

Office of the Inspector-General of Emergency Management

Review into The Western Queensland Surface Trough and Associated Flooding (21 March – 19 May) – Event Report



Document details

Security classification	OFFICIAL-Public	Review date	14 October 2025
Author	Office of the Inspector- General of Emergency Management	Authority	Inspector-General of Emergency Management
Version control	V1.0	ISSN	2204-969X

Information security

This document has been classified using the Queensland Government Information Security Classification Framework (QGISCF) as OFFICIAL-Public and will be managed according to the requirements to the QGISCF.

Contact for enquiries

Name: Office of the Inspector-General of Emergency Management

Phone: (07) 3029 8813

Email: igem.info@igem.qld.gov.au

Web: www.igem.qld.gov.au

Postal address: PO Box 12068 George Street

BRISBANE QLD 4003

© State of Queensland (Inspector-General of Emergency Management) 2025 is licensed under CC BY 4.0

The Queensland Government, acting through the IGEM, supports and encourages the dissemination and exchange of publicly funded information and endorses the use of Creative Commons. All IGEM material in this document — except any material protected by a trademark, and unless otherwise noted — is licensed under a Creative Commons Attribution 4.0 license.



IGEM has undertaken reasonable enquiries to identify material owned by third parties and secure permission for its reproduction. Permission may need to be obtained from third parties to re-use their material.

Written requests relating to the copyright in this document should be addressed to:

Intellectual Property Coordinator C/O QPS Legal Unit, Legal Division

Queensland Police Service GPO Box 1440 Brisbane 4001

Phone: 07 3364 3958

Email: copyright@police.qld.gov.au

Disclaimer

To the extent possible under applicable law, the material in this document is supplied as-is and as-available and makes no representations or warranties of any kind whether express, implied, statutory, or otherwise. This includes, without limitation, warranties of title, merchantability, fitness for a particular purpose, non-infringement, absence of latent or other defects, accuracy, or the presence or absence of errors, whether or not known or discoverable. Where disclaimers of warranties are not allowed in full or in part, this disclaimer may not apply.

To the extent possible under applicable law, neither the Queensland Government or the Inspector-General of Emergency Management (IGEM) will be liable to you on any legal ground (including, without limitation, negligence) or otherwise for any direct, special, indirect, incidental, consequential, punitive, exemplary, or other losses, costs, expenses, or damages arising out of the use of the material in this document. Where a limitation of liability is not allowed in full or in part, this limitation may not apply.

Content disclaimer

The Office of the Inspector-General of Emergency Management has reviewed all relevant documentation and evidence provided by state agencies and other entities, the community, and sourced from media and other public reports. This review report is based on the information that has been supplied to the Office of the Inspector-General of Emergency Management as of 14 October 2025 and does not consider any other material that has not been provided or sighted by the Office of the Inspector-General of Emergency Management. It is therefore possible that some inconsistencies may be present despite the best efforts of the Office of the Inspector-General of Emergency Management to validate and align the raw data utilised throughout this report.

Cover image credit: Queensland Fire Department

Ref No: 2025/9672

14 October 2025

The Honourable Dan Purdie MP Minister for Police and Emergency Services PO Box 15195 City East Queensland 4002



Inspector-General of Emergency Management

Dear Minister

In accordance with the Government endorsed terms of reference dated 22 May 2025, I present the following reports:

- 2025 Significant Weather Events Summary Report
- North and Far North Queensland Tropical Low and Associated flooding (29 January 28 February 2025) Event Report
- Tropical Cyclone Alfred and Associated Severe Weather (1 March 16 March 2025) Event Report
- Western Queensland Surface Trough and Associated Flooding (21 March 19 May 2025) Event Report

These reports detail the impacts of three major and distinct weather systems that affected 73 of the 77 local government areas and one town authority representing 95.5% of the state. The impact of the events included the displacement and isolation of residents, prolonged periods of power and telecommunications loss, extensive damage to homes, businesses and significant livestock losses.

The three weather events were unique and complex, affecting communities in different ways and requiring tailored responses. The individual event reports provide detailed insights into the nature of these impacts and the challenges faced. The 2025 Significant Weather Events Summary Report provides a whole of state perspective on the three events, highlighting compounding and cascading impacts on both the disaster management sector and the Queensland community. It also identifies commonalities across the events to support a holistic understanding of their collective impact.

The production of these reports has been a collaborative effort across Queensland's disaster management sector, reflecting both preparedness and response activities. This process enabled a deeper understanding of operational strengths, challenges and opportunities in managing widespread and compounding disasters. Community members contributed and shared their experiences through public submissions and attendance at community forums.

I recognise the commitment and hard work at all levels across Queensland, and I extend my sincere thanks to councils, state agencies, volunteers, emergency services personnel and disaster management practitioners, their dedication and service were crucial in responding to these events.

I acknowledge the work being undertaken to recover from the impact of these events is ongoing and will be for some time. The commitment of the entities and people is tireless, and I acknowledge everyone involved.

To the community members who supported one another during these challenging events, thank you. Your resilience, compassion, and unwavering commitment to helping others is deeply appreciated. You should be proud of your efforts, which will inspire and strengthen Queensland's response in the future.

Yours sincerely

Alistair Dawson APM

Inspector-General of Emergency Management

Level 26, 111 George St PO Box 12068, George Street Brisbane Qld 4003 Telephone +61 7 3029 8813

Acknowledgement of Country

The Office of the Inspector-General of Emergency Management acknowledges Aboriginal peoples and Torres Strait Islander peoples as the Traditional Owners and Custodians of this Country. We recognise their connection to land, sea and community. We pay our respects to them, their cultures and to their elders past and present.

Acknowledgements

The Office of the Inspector-General of Emergency Management extends our sincere thanks to all who contributed to the reviews of the significant weather events that impacted Queensland between January and May 2025.

The scale of these events was extensive, impacting 73 of the 77 local government areas (LGAs) and one town authority. The impact across Queensland was widespread, with numerous local government areas affected by distinct weather events. Specifically:

- North and Far North Queensland Tropical Low and Associated flooding (29 January 28 February 2025) Event – impacting 40 LGAs
- Tropical Cyclone Alfred and Associated Severe Weather (1 March 16 March 2025) Event impacting 18 LGAs
- Western Queensland Surface Trough and Associated Flooding (21 March 19 May 2025)
 Event impacting 41 LGAs.

Notably, 19 LGAs were impacted by both the North and Western Queensland events, and 7 LGAs experienced effects from both TC Alfred and the Western Queensland Floods. These overlapping impacts created compounding challenges, stretching local resources and increasing emotional, social, and economic pressures on communities already in recovery.

We acknowledge the many community members who shared their experiences through our community forums, written submissions, and personal conversations. Your courage in sharing deeply personal and often confronting stories has provided invaluable insight into the real and lasting impacts of these events.

We thank the staff of Articulous, Australian Red Cross, and the Department of Communities for their support at community forums, helping create safe and inclusive spaces for dialogue.

Our gratitude also extends to local, state, federal, and non-government stakeholders who provided timely information and participated in interviews with thoughtfulness, care, and a genuine commitment to the review process.

To the emergency management practitioners and volunteers – your dedication and unwavering commitment, event after event, is to be commended. Your work remains the backbone of Queensland's disaster response and recovery.

Finally, we acknowledge the staff of the Office of the IGEM, along with seconded and contracted personnel, whose integrity, empathy, and rigour ensured the reviews were conducted to the highest standard.

Thank you to everyone who contributed. Your voices, insights and efforts have helped shape a stronger, more resilient Queensland, one that learns and continues to improve its preparedness, response, and recovery for future events.

Alistair Dawson APM Inspector-General of Emergency Management

Table of contents

Letter of transmission	
Acknowledgement of Country	5
Acknowledgements	6
Figures and tables	9
Executive summary	10
Key themes	10
Preparedness	10
Warnings and public information	10
Infrastructure and capability	
Livestock	
Community resilience	
The future	
The Western Queensland Surface Trough and Associated Flooding Ev	
How to read this report	13
Timeline of events	15
Methodology	15
Lines of inquiry	16
Other reviews and reports	16
Timeline of weather warnings and information	17
Overview	18
Community consultation	22
Mayor and councillor meetings	22
Community forums	22
Public submissions	23
Community insights	23
Preparedness and resilience	23
Access to food and goods	24
Weather information and public warnings	24
Telecommunications	
Flood intelligence	
Response by authorities	
Response by community	
Locally led Bush education and the power of social media	
Bureau of Meteorology in disaster management	
Bureau flood warning service assessment Bureau contributions and stakeholder perspectives	
Forecast limitations or constraints	
Capability improvements	
The Bureau in previous IGEM reviews	
Flood warning infrastructure	
Damaged flood warning assets	
Flood cameras: enhancing situational awareness	32

Inspector-General of **Emergency Management**

The way forward	33
Public information and warnings	35
Australian Warning System	35
Emergency Alerts	36
Communication during events	36
Inclusive emergency preparedness information	37
Evacuation	38
Fodder	38
Recommendation (2)	39
Aviation	40
Recommendation (3)	41
Community resilience	41
Key drivers of community resilience in Western Queensland	41
Social connectedness and mutual support	42
Generational knowledge sharing	42
Adaptability and innovation	
Preparedness and planning	
Challenges identified	
Unprecedented nature of events	
Infrastructure vulnerabilities	
High expectations of government	
Opportunities for strengthening resilience	43
Conclusion	44
Appendix A	46
Terms of Reference	46
Functions of the Office	46
Guiding principles and methodology	46
Scope	47
Out of Scope	48
Deliverables and Timeframe	48
Appendix B	49
Insights	49
Appendix C	54
Glossary of abbreviations	54
Appendix D	56
Reference list	56
Legislation	56
Other materials	

Figures and tables

Figure 1: Timeline of DRFA-activated events	15
Figure 2: Queensland floods, event timeline March–May, 2025	17
Table 1: Record river peaks	19
Figure 3: State road closures during Western Queensland Flooding event	21
Table 2: Bureau products issued during Western Queensland Floods	29
Table 3: Number of sites agreed for acquisition by catchment	34
Figure 4: Number of sites per catchment identified for acquisition as part of FWIN	34

Executive summary

Between 21 March and 19 May 2025, Western Queensland experienced a prolonged and catastrophic flooding event triggered by a surface trough system. This event affected 41 Local Government Areas (LGAs), with rainfall totals exceeding annual averages in just days. Major river systems – including the Thomson, Barcoo, Cooper, Georgina, Diamantina, Bulloo, and Warrego – recorded historic flood peaks, surpassing those of the 1974 floods.

