and mapping are critical to ensure the community is informed and prepared prior to the onset of flooding.

**Observation:**

Currently, flood mapping during a flood is provided by an external service provider, based on one flood expert in collaboration with EMU staff. This event, as well as a recent flooding risk, highlighted the single-point sensitivity of this arrangement.

**Observation:**

The reliance on a contractor, who is less likely to have extensive familiarity with Ipswich flood studies and catchments, combined with EMU personnel to undertake flood intelligence does not facilitate the timely provision of event-based flood risk data and mapping.

**Observation:**

During this event, ICC staff and external consultants allocated to developing flood intelligence experienced significant fatigue due to the unavailability of internal support and relief.

Qualified hydraulic engineers are employed by Council, who provide business as usual advice and information for various Council activities, including the development of flood studies. However, there is reluctance to contribute during a disaster response operations due to lack of resources, fatigue management concerns and perceived liability exposure. Additionally, they dedicate their resources to verifying gauge data through observations during a flood, which is of significant value in future land planning considerations.

The Disaster Management Act 2003 includes protection of liability; however, individuals do not feel that provides sufficient protection based on what they have seen in other organisations and related inquiries.

An organisational fear exists for delegated decision making, especially in relation to information that goes out publicly.

**Observation:**

Currently, at least three organisational roles responsible for hydraulic modelling would have the necessary skill and expertise to provide operational flood intelligence. An external contractor brings insights on the latest technology and can function as a supplementary resource to allow for operational continuity.

**Observation:**

The time between receiving data from the Bureau and Seqwater, and issuing the flood information to the community, is a 2 to 4 hours. This time could be reduced if an appropriately resourced internal capability with local knowledge was available and the forecast system technology enhanced.

**Insight:**

The unavailability of a dedicated flood modelling capability during disaster introduces safety risks for responders and the community. Additionally, it could lead to inefficiencies in use and deployment of resources, as this is informed by flood intelligence.

## Recommendations

11. Organisation: Council executives to determine and advise an optimal staffing/resourcing model to provide event-based flood intelligence to decision makers, responders and the community.
12. People: Council executives to explore sourcing of a dedicated catchment/floodplain management resource to assist in flood mapping, in addition to supporting resources to build internal capabilities and redundancies.
13. Process: Council executives to seek advice as to liability exposure in providing flood intelligence during a flood response for the individual officers.
14. Technology: Council to pursue technological improvements to its forecast system to provide more timely creation of flood maps.

15. Technology: Council to pursue an interactive mapping platform that accurately and easily conveys known flood risks prior to a disaster event to the community.
16. Training: Council to work with other local governments and the state government to develop a flood literacy resource or program.
17. Training: EMU to reflect on community feedback to inform community flood information/communication improvements.

## Roads Management and Disaster Dashboard Updates

Road closures within the Ipswich local government area (LGA) are reported on Council's disaster dashboard. This data is managed by the EMU; however, much of the road information is uploaded by the Department of Transport and Main Roads (TMR) as they have responsibilities for state roads throughout the LGA.

Road closure information is important for the public as this informs their decision making in protecting themselves. It is essential this information is uploaded as quickly as possible onto the disaster dashboard.

The Traffic Management Unit within the Works and Field Services Branch (WFSB) is responsible for managing and setting up road closures and was able to effectively manage road closures with the use of appropriate signs that meet current regulations. WFSB works with other stakeholders, such as the QPS, to manage closures when roads are dangerous or covered by water and debris. WFSB is aware that roads and bridges need to be inspected by engineers to ensure they are safe for travel before being reopened. WFSB uploads road closure information onto Guardian IMS so it is quickly sent to the TMR and advised the LDCC, which ensured that road closure information on the Disaster Dashboard was always up to date. The Queensland Police Service Liaison Officer in the LDCC, via the Operations Cell, was instrumental in proactively reporting and ground-truthing current and impending road/bridge inundation, both supporting and working directly with the WFSB to implement road closures.