Entire townships such as Adavale, Jundah, and Thargomindah were inundated, causing widespread damage to homes, infrastructure, and livelihoods and prompting emergency evacuations. Despite the scale of devastation, no lives were lost – a testament to the resilience and coordinated response of communities and agencies.

The Office of the Inspector-General of Emergency Management (the Office) undertook this review to assess preparedness and response activities of entities against the Standard for Disaster Management in Queensland, identifying good practices, and providing recommendations for continuous improvements. The review was informed by community forums, public submissions, and engagement with local governments and agencies.

Key themes

Preparedness

The event revealed both strengths and vulnerabilities in community preparedness and resilience across the region. While many communities considered themselves well-prepared for typical seasonal flooding, the scale, speed, and severity of this event exceeded expectations and historical experience. The event challenged traditional preparedness models and highlighted the need for adaptive, scenario-based planning.

Communities demonstrated strong social cohesion and a culture of helping one another. Residents used personal resources, such as mustering helicopters, to conduct rescues and evacuations, support neighbours and assist with fodder drops.

Some councils noted a decline in community resilience compared to past events, citing demographic shifts and reduced local capacity.

Isolation caused by the closure of roads and rail due to the impact of the flood waters disrupted supply chains, telecommunications, and access to essential services. Local governments, supported by state and federal agencies, coordinated emergency fodder drops, aviation logistics, and welfare support. Access to food, goods, and telecommunications emerged as significant challenges during the event.

The event highlighted the importance of locally led disaster management, inclusive planning, and tailored preparedness strategies.

Warnings and public information

During this event rainfall totals exceeded annual averages in 24 to 48 hours across vast areas. There were record flood peaks observed in major river systems including the Bulloo, Cooper, and Thomson Rivers, and entire townships such as Adavale, Jundah, and Thargomindah were inundated, requiring emergency evacuations.

While Western Queensland communities are accustomed to intermittent telecommunications coverage, the scale and timing of outages during the floods significantly compounded isolation and response challenges. Critical communication systems failed during peak evacuation periods,

leaving residents unable to access warnings, coordinate rescues, or contact emergency services. The loss of mobile and internet connectivity disrupted information flow and heightened anxiety.

The sparse distribution of automated gauges and radar coverage across large catchments of Western Queensland limited the ability of agencies to provide timely and accurate early warnings. With limited infrastructure in place, communities relied on manual readings, informal observations and local knowledge. Local Disaster Management Groups (LDMGs) and District Disaster Management Groups (DDMGs) relied heavily on local knowledge, including observations from landowners and historical flood behaviour, to inform their decisions. While this input was invaluable, it lacked the precision and consistency needed for coordinated response across multiple jurisdictions.

Enhancing the predictive capabilities of both communication and flood warning infrastructure to enable real-time situational awareness would significantly improve the accuracy and timeliness of public warnings, supporting more informed decision-making during disaster events.

Infrastructure and capability

More than 11,000km of state-controlled roads were closed or restricted. Rail lines and bridges were damaged, isolating communities and disrupting supply chains. Power and telecommunications outages compounded the isolation and hindered emergency communications. Up to 8500km of fencing and extensive farm infrastructure was damaged or destroyed. The remoteness of assets and the scale of damage made repairs difficult and slow, compounding isolation and delaying recovery.

Damaged flood warning assets and the need for improved situational awareness tools, such as flood cameras, has been highlighted above. The lack of available automated systems and delayed data collection and dissemination hindered the ability for decision makers and community to make timely decisions and acquire strong situational awareness.

Aviation played a crucial role in the event response, enabling emergency evacuations, delivery of essential supplies, and aerial assessments across vast, isolated regions. With ground access cut off in many areas, helicopters were used to relocate residents, transport fodder to stranded livestock, and restore vital services such as power. However, the scale of operations in uncontrolled airspace revealed coordination challenges, including clarity of roles, fuel logistics, and asset visibility. Despite these issues, locally led aviation efforts (particularly by mustering pilots) proved highly effective, highlighting the need for improved preparedness and more clearly defined roles, capabilities and responsibilities.

Livestock

DPI advised the Office that approximately 220,000 livestock perished or remain missing as a result of the event. The floods left thousands of livestock stranded without access to feed, prompting an urgent need for aerial fodder drops across isolated properties.

While the response was ultimately effective – with DPI advising the Office that more than 900 helicopter missions delivering more than 3000 hay bales– initial coordination was impeded by lack of role clarity, use of informal communication channels, and challenges with funding approval processes. Biosecurity concerns, such as the risk of fire ants, added complexity to sourcing and transporting fodder. Despite these challenges, local knowledge and rapid mobilisation by councils, pilots, and producers combined with the support of state and federal agencies, were instrumental in saving stock and stabilising animal welfare during the crisis.

Community resilience

Western Queensland communities have long been recognised for their resilience, shaped by geographic isolation, harsh environmental conditions, and a strong culture of mutual support. This resilience was clearly demonstrated during this event, as residents mobilised quickly to assist one another, often relying on local knowledge and informal networks to respond when formal systems were overwhelmed or delayed

Social connectedness played a vital role in the response. In many towns, neighbours helped with evacuations, shared resources, and provided emotional support.

By building on existing strengths (such as social capital, generational knowledge, and adaptability) and by enhancing preparedness and support systems, Western Queensland communities can continue to evolve and remain resilient in the face of increasingly complex and severe disasters.

The future

The disaster events that unfolded across Queensland in 2025 starkly illustrate the increasing complexity of cascading, compounding, and concurrent events which is now shaping the future nature of contemporary disasters.

The compounding nature of these events was evident as communities already recovering from previous disasters faced new ones, intensifying social, economic, and environmental stress. Cascading effects emerged as damage to critical infrastructure – such as roads, power, and communications – disrupted emergency response and recovery operations. This triggered cascading impacts across sectors, systems and infrastructure. The complexity of managing these successive events requires coordinated, multi-agency responses and adaptive strategies that can address simultaneous risks across vast geographic areas.

These back-to-back, statewide disasters underscore the pressing need for integrated, forward-looking disaster risk reduction approaches that account for the systemic vulnerabilities and interdependencies shaping Queensland's resilience landscape.

Strengthening local leadership, investing in resilient infrastructure, and embedding community-led solutions into formal disaster management frameworks will be crucial to enhancing Queensland's overall disaster resilience for the future.

Having regard to the scale, frequency, and complexity of recent disaster events, there is a need to foster a strong culture of shared responsibility and proactive preparedness across Queensland communities.

Queenslanders should now turn their minds to the changing shape, impact and magnitude of disasters as a part of everyday life, recognising that being aware of local risks, preparing for those risks, and planning accordingly are essential steps in an evolving process. The path forward should be shaped by evidence, guided by collaboration, and grounded in the lived experiences of those most affected.

The better prepared individuals and communities are, the quicker and more effectively they can recover.

The Western Queensland Surface Trough and Associated Flooding Event Report

How to read this report

The Western Queensland Surface Trough and Associated Flooding 21 March – 19 March (Western Queensland Floods) Event Report (event report) is one of four reports written arising from the three significant weather events that occurred in the first half of 2025. The reports are written in line with the terms of reference, and the additional reports are described as follows:

- North and Far North Queensland Tropical Low and Associated Flooding (29 January – 28 February) Event Report
- Tropical Cyclone Alfred and Associated Weather (1 March – 16 March) Event Report
- 2025 Significant Weather Events Summary Report (Summary Report).

The three event-related reports are supported by the Summary Report, the purpose of which is to provide a whole-of-state summary of the three events, and the impact on the Queensland disaster management sector and communities.

The North and Far North Queensland Tropical Low and Associated Flooding 29 January – 28 February 2025 Event Report (event report) is one of four reports written arising from the three significant weather events in the first half of 2025. The reports are written in line with the terms of reference and the additional reports are described as follows:

- Tropical Cyclone Alfred and Associated Severe Weather (1 March – 16 March)
- The Western Queensland Surface Trough and Associated Flooding (21 March – 19 May)
- 2025 Significant Weather Events Summary Report.

The three event-related reports are supported by a Summary Report, the purpose of which is to provide a whole-of-state

summary of the three events, the impact on the disaster management sector and the Queensland community. The Summary Report will also provide an analysis of any commonalities between the three events.

The Summary Report discusses the cascading and compounding impact of the three events on the disaster management sector, and reflects upon the changing face of disasters, and how strategic

Complicated vs complex

What's the difference between complicated and complex?

Complicated problems originate from causes that can be individually distinguished. They can be addressed pieceby-piece—for each input to the system there is a proportionate output. The relevant systems can be controlled and the problems they present admit permanent solutions.

On the other hand, **complex** problems result from networks of multiple interacting causes that cannot be individually distinguished. They cannot be addressed in a piecemeal way, and they are such that small inputs may result in disproportionate effects. The problems they present cannot be solved once and forever but need to be systematically managed.

Source: Roberto Poli, author of Working with the Future: Ideas and Tools to Govern Uncertainty (CASP, 2024, p 10) level planning in response to complex and potentially catastrophic crises can be achieved as identified in the Crisis Appreciation and Strategic Planning (CASP) Guidebook.¹

The purpose of this review is to provide the disaster management sector in Queensland with an opportunity to reflect on preparedness and response activities in times of disaster and the opportunities for future enhancements. The scope of the review is limited to Queensland and the response in this state. However, Australian Government agencies which regulate or provide services to the Queensland Government and local governments and are integral to the disaster management system were also invited to provide a submission on their roles. We thank all entities for taking the time to provide a submission to inform this event report.

The review also provided the community the opportunity for their views and experiences of the events to be heard and to reflect on the performance of Queensland's disaster management arrangements. Thank you to the community for engaging with the process, whether it was through a written submission or attendance at one of the community forums. This feedback has informed the evaluation of the effectiveness of the disaster management arrangements and has helped inform this event report.

While this event report can be read as a stand-alone document, the additional event reports and summary report provide a picture of the significant weather events that impacted the state during the first half of 2025. Together these documents provide an understanding of:

- Pre-season planning activities
- Integration of preparedness and response activities between all levels of government
- Opportunities to enhance community resilience
- Communication systems and connectivity of communities
- Provision of information to make informed decisions at both planning and response phases.

While each of the three events experienced in 2025 is unique and had specific impacts on each community, there are shared experiences which provide invaluable insights to government agencies, businesses, not-for-profit organisations and individuals on how to better manage their responses to natural disasters.

Recommendations:

A full list of recommendations is contained in the Summary Report.

Where recommendations are endorsed by government in full or in part, the Office's Monitoring, Evaluation and Reporting (MER) process will use the Summary Report to support assurance activities.

It is noted that individual event reports will only include recommendations relevant to the specific issues addressed, and therefore may not reflect the full suite of recommendations.

¹ Crisis Appreciation and Strategic Planning Guidebook, National Emergency Management Agency, Australian Government, 2024, p10

Timeline of events

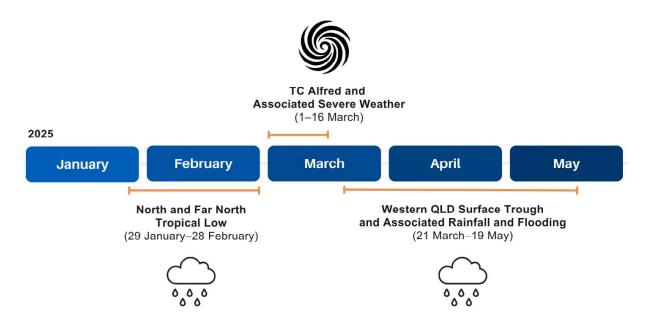


Figure 1: provides an overview of the Disaster Recovery Funding Arrangements-activated events. Response activities may have started before DRFA activation and continued after the activation period ended.

Methodology

In undertaking the review, consideration was given to the intent of the Queensland Disaster Management 2016 Strategic Policy Statement, and analysis was aligned to the Standard for Disaster Management in Queensland (the Disaster Management Standard) and terms of reference. The methodology outlines the minimum requirements for Office of the Inspector-General of Emergency Management (the Office) reviews.

The review was conducted according to Queensland's disaster management doctrine as it existed for the period of the three events in the first half of 2025.

This report contains observations, insights and recommendations from North Queensland Floods, as described below.

- Observation: a record of a noteworthy fact or occurrence that someone has heard, seen, noticed, or experienced as an opportunity for improvement or an example of good practice and shared with the review.
- **Insight:** A deduction drawn from the evidence collected (observations), which needs to be further considered. An insight defines the issue, not the solution.
- Recommendation: A proposed course of achievable action to either reinforce good practice
 or address an area identified for improvement.

Monitoring the implementation of accepted recommendations occurs through the Office's monitoring, evaluation and reporting program, discussed later in the report.

Lines of inquiry

From the terms of reference (Appendix A), the Office developed three lines of inquiry in relation to the three reviews:

- Pre-season planning activities
 Including pre-season planning activities undertaken by entities
- 2. Integration of preparedness and response activities including information and data needs

Including a) integration of preparedness and response activities between all levels of government; and b) provision of information and data to inform and support planning decisions in the preparation and response phases.

3. Opportunities to enhance community resilience including communications for the community to stay connected

Including a) opportunities to enhance community resilience to better prepare for, and respond to future disasters; and b) ensuring effective communications systems to enable the community to take necessary actions and to ensure connectedness within the community and with response entities

The data collection and analysis activities of the review were prioritised and coordinated through these lines of inquiry. Throughout the review process, it became clear that many of the issues raised were complex and overlapped across multiple lines of inquiry. In such instances, efforts have been made to acknowledge the overlap while including the discussion in the most relevant section or sections of the report.

Other reviews and reports

The reviews also considered other relevant available reviews and reports, such as:

- Australia's National Climate Risk Assessment, Australian Climate Service, Australian Government, 2025
- From storm to study: Insights on resilience from Tropical Cyclone Alfred, prepared by Dr Geoff Boughton, Dr David Henderson, and Dr Bruce Harper from James Cook University for Natural Hazards Research Australia, 6 May 2025
- Brisbane City Council Tropical Cyclone Alfred Review, prepared by The Hon Paul de Jersey for Brisbane City Council, 12 May 2025
- Social media analytics to explore community experiences of Tropical Cyclone Alfred, prepared by Julian Marx, Farnaz Pirasteh, and Rashika Bahl from The University of Melbourne for Natural Hazards Research Australia, 10 May 2025
- Australian Transport Safety Bureau (ATSB) report AO-2025-016

Timeline of weather warnings and information

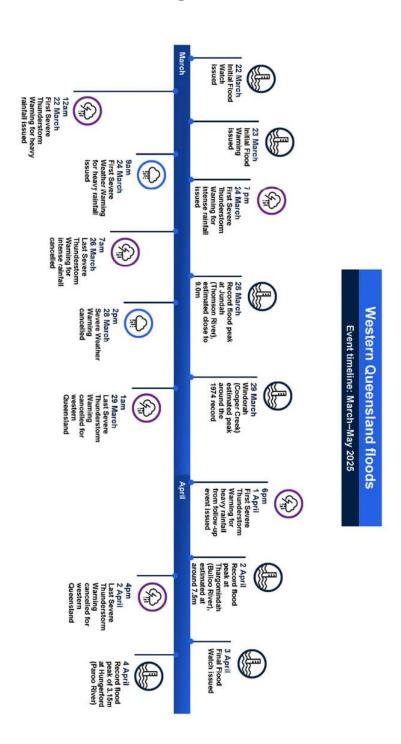


Figure 2: Weather warnings and information issued for the Western Queensland Floods. Source: Bureau of Meteorology.

Overview

The community is very resilient... Being a very remote location, a degree of disruption and discomfort is expected. If people are passive and dependent on services, they normally do not stay in the area for long. Western Queensland councillor

This event has made the community come together and has strengthened community resilience.

Disaster Management Group

Western Queensland is arid country characterised by flat topography, and a system of creeks and streams. There are several river systems in the vast region, the largest of which is the Thomson Barcoo Cooper system, which starts north of Longreach and runs through Barcaldine, Blackall, Windorah and down to Kati Thanda—Lake Eyre in South Australia.

Next to it is the Diamantina River, which runs through Winton to Birdsville and also feeds into Kati Thanda–Lake Eyre. The Georgina River starts just over the border in the Northern Territory and feeds down through Urandangi, Boulia and Bedourie into Lake Eyre. The Bulloo River

Rainfall 21 March to 4 April	
Sunbury (homestead)	698mm
Winton	528mm
Wahronga (homestead)	504mm
Quilpie	410mm
Source: ABC Landline	

starts just above the small town of Adavale and runs through Quilpie and Thargomindah and into northwest New South Wales. The Warrego River runs through Charleville, Eulo and Cunnamulla and into the Murray Darling River system².

Residents who live and work in and around these river systems understand how the often dry or shallow creeks and streams can fill to capacity and spill over when there is enough rain. Since the beginning of 2024, approximately 40 local governments have activated counter-disaster operations for flooding events. Many local governments activated twice or three times in 2024 for rain and flooding events. Each of these events tested local disaster management groups (LDMGs).

Conversely, other Western Queensland communities were in drought and welcomed a March forecast of 10-40mm of rain per day over four or five days. 3

However, on 21 March 2025 when the rain began to fall, Quilpie residents reported 200mm of rain in seven hours. On 22 March 2025, the Bureau issued an initial flood watch for parts of the Kati Thanda–Lake Eyre Basin rivers – Thomson, Diamantina and Georgina – predicting minor flooding from early in the week and possible moderate flooding later. This constitutes the usual wet season

² Landline: S2025 Western Queensland Flood Special, ABC iView 2025, Australian Broadcasting Corporation

³ Landline: S2025 Western Queensland Flood Special, ABC iView 2025, Australian Broadcasting Corporation

that the community understands and expects. Over the next three days, major flood warnings were also issued for the Bulloo, Georgina, Paroo and Warrego rivers, as well as Eyre Creek.

Up to 600mm of rain – nearly double the yearly average – caused widespread flooding and inundation. Large parts of Western Queensland received rainfall over a 24–48-hour period that equalled or exceeded their average annual totals. Many of these areas are designated semi-arid zones – which typically receive 200–400mm of rain per year – and were drier than average before this event. For many residents, it was the largest flood in living memory.

Towards the end of March, the rain finally eased across western catchments, though major flooding continued as rivers peaked in the lower catchment areas. The affected area covered several hundred thousand square kilometres, from the Gulf Country to Queensland's southern border.

Major flooding occurred along the Thomson River at Stonehenge, Jundah and Windorah. Each town exceeding flood peaks recorded in the 1974 flooding event. Record flood levels were also observed on the Paroo River at Eulo and the Bulloo River at Thargomindah.

Table 1: Record river peaks

Record river peaks		
System location	2025	Record 1974
Bulloo - Thargomindah	7.55m	6.78m
Cooper - Windorah/Longreach	8.51m	8.48m
Thomson - Jundah	8.95m	8.38m
Source: ABC Landline		,

Entire townships and properties were evacuated as the rain fell. Aircraft proved essential in supporting the many emergency evacuations. As Adavale became inundated, helicopters relocated the town's population to Quilpie, which was also cut off by road.