### Observation:

There were instances where emergency services and community members removed road closure signage prior to safety inspections being undertaken. WFSB has developed an Emergency Management Response Plan for their Branch, with a section focused on flooding. This provides direction regarding roles and responsibilities for road closures, which includes:

- Support with physical road closures by placing signage and notifying the communications and road closures officer that roads have been closed
- Support with placing out advisory signage (water over the road, road conditions, etc.)
- Respond to service requests to make incidents safe during work hours
- Undertake works in relation to requests that have been made safe by the on-call officer out of hours
- Reopen roads<sup>1</sup>

In October 2022, WFSB conducted a desktop exercise based on the February 2022 flooding incident, which has resulted in improvements to processes. During the workshop, double handling tasks were identified, which have since been resolved. WFSB has Traffic Guidance Schemes (TGS), which are visual guides showing critical site information and the arrangement of temporary traffic control devices in and around work sites to change the existing road and footpath conditions for a bridge/road closure and water over road. This allows for the correct amount of safety equipment to be taken to a site to ensure compliance with legislation.

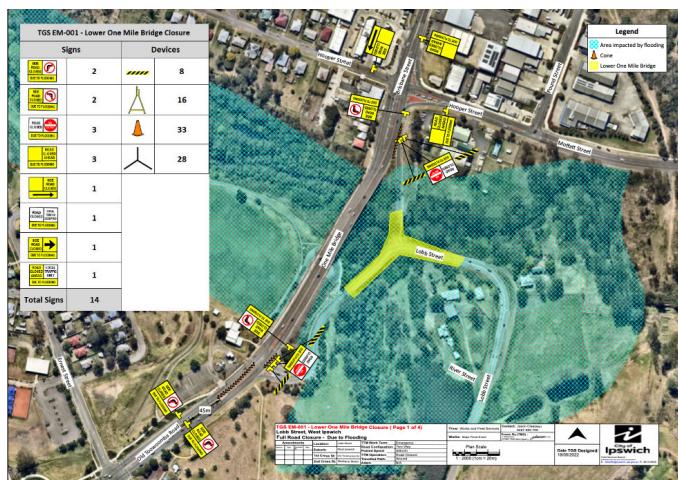


Figure 9. A TGS showing signs and devices to manage a road closure

<sup>1</sup>Works and Field Services Emergency Management Response Plan 2022, Ipswich City Council

**Observation:**

WFSB has taken the initiative to develop decentralised disaster plans, exercise and continually review these plans.

**Insight:**

It would be valuable to replicate the disaster preparedness activities of WFSB across all Branches within Council.

**Recommendations**

18. Process: Replicate the WFSB disaster preparedness planning and annual exercising process across all branches/sections.
19. Training: Provide education to emergency services and the community regarding the opening of closed roads and the associated risks prior to a safety inspection being undertaken.

**Evacuation Centre Management**

Evacuation centres are places of emergency sheltering for disaster impacted people. The City of Ipswich like many other Local Governments has adopted the Australian Red Cross Emergency Sheltering practices. Recognising the limitations of evacuation centres, Council encourages residents to instead stay with family or friends, or pursue commercial accommodation, where possible.

Setting up and managing evacuation centres during disasters is one of the core activities Council manages in order to provide support to those severely affected by the disaster. In preparation for these scenarios, the Ipswich City Council in April 2018 developed Evacuation Centres Sub Plans, which are supported by an Operating an Evacuation Centre Manual. It was identified during previous events that maintaining several evacuation centres around the Ipswich LGA strained resources and services. It was identified that utilising a single location would allow effective channelling of resources. Should capacity be reached, or significant isolation occur, other centres may be established.

The operation of evacuation centres straddles the response and recovery (immediate relief) phases of disaster management; as such, evacuation centres were also examined in the Recovery AAR.