Around 70–100 per cent of residences in Adavale, Jundah and Thargomindah suffered serious inundation. Homes were damaged or destroyed – some people lost everything. Many residents needed temporary mobile emergency accommodation, which was transported into affected communities. These facilities will continue to house residents whose homes are undergoing repairs, particularly in Thargomindah. No human lives were lost.

Much of the impacted area is dedicated to primary production. QRA advised the region carries more than 40 per cent of Queensland's sheep stock. The flood caused catastrophic losses of cattle, sheep, and goats, as fencing washed away and water levels exceeded stock refuge points on stations.

Fodder drops by the Department of Primary Industries (DPI), local governments, and local helicopter pilots saved much of the stock; however, around 220,000 head of livestock perished or are still missing. Stock losses for individual properties is as high as 20 per cent.

Primary producers also reported significant damage to farm infrastructure, machinery and equipment, vehicles, water infrastructure, structures, internal roadways, and up to 8500 kilometres of fencing was also damaged or destroyed.

Many face an extended period without normal income as they confront the extraordinary costs of replacing livestock and repairing infrastructure. One government agency estimated it could take up to two years to rebuild stock numbers, prolonging the financial pressure on producers through the recovery period.

Furthermore, 11,285 kilometres of state-controlled roads were either closed or had restricted access. This was in addition to local government roads, bridges, unsealed roads, and other access routes.

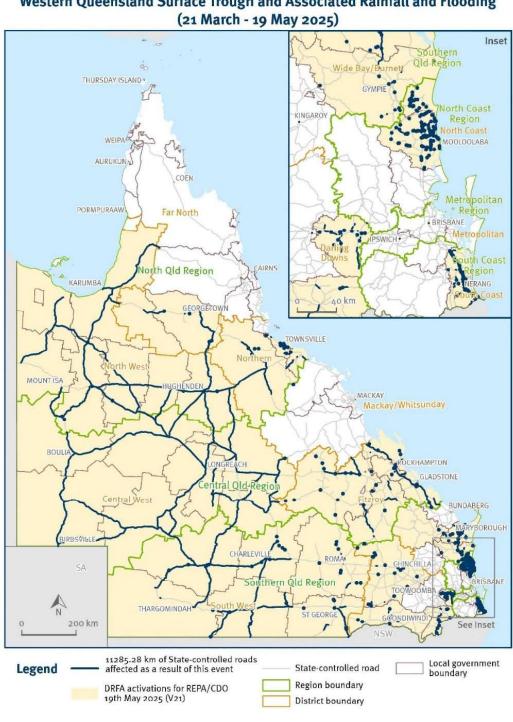
All western developmental roads, key links and highways experienced some damage, including severe shoulder scouring and deep drop-offs at road edges, extended pavement damage, and major washouts at culverts and floodways. Mount Isa, Central West, and North Coast rail lines were temporarily closed due to track damage.

These access issues isolated communities, families and individuals, and cut off critical and essential transport and supply routes. Power outages and telecommunication connectivity issues added to the isolation, as substations were de-energised to prevent flood damage. Families lost food and access to emergency communications due to the outages.

Floodwater also destroyed crucial recreational facilities that bring communities together, including playgrounds, racetracks, clubs, sporting fields, and golf courses. These towns face the enormous task of repairing and rebuilding important facilities that prevent social isolation and create positive health outcomes for regional and remote communities.

Many of the region's 2200-plus small businesses suffered severe financial losses when they were forced to close due to damage or access issues. Health, government, and essential services that are vital to these communities also closed. Almost 200 tourism-related businesses also suffered losses due to damage, closures and cancellations.

The review revealed there was some concern from the community about limitations in flood monitoring infrastructure, particularly the sparse distribution of gauges, weather stations and water markers across vast catchments. In some cases, there was no infrastructure in place, leaving entire areas without any formal monitoring capability.



Western Queensland Surface Trough and Associated Rainfall and Flooding

Spatial Systems 30/06/2025

Figure 3: state road closures during Western Queensland Flooding event Source: Department of Transport and Main Roads

"It was noted a significant number of flood gauges in impacted areas still required manual reading. This is an identified vulnerability with emergency services workers and other members of the community required to manually read the gauges and report the observations to the SDCC. The lack of automation had a negative impact on planning and response operations during the event, particularly when assessing the time before flood waters would peak."

Community consultation

To gain insights from the community of the Western Queensland Floods, the Office invited public submissions, conducted community forums, and met with mayors and councillors.

Forums and meetings were targeted at local governments most impacted.

Mayor and councillor meetings

To gain direct insights into local preparedness, response and challenges, targeted meetings were held with LDMG members from affected Western Queensland councils, including Longreach, Bulloo, and Quilpie. These meetings provided an opportunity to understand the unique challenges and strengths within each community, as well as to identify good practices and areas for improvement in the operationalisation of disaster management arrangements. These discussions yielded valuable information to inform the review report.

Community forums

Community forums provided an opportunity for community members from an impacted area to participate in a structured engagement session hosted by the Office. These forums are supported by the Australian Red Cross (ARC) and Community Recovery officers from the Department of Families, Seniors, Disability Services and Child Safety (DFSDSCS) and are facilitated by an experienced external facilitator. ARC assisted through the provision of psychological first aid, and Community Recovery officers provided recovery information and help to connect participants to support services.

The primary purpose of the forum was to connect the Office directly with community members affected by the disaster event, and to hear firsthand their lived experiences, perspectives, ideas, and suggestions. These accounts offer valuable insights into the social and operational impacts of the events on community members.

The information gathered through these forums helps the Office develop a deeper understanding of how the event affected the community and the delivery of the Queensland Disaster Management Arrangements (QDMA), informing future improvements in relation to disaster preparedness and response.

On Tuesday 12 August 2025, the Inspector-General of Emergency Management (IGEM) and Office staff travelled to Quilpie and Western Queensland held a community forum. Participants were invited to share how the Western Queensland Floods impacted them as individuals and as a community. Participants also shared experiences and insights about:

- Community preparedness and the activities undertaken ahead of the disaster events
- How effectively government communicated and shared information with communities and how consistent and timely was this communication
- Community outcomes and resilience, including local strength and solutions that held during the events and how can communities be supported before and during disaster events.

For more information about how the Office promotes these forums, refer to the Summary Report.

Public submissions

The Office sought public submissions to hear directly from individuals, communities, and local organisations about their experiences for the event.

The public shared their feedback by either:

- completing an online form from the Office's website which had prompts to help them prepare their submission
- · downloading the form, completing it offline and emailing it to the Office
- emailing a submission directly to the Office.

Individuals were also welcome to attach supporting materials, such as photos, videos or documents, to provide further context to their submission.

Public submissions were open from 13 June to the 27 August 2025.

Community insights

Consolidating what was learned from the LDMG and mayor meetings, community forum and public submissions, the following are the main themes for the Western Queensland Floods.

Preparedness and resilience

During the community forum participants expressed a general belief that their communities were well prepared for adverse weather events (as previously experienced) but were caught off guard by the severity and extent of impact of this weather event.

No one alive today in the community had ever seen anything like the flooding experienced.

Community forum participant

Despite this, a strong theme of community resilience emerged. Residents described how they came together to help each other. For example, mustering helicopters were used to evacuate stranded individuals when rising floodwaters made ground access impossible.

Forum discussions highlighted the resilience within these communities often stems from necessity. Many residents emphasised that in times of crisis, they need to rely on themselves and each other

due to the limited external support. This self-reliance and connectedness within the community was seen as a defining characteristic of their community and the response to the event.

We are a small community and that is why we all help plus we all know each other.

Community forum participants

Conversely, concern was also expressed in meetings with mayors and councillors of the reduction in resilience as compared to past events, noting that changing demographics and evolving community structures may have contributed to a decline in historical resilience capabilities.

Access to food and goods

Community members expressed frustration regarding supply chain limitations, particularly the perception that they were 'at the end of the line' for resupply efforts. An example shared at the community forum involved fuel distribution, where fuel tankers reportedly met the needs of the first community in the delivery run, but by the time the last delivery was made there was not enough product to meet the needs of the community.

In contrast, discussions with mayors and councillors highlighted examples of strong self-reliance. For instance, it was noted by one mayor that their community was able to manage without food deliveries for up to six weeks, demonstrating a high level of self-sufficiency, likely developed through lived experience and proactive planning.

Weather information and public warnings

Significant concerns were raised from community forum participants about the accuracy, timeliness, and specificity of public information and warnings they received. Participants reported that while they were aware of a minor flood threat to their region, the information did not include enough details and did not reflect the severity of the event. Some felt that the rainfall predictions were substantially underestimated, contributing to a sense of misinformation and inadequate preparedness.

Additionally, participants noted that council-issued Australian Warning System (AWS) warnings were either delayed, not received, or lacked locally relevant information about flooding impacts. This gap in communication hindered effective decision making at a community level.

Further, concerns were expressed about the lack of accurate information provided to tourists and truck drivers regarding road closures, which they believed put individuals at risk and added further pressure on the community and emergency services.

Telecommunications

Telecommunication failures were a recurring concern raised during the mayoral meetings. In several instances, communication systems failed during critical evacuation periods before the flood heights peaked. They reported that this significantly hindered coordination and response efforts.

Community members reported that telecommunications were unavailable for more than two days. Attendees said this outage impacted their ability to share and receive critical information. Participants emphasised the need for more reliable and resilient telecommunications infrastructure in Western Queensland to ensure communities are better supported during future disaster events.

Flood intelligence

Attendees at the community forum expressed strong concerns regarding the adequacy of weather and flood monitoring infrastructure across the region. Participants described existing systems as insufficient, citing lack of rain gauges, weather towers, and water markers throughout the vast catchment areas. Participants believed increased investment in flood warning infrastructure could improve the accuracy and reliability of flood intelligence.

There are only three weather stations across the vast Western Queensland region that are inadequate to predict and monitor weather and potential disaster events effectively.

Community forum participant

Community forum participants said they were frustrated that rainfall predictions were significantly lower than what was experienced. Some participants felt the local information provided was either too general or misleading, particularly when referencing broader Western Queensland regions that do not reflect localised conditions.

Participants believed more upstream river gauges, weather recording stations and the installation of a weather radar would enhance early flood warning capabilities. Locally specific data was seen as essential for effective disaster preparedness and response, with many reporting that they did not believe current systems adequately supported timely or accurate local decision making.

Response by authorities

Participants at the community forum commended the work of their council for its effective coordination with the State Emergency Service (SES) and Queensland Police Service (QPS) during the disaster response. The collaboration between local and state agencies was viewed positively and contributed to overall effectiveness of the response effort.

However, concerns were raised regarding perceived inconsistencies in critical information, particularly when key personnel changed during the response and immediate relief phases. Forum participants believed the lack of continuity created some confusion and added stress for community members.

Participants suggested more consistent personnel, from outside the region, may better support residents during the response and immediate recovery phases of a disaster event. It is recognised that in high tempo and protracted operations there is a need to factor in breaks to manage fatigue, staff welfare and endurance.

Response by community

The forum and submission process highlighted the critical role played by residents during the floods. The community emphasised the importance of involving local members with deep knowledge of the area in future disaster response efforts.

Their familiarity with the terrain and conditions was seen as essential to ensure that response activities were appropriate, timely, and effective.

Locally led

Forum participants expressed frustration over the limited involvement of local personnel within disaster management groups. Concerns were raised about the reliance on external 'experts' who may lack an understanding of the local context, geography and community dynamics.

One example shared involved a volunteer from outside the region, deployed to the area to assist, arguing with a local resident over the disposal of their personal property, highlighting the need for greater cultural sensitivity and local awareness.

Forum attendees strongly advocated for increased inclusion of community members with local knowledge in disaster planning and response efforts. They also called for improved access to essential disaster response equipment, including swift water rescue boats and helicopters, to ensure timely and effective support during future events.

Rescues were undertaken by local helicopter pilots (mustering helicopters) because the floods happened so rapidly, if they did not act someone could have died.

Community forum participant

Bush education and the power of social media

During the Western Queensland Floods, a resilient group of educators were finding a way to keep their 'bush students' learning.

Remote teachers and governesses, who work in single-room schools or on isolated stations, told the Office of the lengths they went to for continuity of learning for their students when flood water damaged their classrooms and cut off supply routes to replace lost resources.

One governess said that people across the country helped her to keep teaching through the disaster.

Despite the efforts of government and regional services, it was the generosity of everyday Australians via social media fundraising that enabled me to source learning materials, basic supplies, and essential technology in time for Term 2. Without grassroots support, our students would have missed critical weeks of their education.

Teacher from Western Queensland

Another remote teacher also said grants sourced via social media meant she could open a new temporary classroom that allowed her three students to keep coming to school and provide structure during the event.

While this is a strong example of resilience in supporting students, it also highlights an area of improvement for emergency education responses for remote and isolated families to note that impacted classrooms come in many shapes and sizes

BushED Australia told the review how vital remote teachers are.²

"Home tutors and governesses are the backbone of remote education, quietly delivering consistent, high-quality learning in some of the most challenging conditions in the country. And we do so without formal recognition or tailored support in policy frameworks.

"The growing demand underlines the importance of ensuring reliable, resourced, and resilient learning environments not only for the benefit of students, but for the long-term sustainability of rural communities."

Bureau of Meteorology in disaster management

The Bureau of Meteorology (Bureau) is Australia's national agency for weather, climate, oceans and water. Its comprehensive suite of products and services supports informed decision making by governments, emergency services, industry and the community. They offer a wide range of observations, forecasts, warnings, analyses and advice, covering various aspects of Australia's atmosphere, water, ocean and space environments.

The Meteorology Act 1955 (Cth) Sections 6(1) and (2) outline the Bureau's functions, including issuing warnings for gales, storms and other weather conditions that may endanger life or property, as well as conditions likely to lead to floods or bushfires.⁴

The roles and responsibilities of governments in delivering forecasts and warnings to the Australian community are specified in the Intergovernmental Agreement (IGA) on the provision of Bureau of Meteorology Hazard Services to the States and Territories.

Under the IGA, the Bureau's responsibilities include, but are not limited to the issue of warnings of:

- gales, storms and other weather conditions likely to endanger life or property
- weather conditions likely to give rise to floods
- riverine flooding where riverine flooding is defined as any flooding where the rain-to-flood delay time is relatively high and typically more than 6 hours but excludes flooding caused by elevated sea levels, storm surge, flash floods, failure of manmade infrastructure and urban overland flow.⁵

The IGA also states warning services for flash flooding are the responsibility of state and local governments where flash flooding is defined as any flooding of short duration with a relatively high peak discharge in which the time interval between the observable causative event and the flood is less than 6 hours.

The Interim State Disaster Management Plan 2024-25 (Interim SDMP) identifies the Bureau's role is to collect, coordinate and distribute environmental observation data in support of advice, community warnings and briefings.

The role also includes providing seasonal climate outlooks for forward planning. The Bureau is an external representative that attends meetings of the Queensland Disaster Management Committee (QDMC) as required, and is a standing invitee to meetings of the State Disaster Coordination Group (SDCG). A senior Bureau forecaster is permanently based at the State Disaster Coordination Centre (SDCC).

The embedded meteorologist supports state-level operational response and works with the SDCC to ensure the effective dissemination and use of weather, flood and climate information. Significant warnings from the Bureau are a trigger, but not the only trigger, for the Stand Up activation level of the SDCC.⁶

Bureau flood warning service assessment

The Bureau uses three performance indicators for its flood warning service:

Timeliness: Percentage of flood watch and flood warning products issued on time, i.e. before
or at the stated next issue time.

-

⁴ Meteorology Act 1955 (Cth)

⁵ Intergovernmental Agreement on the Provision of Bureau of Meteorology Hazard Services to the States and Territories, Council of Australian Governments, 2017

⁶ Interim Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline 2024-25, Emergency Management and Coordination Command, Queensland Police Service, 2024, p. 58

- Lead time: Percentage of river level forecasts that met or exceeded the target lead time. The lead time is essentially how much advance notice (time) is given ahead of exceedance of a specific river height trigger. Target lead-time and the corresponding trigger height are defined in the Service Level Specification (SLS) for each forecast location.⁷
- Peak accuracy: Percentage of predicted flood peaks that were within a specified water level range (as per the SLS) of the observed peak, typically + 0.3m.

The Bureau acknowledges that internet and mobile phone network connectivity restrictions may prevent communities from accessing forecast and warning information. The Bureau provides regular updates to ABC Emergency to support live emergency broadcasting. Responding to media enquiries and amplifying timely messaging through social media channels helps the Bureau deliver and amplify key messages, forecasts and warnings.

The observation network in Western Queensland is a combination of automatic weather stations and real-time and manually-read rainfall and river-level gauges. The network in Western Queensland is less dense than in higher-rainfall areas east of the Great Dividing Range.

Leading up to and during the Western Queensland Floods, the Bureau advised that the following forecasts, warnings, briefings and media responses were issued:

Table 2: Bureau products issued during Western Queensland Floods

Number of Bureau products issued during Western Queensland Floods		
Warning type	Total	
Severe weather warnings	19	
Severe thunderstorm warnings	106	
Flood watches	13	
Flood warnings	323	
Briefings to emergency management sector via QDMA	366	
Media inquiries	127	
Social media posts	264	
Source: Bureau of Meteorology		

Meteorologists and hydrologists further disseminated this information through briefs and advice services, media and social media reporting.

For many locations, the onset of flooding was faster than normal due to the intensity of the rainfall. Standard flood forecasting models are of limited effectiveness within many catchments in Western Queensland. The high prevalence of braided rivers and the low density of the real-time observation network mean that empirical forecasting techniques (peak height correlations) are often the preferred method of forecasting. This reduces the extent to which forecast rainfall can be used to anticipate flood levels.

-

⁷ Service Level Specification for Flood Forecasting and Warning Services for Queensland – Version 3.6, Bureau of Meteorology, 2024

Bureau contributions and stakeholder perspectives

A Western Queensland LDMG reported that the Bureau's input at daily meetings was critical to their planning during this event as it enabled them to determine the flood heights which would impact properties.

Similarly, a neighbouring District Disaster Management Group (DDMG) noted that intelligence from the Bureau and landowners upstream along the Warrego, Paroo and Bulloo rivers and their tributaries was instrumental in preparing several LDMGs of impending flood waters. This locally sourced information from landowners was also provided to the Bureau to support weather modelling and forecasting.

Another DDMG further highlighted the value of intelligence from the Bureau and landowners upstream in the Thomson and Barcoo catchments, which helped to prepare their areas for the flood event.

Excellent support was provided by (the Bureau) in providing the most up-to-date intelligence on rain and river heights which assisted the Local Disaster Coordination Centre in planning.

Western Queensland LDMG member

Forecast limitations or constraints

The Bureau's ability to provide accurate flood forecasts is significantly constrained by the lack of upstream weather stations and monitoring infrastructure along key river systems. Standard flood forecasting models are of limited utility within many catchments in Western Queensland and empirical forecasting techniques are often the preferred method of forecasting. In some areas, councils need to rely on local information and informal observations – such as flow rate at river height markers – to estimate likely flood heights. While valuable, this approach limits the lead time available for preparation and response.

In Western Queensland, the absence of radar coverage and insufficient rainfall gauges may hamper the Bureau's forecasting capabilities. In some cases, the opinion was expressed that the Bureau may only have become aware of the true extent of the rainfall after significant events had already occurred, such as when a recording station reported 200mm rainfall on the second day of the event.

During the flood, a Western Queensland LDMG relied on overnight rainfall figures provided by locals, noting the flood heights exceeded those of the last comparable flood event which occurred in 1963. Early warning and response capacity are affected by the declining rural population and fewer residents living on properties to provide on-the-ground local information, limiting early warning and response capacity. Participants of the community forum also expressed frustration with the lack of timely early warning, response capacity, accurate Bureau information, and the disparity between predicted and actual rainfall.