To support evacuation centres in Ipswich, Council has a Memorandum of Understanding with the Australian Red Cross for the management of evacuation centres during disasters.

The Ipswich Showgrounds was initially set up as a Place of Refuge (PoR) on 25 February 2022; however, due to increasing community needs, it was transitioned to an evacuation centre at 1830 hours (6.30pm) on 26 February 2022. This evacuation centre supported over 400 affected community members from across the Ipswich LGA during the floods. A small number of affected community members from outside the Ipswich LGA also attended the evacuation centre seeking support. The evacuation centre closed at 1700 hours (5.00pm) on 9 March 2022 after being in operation for 12 days.

Ipswich City Council and the Red Cross primarily led the centre. It was reported the transition from a PoR to an evacuation centre was not clearly communicated; therefore, introducing confusion to the staff. It is imperative during a transition that the transition process is clearly communicated to all staff, so they are aware of the arrangements and requirements.

Although there is a Memorandum of Understanding in place with Ipswich City Council for Red Cross to manage the centre, like many agencies during this event, they experienced resource constraints (due to flooded roads, widespread nature of the event and COVID) at the evacuation centre.

Various services were provided at the evacuation centre for affected residents, including counselling, mental health support, medical treatment, doctors, pharmacy arrangements, onsite security, police patrols and dedicated support services for evacuees (financial, housing and community recovery). There was difficulty securing appropriate and trained staff across these services locally and from wider afield. Various complications and confusion arose due to untrained staff working in the centre. Due to staff turnover and attrition, Ipswich City Council has lost evacuation centre-trained staff, which it is working to replenish as a priority.

**Observation:**

The Ipswich evacuation centre provided a variety of services to impacted residents at a level that may not have been replicated at other centres, should they have been established.

**Observation:**

There was a clear desire from the community to have shelters closer to the impacted areas.

**Insight:**

The high dependency on Red Cross staff, systems, processes, and capabilities in evacuation centre management introduces a risk. Enhancing an internal capability and developing a collaborative model can reduce this risk.

**Insight:**

Opening and managing an evacuation centre requires significant resources and coordination, as well as introduces risks. Where possible these efforts should be streamlined to core location(s), where all services can be provided.

During the running of the evacuation centre, it was reported there was a high need for mental health support for people sheltering at the evacuation centre and there was lack of clarity around implementation of the drug and alcohol policy. There were challenges managing community members who were using drugs and alcohol off site and how to manage these people on their return to the evacuation centre.

**Observation:**

Various incidents around drug and alcohol use, including incident of a violent outburst requiring a triple zero call, was noted. These did not appear to be deterred despite the provision of uniformed security.

**Observation:**

A lack of understanding of the Managing Animals and Livestock in a Disaster Sub Plan at the evacuation centre caused a variety of complications and confusion for staff and the public regarding pets in evacuation centres.

A Memorandum of Understanding between the Ipswich Show Society and Ipswich City Council is being negotiated to outline the use of the Ipswich Showgrounds as an evacuation centre.

**Improvements Made**

- Conducted a debrief with the Ipswich Show Society and the Ipswich City Council staff who worked in the centre.
- Trained 25 Ipswich City Council staff, three SES volunteers and 12 community centre staff in evacuation centre management and operation.
- Conducted a functional evacuation centre establishment exercise with 16 Ipswich City Council staff, three SES volunteers and four community centre staff.

**Recommendations**

20. Training: Explore opportunities to provide evacuation centre management support through the recently established Ipswich Human/Social network.
21. Process: Council to review the number and locations of centres available during a flood event and the standard to which they can operate, considering: accessibility, risks, capacity, resources, service levels and availability of partner agency/human social network support.
22. Training: Council executive to confirm organisational responsibility, resources and training to provide evacuation centre staff during a disaster.
23. Process: Council to develop a security policy for evacuation centres and secure/train the resources to provide the required services.
24. Training: Council to develop a training module on how to manage evacuee challenges, including people who are drug and alcohol affected, have mental health issues or are distressed due to trauma.
25. Process: Formalise the Memorandum of Understanding between the Ipswich Show Society and Ipswich City Council regarding the use of the Ipswich Showgrounds as an evacuation centre.
26. Process: Establish an evacuation centre-specific animal management plan.