A neighbouring disaster district acknowledged the limitations of Bureau data and flood monitoring in the region, highlighting that local knowledge remains the primary source of intelligence and should be systematically documented. The district also identified opportunities to improve flood behaviour monitoring in the Channel and Gulf Country regions, noting that councils have invested in cameras and monitoring equipment to address gaps in the Bureau's current network.

Capability improvements

The Bureau acknowledges the need for enhanced meteorological infrastructure in many regions of Queensland. This event report contains a dedicated section on the Flood Warning Infrastructure Network (FWIN). Notably, planning for a

Good practice

'Know your weather. Know your risk' is the Bureau's annual public safety campaign. Its overarching goal is to inform communities about severe weather and how it could affect them, giving them confidence to act when they need to. In 2024, the campaign ran from 9 September 2024 to 13 October 2024.

Source: Bureau of Meteorology

new radar installation in Western Queensland is underway, with site selection anticipated by mid-2026 following stakeholder consultation. The specific type of radar and supporting infrastructure is yet to be determined.

The Bureau is exploring the use of renewable energy and hybrid power supply options to improve the resilience of radar installations. Pilot projects are underway in New South Wales. There are currently no plans to extend the project to Queensland.

The Bureau in previous IGEM reviews

Previous reviews conducted by the Office, including the 2023-24 Severe Weather Season Review, have highlighted the limitations faced by the Bureau in providing comprehensive warnings about actual rainfall levels experienced and the impact of unprecedented severe weather events on preparedness activities.⁸ These reviews noted that without the ability to access accurate and timely rainfall data, local decision makers were often left without the necessary information to plan and respond appropriately.

Flood warning infrastructure

Flood warning infrastructure plays a crucial role in protecting Queensland communities by providing the intelligence needed to anticipate, prepare for, and respond to flood events.

This and past reviews heard concerns from entities that the flood gauge network in regional, rural, and remote areas is insufficient, with blind spots in the network. These blind spots reduce the accuracy of flood forecasting, which has had an impact on community and agency preparedness, and the ability of decision makers to issue warnings and plan timely evacuations. This has impacted the community's confidence in the disaster management agencies.

_

^{8 2023–24} Severe Weather Season Review, Inspector-General Emergency Management, 2024, p. 43

The issue can be compounded in the many areas where gauges are read manually rather than automated. In one instance, decision makers were required to utilise a helicopter, drones, and community-sourced observations to assess river heights and flood conditions in real time. The Local Disaster Coordinator, supported by experienced liaison personnel, was able to make informed decisions using local knowledge and direct observation. While this LDMG was able to adapt quickly, it underscored how challenging it is to gather timely and accurate data, complicating the capability to make timely decisions in rapidly evolving events.

Concerns were also expressed in apparent delays in some areas where the Bureau did not publish data from manually-read gauges. One LDMG which experienced this said it caused several issues

around information and warning for their community because councils cannot contradict the Bureau by publishing manual readings. This example highlights the interdependent nature of disaster information systems.

Local governments rely on data custodians to validate and publish gauge readings before they can be reflected on community-facing dashboards. Delays in these processes create downstream challenges for timely community communication, potentially affecting community confidence and safety.

Damaged flood warning assets

With frequent compounding and cascading disasters, the expanse of the flood gauge network, and remoteness of

thousands of assets, means that when something is damaged or faulty, it can be difficult to repair or replace quickly. This also impacts the accuracy and reliability of the flood gauge network to inform the Bureau, communities, LDMGs, and response agencies.

Flood cameras: enhancing situational awareness

In addition to flood gauges, there is growing recognition of the value flood cameras on roads to enhance real-time situational awareness and public safety. Local governments have emphasised that cameras positioned across catchments and along major transport routes provide critical visual confirmation of flood conditions, supporting both operational decision making and public confidence in warnings.

Supporting and growing this capability aligns with the Queensland Strategy for Disaster Resilience (QSDRs) emphasis on improving access to real-time information (Strategic Commitment C1.2) and ensuring investment is aligned with local and regional needs (Objective 4), as well as the Interim SDMP's focus on predictive capabilities and situational awareness to support coordinated response.

Did you know?

Queensland has more than 3300 rainfall and river gauges.

These inform statewide flood warnings and forecasts.

Flood warning assets are owned and operated by more than 60 groups, including State and local government, the private sector, and the Bureau of Meteorology.

Source: Bureau of Meteorology

⁹ Queensland Strategy for Disaster Resilience 2022–2027, Queensland Reconstruction Authority, 2025, p. 24
¹⁰ Interim State Disaster Management Plan 2024-25, Queensland Disaster Management Committee, 2024, p. 24

The way forward

The QSDR emphasises the need to transform systems to make them more resilient, especially in the face of systemic disaster risk driven by a changing climate and increasing hazard intensity.¹¹ Ensuring infrastructure is designed and maintained to withstand future conditions is essential to safeguarding communities.

These examples reinforce the need for redundancy in flood warning infrastructure to ensure continuity of operations when primary systems fail. These measures should be embedded and trained within broader business continuity planning frameworks, as outlined in the Interim Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline 2024-25 (DM Guideline), to ensure that critical functions can continue during disruptions.

This aligns with the principles of evidence-based decision making, situational awareness, and continuous improvement outlined in the Standard¹² and supports strategic commitments in the QSDR and operational guidance in the Interim SDMP.

It has also been highlighted that physical flood markers play a valuable role in supporting community understanding of flood risk, particularly in high-tourist areas. In such contexts, visible markers provide a tangible reference point, helping people visualise what flood heights mean in that town.

Beyond their operational value, flood markers also serve as important educational and cultural assets. They help embed lived history into community, bridging understanding between long-term residents and new residents or visitors who may be unfamiliar with local flood behaviour.

When simple floor markers are paired with clear and trusted communication channels from responsible entities, flood markers become a useful reference point for community knowledge and response.

Further, significant investment is currently underway to strengthen Queensland's flood warning capabilities, including the \$236 million National Flood Warning Infrastructure Network Program (NFWINP) led by the Bureau¹³ and the \$7 million Emergency Response Fund (ERF) FWIN program, funded by the Australian Government and led by the Queensland Reconstruction Authority. These programs aim to strengthen the network and significantly improve data availability across the state.

This will continue to take time.

However, diversifying the types of infrastructure used, such as cameras and satellite telemetry, can help support and improve the flood warning infrastructure network in Queensland.

Insight: Complementary flood monitoring assets such as flood markers and flood cameras can contribute to the accuracy, timeliness and resilience of flood warning intelligence.

_

¹¹ Queensland Strategy for Disaster Resilience 2022–2027, Queensland Reconstruction Authority, 2025, p. 8

¹² Standard for Disaster Management in Queensland, Inspector-General of Emergency Management, 2021, p. 13-14

https://www.qld.gov.au/emergency/dealing-disasters/disaster-types/flood/for-councils-and-flood-practitioners/flood-warning-infrastructure-resources/bureau-of-meteorologys-flood-warning-infrastructure-network-fwin-program

¹⁴ https://www.gra.qld.gov.au/ERF/ERF-FWIN-program-2021-22

Table 3: Number of sites agreed for acquisition by catchment

Number of sites agreed for acquisition (as at July 2025)	
Catchment	Number of sites agreed for acquisition
Norman and Gilbert	16
Flinders and Cloncurry	29
Nicholson and Leichhardt	19
Georgina and Eyre	13
Diamantina	17
Thomson Barcoo Cooper	10
Bulloo	8
Paroo	6
Balonne	18
Condamine	89

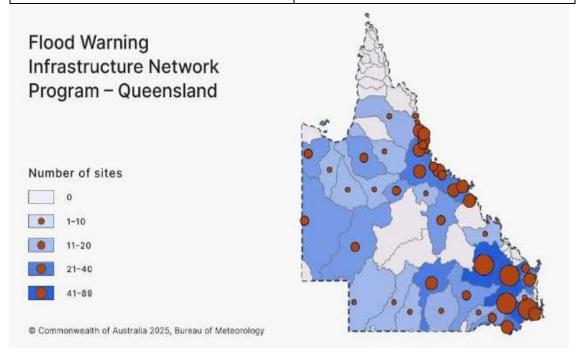


Figure 4: Number of sites per catchment identified for acquisition as part of FWIN.

Public information and warnings

"A warning provides point-in-time information about a hazard that is impacting or is expected to impact communities. It describes the impact and expected consequences for communities and includes advice on what people should do." Australian Disaster Resilience Handbook

"Public information is information provided to the public immediately before, during and after an emergency to reduce the potential impact of an emergency or hazard." ¹⁶

Queensland Warnings Manua

Under the QDMA and outlined in the Queensland Warnings Manual¹⁷, local governments are responsible for issuing community-focused warnings for severe weather (including severe storms with dangerous cells), flooding, cyclone, and storm tide.

Councils can request warning support from their QPS Emergency Management Coordinator (EMC), and the QPS SDCC Watch Desk. During SDCC activations, the Public Information and Warnings Unit provides surge capacity.

The Queensland Fire Department (QFD) is responsible for all fire warnings and Queensland Health is responsible for extreme heatwave warnings.

A warning is only issued when some form of protective action is needed. If not, it is public information.

Primary agencies responsible for warning communities in Queensland

Severe weather, flood, cyclone and storm tide: Local governments, Maritime Safety Queensland

Bushfires: Queensland Fire Department

Extreme heatwaves:
Queensland Health

Australian Warning System

All community-focused warnings in Queensland follow the Australian Warning System (AWS) warnings framework. It was implemented in Queensland in November 2023.

The AWS framework helps communities understand the hazard, their risk level for that hazard at that point in time, and what they need to do to be safe, regardless of where they are in the country. It has been applied across all hazards and across most warning distribution methods.¹⁸

¹⁵ Australian Disaster Resilience Handbook Collection: Public Information and Warnings, National Recovery and Resilience Agency & Australian Institute for Disaster Resilience, 2021

¹⁶ Queensland Warnings Manual, Queensland Police Service, 2024, p. 8

¹⁷ Queensland Warnings Manual, Queensland Police Service, 2024, p. 8

¹⁸ https://www.disaster.gld.gov.au/watch-for-the-warnings

Emergency Alerts

Emergency Alerts (EAs) are not AWS warnings. Emergency Alerts is a distribution method used in conjunction with other platforms to get urgent community warnings and information out.