## Collaboration between Various Council Communication Capabilities: Media, Contact Centre

The community has a wide variety of sources for gathering disaster information and relies heavily on timely and accurate information to act.

### Disaster Related Information Sources



Figure 10. Ipswich community disaster related information sources

It is the responsibility of the Public Information and Warnings (PIW) cell within the LDCC to ensure that information and warnings for all communication channels deployed by Council (contact centre, dashboard, social and general media, Council staff in the field/libraries/reception, warnings) are consistent, efficient and effective. The PIW cell must also align the messaging of participating emergency services and response/recovery agencies.

In late 2021, a review of communications resulted in four different sections coming under the Media Communications and Engagement Branch (MCEB):

- Media Section – manages proactive and reactive enquiries from mainstream media such as television, radio and print
- Digital Media and Content Section – manages digital media posts such as Facebook
- Corporate Communications Section – manages internal communications within Council
- Engagement Section – handles community issues such as project development and feedback

The Marketing Services Branch is responsible for campaigns (including social media), style guides and Ipswich Online. The Customer Contact Centre sits within the Libraries and Customer Services Branch. During business hours, Council staff handle enquiries; outside business hours, an after-hours call centre service is used.

During disaster events such as floods, communication from Council is handled by the Media Section and Digital Media and Content Section teams. At these times, the two Sections work from the same location to manage communication issues. The Media Section works with mainstream media and shadows the Chair of the Local Disaster Management Group (the Mayor) to ensure messages from Council are consistent with the developed talking points and to handle further enquiries. Due to the Mayor being out among the community, Media Section staff are not always based within the LDCC in the office.

The Digital Media and Content Section handles all digital media such as Facebook feeds. During the floods, the Digital Media and Content Section monitored Councillors' Facebook pages as they often had first-hand information because they were in the community.

**Observation:**

The need for PIW personnel to be based physically with the LDCC is important for situation awareness and timely approvals.

**Observation:**

The assignment of a dedicated PIW personnel to support the Chair of the Local Disaster Management Group is critical.

All media releases during the disaster were reviewed and approved by the LDCC Commander prior to publishing to ensure terminology and content aligned. During the flood, it was challenging to physically attend the LDCC due to the flooding impacts on the road network. At times, this slowed the approval of releases as these members could not directly approach the LDCC Commander.

MCEB found, on occasion, warnings and notifications uploaded to social media sites were pushed down by other uploads and there was not enough time for these alerts to be a lead profile. Warnings and Emergency Alerts should be allowed sufficient time to be the lead post before other posts are uploaded. MCEB stated the use of simple language is important when releasing information to the public. It is important to have approved talking points that elected members and Council staff can provide to community members. After the floods, the MCEB has participated in two training sessions dealing with the release of public information during disaster events, coordinated by EMU.

**Observation:**

The EMU manages the information uploaded onto the disaster dashboard, including Emergency Alerts and update the Customer Contact Centre (CCC). The information on the disaster dashboard has been improved since the flood, based on community feedback.

**Insights:**

A more holistic approach to communication, information and warnings by the PIW personnel would provide greater efficiencies and allow the EMU to focus on the event.

During the review, it was observed there were at times omissions or delays in communicating information to the Customer Service Call Centre, particularly after hours.

**Observation:**

Changes in the customer contact centre arrangements has resulted in a capability difference for the out-of-hours service provider. This service provider does not have access to council systems and does not receive the updates, scripts and response information from the LDCC it requires to inform the community – particularly when operating outside business hours

**Observation:**

The review identified that communication with staff in the field regarding disaster related safety hazards, status of Council assets, staffing arrangements and/or location of Council resources, was not always considered. When managing a disaster two-way communication should exist between the field and the coordination centre. The field crews can provide valuable information regarding local hazards, community impacts, progress on tasks and other planning considerations. Equally, the staff in Operations in the LDCC should share impact/risk and operational information with the staff in the field.

## Recommendations

27. Organisation: Identify and train sufficient capability and capacity to undertake public information, warnings and associated functions in a holistic manner, including on-ground support to the LDMG Chair, media releases, social media, updates to customer service and issue warnings.
28. Process: Roster public information and warnings personnel to be present in the LDCC where possible.
29. Process: Develop a communication strategy at the start of every disaster event using the template that has been developed.
30. Organisation: Review the out-of-hours customer contact centre arrangements and implement measures to ensure a consistent level of service during a disaster between the service during office hours, as well as out of hours.

31. Process: Ensure internal communication with field-based staff is considered in the communication strategy by the Public Information cell in the LDCC.  
List stakeholders: community, Councillors, agencies, staff, suppliers, partners and service providers.
32. Process: Consider use of boosted social media posts for official warnings at Watch and Act or Emergency Warning levels.

## Fatigue Management

During a disaster or incident, there can be reliance on a small number of trained staff to undertake the main disaster management roles. This is understandable as they are trained, motivated and have a strong desire to help the community. Unfortunately, in protracted disasters, the issue of fatigue can become a problem where staff that are required to make critical decisions may be impaired due to lack of sleep or excessive pressure/stress.

### **Observation:**

It was stated the LDCC and other ICC operational areas relied heavily on their core group of staff and over the days it became apparent that insufficient trained and/or willing staff were available to relieve this core group. Additionally, staff were still undertaking BAU roles, which increased their fatigue.

It is imperative a directive is made from the ELT directing all staff to assist with the disaster response/recovery and BAU duties will be undertaken only if directed by the ELT. This will ensure all managers and staff know the priorities and direct their staff to the response/recovery, allowing for sufficient staff to relieve positions and reduce fatigue levels. ELT is to communicate throughout the organisation the priorities and point in time for the transition back to business-as-usual priorities. See also the Governance and Structure section and relating recommendation 1 in the Strategic Review report.

### **Insight:**

Enabling fatigue management of these key roles requires ongoing investment in training and development outside of a disaster. Staff fatigue can also be managed through planned release of resources and monitoring of staff wellbeing. It may be of benefit to appoint a 'buddy' system for all key roles, which has the responsibility to monitor and manage the fatigue levels. This would include the Incident Commander (Incident Controller in the proposed structure), LDC, LRRC, LDMG Chair, Task Group Chairs and other key roles as relevant.

## Recommendations

33. Process: Council to conduct a Business Impact Analysis to inform what services should continue during disaster response and recovery. This information will inform planning and allow for swift redeployment of staff to support disaster operations with coordination and in field activities.
34. Process: Council to review the fatigue monitoring process to include a responsibility for monitoring and managing fatigue for each key role.
35. People: Council to consider incentives to encourage staff to undertake duties during disaster events.
36. People: Council to consider inclusion of disaster operations in position descriptions.

## Operational Implementation Roadmap

To implement the findings of the review the following stages are recommended.

First, Council's ELT and EMU plus other stakeholders as appropriate should meet to endorse the recommendations and plan actions through a workshop. As part of the review, the outcomes of this workshop should be captured in an action plan that outlines tasks, roles and responsibilities, resource needs, milestones and success criteria.

Following that, finalise the action plan and any documents that are recommended for development/ finalisation as part of this review.

Council ELT should monitor implementation of the action plan and related documents then communicate intent, priorities, actions and progress across the organisation.

Regular progress review times should be set, until the success criteria of the action plan have been met.