EAs can be sent via text message to mobile phones, or a recorded voice message to mobile phones and landlines. They can be sent based on service address or geo-located to mobile phones in an area.

EAs are requested by council, or QFD for bushfires, and are sent by the QPS SDCC Watch Desk.

The EA system is a national system, and EAs are sent based on a triaged approach, which can impact the timing of EA delivery. For example, a life-threatening situation over a large area in South Australia (like a fast and dangerous bushfire) can take precedence over a lower risk event in New South Wales (like a slow riverine flood). This can sometimes cause a 'bottleneck' and cause delays in when the EA is received by community members.

NEMA advised the EA system will be replaced with the National Messaging System (NMS), which aims to address the speed and geographic accuracy of EAs. The NMS will be fully implemented and available for use by states and territories in time for the 2026-27 Higher Risk Weather Season, commencing 1 October 2026.

Communication during events

Communities across Western Queensland reported that they were taken by surprise by the huge volume of rain that fell over a short time period, overwhelming drainage systems, creek and river systems.

While local governments and residents considered themselves well prepared for a traditional wet season and 'normal' flooding, many reported being unprepared for the scale and speed of the flash flooding and record-breaking flood heights experienced during the event.

During the Western Queensland Floods, the heaviest falls happened late at night, which did not allow councils time to warn their community beforehand so they could act accordingly. Some attribute being 'taken by surprise' to inadequate weather forecasting for their region. The actual rainfall was far above what was forecast by the Bureau.

One agency observed the Bureau may not have been fully aware of the extent of rainfall in some areas until after significant falls had already occurred. It was noted that a 200mm reading from a recording station on the second day of the event appeared to prompt greater awareness of the unfolding conditions.

Despite these issues, councils started issuing AWS flood warnings and some requested Emergency Alerts as soon as they could. However, due to the fast onset, loss of power, and telecommunications outages in some locations, the warnings were not seen until it was too late for people to leave safely or protect their property.

The Office acknowledges that localised AWS warnings are not always possible for fast-onset events, such as severe storms, flash flooding, and some bushfires, due to the speed and unpredictability of these hazards. This challenge is particularly pronounced for smaller councils, and during weekends or overnight periods when resources may be limited.

Feedback from communities impacted by the Western Queensland Floods highlighted both community and entities' heavy reliance on mobile phones before, during, and after disaster events. Mobile connectivity was essential for staying informed, maintaining contact with family, and calling for assistance when needed. It is important to note that satellite-based services do not receive Emergency Alerts.

Agencies and councils also relied heavily on telecommunications to disseminate critical information, which increases the vulnerability of communities and response agencies when telecommunications infrastructure fails during disasters.

The current reliance on technology for issuing public information and warnings exposes significant vulnerabilities, particularly when power and telecommunications are disrupted. There is limited evidence of resilient offline business continuity options for communicating with communities during such outages. This is a gap that should be addressed.

With the expectation that future disasters will be increasingly complex and may result in prolonged loss of power and telecommunications, it is essential to plan for warning and informing communities without a reliance on phones or electricity. Proactive education – ensuring communities know where to access offline information before the disaster season – should be embedded as standard practice. This is especially critical for regional and remote communities where phone coverage is often unreliable.

Inclusive emergency preparedness information

Accessible warning and public information, including preparedness information, remains inconsistent. Past reviews (e.g. the South East Queensland Rainfall and Flooding Review¹⁹) noted that messages were overly technical, sometimes inconsistent and failed to reach culturally and linguistically diverse (CALD) and First Nations communities.

A new project is underway to provide preparedness information in languages other than English through the Get Ready Queensland program. The Get Ready Queensland team (which is part of QRA), is producing a series of natural hazard information videos and 'Easy Read' resources for CALD communities and people with low literacy skills. There will be a toolkit for government and NGOs on how to use and adapt the resources for their communities.

"These inclusive and accessible resources are being developed for use across Australia and will focus on seven natural hazards: bushfires, floods, cyclones, storms, heatwaves, earthquakes and tsunamis. The resources will be translated into Arabic, Cantonese, Dari, Korean, Mandarin, Punjabi, Thai, and Vietnamese." Queensland Reconstruction Authority

-

¹⁹ South East Queensland Rainfall and Flooding February to March 2022 Review, Inspector-General Emergency Management, 2022

Evacuation

For agencies working the disaster management sector, there is a clearly defined and structured outline for the management of evacuation in disaster situations. This is covered in the Summary Report.

What this event review covers is the disaster management preparedness and response to the Western Queensland Floods. The Office recognises that the floods were unique and catastrophic for many individuals and communities. The Office also acknowledges the mental health support funded by the QRA for the purpose of supporting affected residents in the wake of the floods.

The record-breaking floods in March required residents from Thargomindah and Jundah to evacuate to Charleville and Longreach. In Adavale, residents had little warning as record rain fell overnight, resulting in homes being inundated by morning and residents waking up to water in their homes. All Adavale residents were subsequently evacuated to Quilpie, approximately 90 kilometres away.

Most roads surrounding Adavale are unsealed and the widespread inundation triggered their closure. Other regional routes were also closed in places due to riverine flooding. Evacuations relied heavily on local helicopters (see section on Aviation for more information) and, in one instance, a small dingy, until a swift water rescue team arrived. The Quilpie LDMG provided comprehensive support to the evacuated residents and arranged accommodation, clothing, toiletries and meal vouchers.

Residents from the town of Jundah were evacuated to Longreach in the neighbouring shire as floodwaters threatened their homes. The 54 evacuees arrived with only bare essentials and were transported from Longreach airport to the Longreach library where the LDMG coordinated the provision of accommodation and meals. Recognising the potential mental health implications for the evacuees, Longreach Regional Council provided ongoing welfare checks until it was safe for them to return home. Similarly, Thargomindah residents were evacuated to Charleville in the neighbouring shire.

Several LDMGs highlighted the need to strengthen arrangements for receiving and hosting evacuees from other local government areas, and the importance of proactively identifying and preparing suitable evacuation facilities in advance.

Fodder

Residents across Western Queensland suffered prolonged isolation. The inundation of roads and paddocks, left large numbers of livestock without access to feed, creating an urgent need for aerial support to sustain animal welfare and prevent stock losses. The coordination of emergency fodder provision required collaborative efforts across all tiers of the QDMA. A Fodder Disaster Taskforce was activated to assist with supply and distribution.

DPI was identified as the lead agency to coordinate the fodder drop and was responsible for administering the Coordinated Fodder Support Package, and this was made available to primary producers impacted by the event.²⁰ An Operations Cell was set up at the Charleville District Disaster

Page 38 of 59

²⁰ https://www.qra.qld.gov.au/funding-programs/event-specific-exceptional-circumstances-assistance/2025-western-queensland-surface-trough-exceptional-circumstances-packages/coordinated-fodder-support-package-2025-western-queensland-trough

Coordination Centre to manage the logistics of fodder drops across surrounding shires. The Operations Cell was supported by Blackall-Tambo Regional Council and operated out of Blackall. Other operational hubs supported the distribution of fodder from Quilpie, Jundah and Eulo. At peak activity, up to 19 helicopters operated from Quilpie Airport, while local coordination at Jundah and Eulo enabled access to otherwise isolated properties. These hubs helped reduce flight distances and supported efficient delivery to remote areas.

Key amongst the challenges associated with sourcing fodder from other areas was the risk of red imported fire ants, an invasive species. DPI implemented biosecurity protocols including weed-free and fire ant-free declarations for the hay supplied and approved the purchase of hay stored in local sheds.

The rapid organisation of the fodder drop initially led to some confusion regarding which agency was responsible for facilitating the operation. There was also a lack of clarity around the process for requesting and coordinating fodder drops, with a tendency to rely on informal communication channels such as phone calls and emails, which further contributed to the confusion.

In several locations, individuals with local knowledge and relevant skills assumed coordination roles, which proved highly effective in streamlining the process and ensuring successful delivery.

It is noted that the activation of fodder support funding under the DRFA package requires multiple high-level approvals. This caused some delays, however the QRA recognised the urgency of the situation and funding was ultimately approved by both the Australian and Queensland governments.

Despite the challenges, several aspects of the fodder response were considered highly effective. DPI's logistics network successfully maintained consistent fodder and fuel supply across all affected regions throughout the event, and over 900 helicopter flights were logged, delivering more than 3000 large hay bales. Local coordination hubs at Jundah, Quilpie, and Eulo were praised for enabling access to remote properties, and individuals who assumed coordination roles were credited with helping save livestock. Collaboration between DPI, councils, primary producers, and helicopter operators was also recognised as a significant strength.

The emergency fodder response demonstrated the importance of coordinated logistics, local knowledge, and multi-agency collaboration in safeguarding animal welfare during widespread disaster events. The challenges encountered, lessons identified and good practices observed provide valuable insights to strengthen future disaster preparedness and response efforts across Queensland's disaster management system.

Insight: Clarity in roles and responsibilities in fodder provision decreases the risk of parallel effort, delays and supports timeliness of tasking and delivery.

Recommendation (2)

The Inspector-General of Emergency Management recommends that the Department of Primary Industries lead a discussion with relevant stakeholders to establish a framework for the procurement of, and distribution of fodder during disasters.

Aviation

The Summary Report outlines the regulatory framework governing the use of aviation in disaster management.

The Western Queensland Floods demonstrated that every disaster event is different, and requires a tailored response. The Western Queensland Floods impacted an area comparable in size to the state of Victoria. This necessitated the extensive use of aviation for both evacuations and the delivery of essential supplies, including fodder for livestock. Due to the scale of the event, the response operation occurred largely in uncontrolled airspace over vast distances of water and revealed several interdependencies, particularly in logistics. Councils, QPS, QFD, DPI and Energy Queensland engaged contracted or pre-approved aviation providers to support a range of operations, including:

- Evacuations
- Emergency resupply
- Relief (including fodder drops)
- Transportation of personnel to restore essential services
- Situational awareness and data collection
- Aerial inspections of assets (such as energy infrastructure)
- Damage assessments.

Collaborative and concurrent problem solving worked well. For example, aircraft-based options were considered to transport a replacement generator for Jundah while road access was being restored. Energy Queensland ultimately used a helicopter to transport the generator, enabling crews to start cleaning and commencing repairs at Jundah's power station. One Western Queensland council identified that resource sharing and prioritisation for the delivery of critical supplies was considered to have worked well.

For primary producers in that same local government area, almost all resources needed to be transported by aircraft daily. As such, the identification of suitable staging points with appropriate unloading equipment closer to Quilpie was essential. Supply of aviation fuel became a challenge, highlighting the need for aviation fuel supplies to be positioned closer to staging sites for smaller helicopters distributing fodder. Post-event, one local government identified establishing an emergency supply providers list within the region to ensure continued access during isolation.

Furthermore, requests from Longreach landholders and the Barcoo LDMG required the Longreach DDMG to request QPS assistance to source aircraft for the transport of essential food, medical resupplies, veterinary supplies and other resources. QPS coordinated both rotary and fixed-wing aircraft from Longreach airport to conduct resupply operations throughout the Longreach and Barcoo local government areas. Bulloo Shire Council found local knowledge and helicopter surveillance improved their decision making.

DPI aviation logistics for fodder drops were coordinated by chief pilots who managed taskings and reporting, using pilot mapping and data to track deliveries and flight paths. Local and district disaster management groups supported these efforts by procuring aviation fuel. However, coordination challenges arose when tasking disputes led to councils withdrawing their support. DPI identified the need for clearer definition of aviation coordination roles and responsibilities in procurement contracts.

The Office identified several opportunities to strengthen coordination and communication during disaster response. Key areas for improvement include clarifying coordination roles, enhancing communication systems, and prioritising pre-event planning.

Further identified opportunities for improvement include formalising roles and responsibilities, improving training and induction processes, and developing operational guidelines to support future coordination. Additionally, improvements could be made to aviation coordination and asset visibility, using local helicopters to reduce costs and support the local economy, and implementing secure systems to manage property-level information.

Pre-season planning and exercises involving fodder drops were also identified as valuable preparedness activities. Establishing formal liaison officer roles early in activation phase would improve coordination and dispatch. Creating property identification protocols to assist with aerial delivery operations is also suggested. The need for consistent messaging and data sharing with councils was also highlighted as a key area for improvement.

Insight: Improved guidance in key doctrine and establishment of clear roles and responsibilities for entities deploying aviation resources pre-season would strengthen communication, improve coordination, and enhance operational efficiency.

Should the recommendation below be accepted in full or in part, entities holding Air Operator Certificates (AOC) may wish to consider including the relevant AOC holder in any meetings associated with the recommendation.

Recommendation (3)

The Inspector-General of Emergency Management recommends that the Queensland Police Service convene a meeting with the Civil Aviation Safety Authority and other state entities deploying aviation assets to disaster operations (e.g. Queensland Reconstruction Authority, Queensland Fire Department, Department of Primary Industries, Energy Queensland, Local Government Association of Queensland etc), to discuss air operations in uncontrolled airspace and complex environments to determine what 'safe practice' looks like, as well as 'good practice'.

Community resilience

Western Queensland communities have long been recognised for their resilience, underpinned by strong social connections and a culture of mutual support. However, the flooding and rainfall events of March and April 2025 tested this resilience, as the extent of the event had not been previously experienced and the usual warning signs, triggers and resultant losses were exceeded.

Key drivers of community resilience in Western Queensland

Western Queensland communities face unique challenges due to their geographic isolation, exposure to extreme weather events, and limited access to services. Despite these pressures, many communities have demonstrated remarkable resilience, driven by a combination of social cohesion, local knowledge, adaptability, and proactive planning. Understanding the key drivers of resilience informs future disaster preparedness and recovery strategies. In undertaking this review,

the foundational elements that enable Western Queensland communities to withstand, respond to, and recover from adversity have been identified as follows:

Social connectedness and mutual support

Western Queensland communities thrive on strong interpersonal relationships and a shared sense of responsibility. This social capital enables collective action during crises. For example, in one shire, residents came together to assist neighbours with sandbagging homes, sharing resources, and providing emotional support during the floods.

Generational knowledge sharing

Long-term residents play a critical role in building resilience by sharing their lived experiences of severe weather events with newer community members.

In Jundah, informal gatherings and community education days were organised to pass on knowledge about flood preparedness, such as how to secure properties and manage livestock during emergencies.

Adaptability and innovation

Communities demonstrated adaptability by exploring innovative solutions to mitigate future risks.

For example, one Western Queensland town is considering building levee walls to protect the town. Another community is exploring the feasibility of raising all homes above the 2025 flood level, while another town is contemplating relocating the entire town to higher ground.

Preparedness and planning

While many residents had prepared for typical severe weather, the scale of the 2025 floods revealed gaps in planning for unprecedented events. This highlights the need for communities to anticipate and prepare for "unknown" scenarios.

The Queensland Reconstruction Authority's Get Ready Queensland program has been instrumental in promoting year-round disaster preparedness, encouraging actions such as creating emergency kits and developing community-wide response plans.

Expanding the remit of the Get Ready Queensland program to include aspects of adaptability, transferability and resilience would improve Queenslander's ability to be prepared for not yet experienced events.

Challenges identified

Unprecedented nature of events

The 2025 floods were described by many residents as 'outside lived experience', with several reporting they had never witnessed such volumes of water in their lifetimes. This level of unpredictability challenges traditional preparedness models that rely heavily on historical data and past events.

Planning for high-consequence, low-probability events—those that fall outside historical norms—is essential. Communities and agencies should adopt flexible, scenario-based planning approaches that account for extreme and unfamiliar conditions.

Infrastructure vulnerabilities

Flooding caused significant damage to critical infrastructure, including roads, bridges, telecommunications, and water supply systems. These disruptions had cascading effects on supply chains, emergency response capabilities, and access to essential services such as healthcare and food distribution.

In several remote towns, damaged bridges delayed the delivery of emergency supplies and hindered evacuation efforts, highlighting the fragility of single-access routes in isolated regions.

High expectations of government

Community submissions revealed that residents hold local councils and the State government to high standards of accountability during disaster events. While many praised the efforts of emergency services, some councils were criticised for perceived shortcomings in infrastructure maintenance, communication, and disaster response coordination.

In one locality, residents expressed frustration over delayed road repairs and limited access to sandbags, which they felt exacerbated the impact of flooding.

Transparent communication, consistent engagement, and visible preparedness efforts are key to maintaining public trust. Equally, there is a shared responsibility, as explained in the Standard, that empowers communities and individuals to take shared responsibility for resilience.

Opportunities for strengthening resilience

Enhancing social capital

Social capital – the networks of relationships and trust within communities – is a foundational element of disaster resilience. Programs that foster community connections, such as neighbourhood networks, volunteer initiatives, and local leadership development, can significantly improve collective capacity to respond and recover.

The ARC has consistently highlighted the role of social capital in disaster management, noting that communities with strong interpersonal ties are more likely to engage in mutual aid, share resources, and support vulnerable individuals during crises.

Tailored community education

Education initiatives – both formal and informal – are essential for bridging knowledge gaps, particularly among newer residents who may be unfamiliar with local hazards and response protocols. Community forums, workshops, and social events provide accessible platforms for sharing practical advice, preparedness strategies, and lived experiences.

In flood-prone areas, sessions on property protection, livestock management, and evacuation planning can empower residents to take proactive steps before a disaster.

Education programs should be tailored to local contexts, using plain language and culturally appropriate formats. Partnering with schools, community groups, and local media can help extend reach and reinforce key messages year-round.

Integrating local knowledge into planning

Local residents possess valuable insights into historical events, environmental patterns, and community dynamics. Incorporating this knowledge into disaster management planning ensures that strategies are context-specific, culturally appropriate, and more likely to be effective.

In Western Queensland, long-term residents have shared practical advice on flood behaviour, evacuation routes, and livestock safety—information that may not be captured in formal datasets. LDMGs and councils may wish to consider establishing, revitalising or continuing ongoing community consultation to contribute to the contextualisation of plans, drawing on local strengths.

The 2025 Western Queensland Floods highlighted both the strengths and vulnerabilities of Western Queensland communities. While their resilience was evident in the collective response to the disaster, the event also reaffirmed the need for enhanced preparedness and adaptability.

Conclusion

The Western Queensland Floods presented significant challenges to Queensland's disaster management system, testing its capacity to respond to events of unprecedented scale and complexity. Despite these challenges, the QDMA demonstrated the value of the principles of a locally led, regionally co-ordinated and state and commonwealth supported approach to managing disasters in Queensland. This framework reflects a scalable, flexible and cross agency approach, ensuring that responses are tailored to the severity and complexity of each event whilst also maintaining strong coordination across all levels of government and community.

The collective efforts of government agencies, local governments, non-government organisations, volunteers, and communities showcased the resilience and dedication of all involved. Under immense pressure, all stakeholders worked tirelessly and collaboratively to deliver the best possible outcomes.

While the QDMA has proven its value, it is acknowledged that the system is undergoing a period of change. Queensland has been subject to major disaster events in 2022, 2023–24, and 2025. These events have placed sustained pressure on Queensland's disaster management system. The Office has undertaken a number of reviews and made a suite of recommendations aimed at enhancing the QDMA, improving resilience and operational effectiveness.

In undertaking this review, regard has been had to the recommendations from previous IGEM reviews in 2022, 2023 and 2024–25, and it is evident that the QDMA is undergoing a period of transition with changes still being embedded across the sector. This transition will take time, but those changes and the small but meaningful enhancements identified in this review reflect a shift towards more adaptive, integrated, and future-focused approaches to disaster preparedness and response, informed by lessons learned and evolving risk landscapes. These enhancements are essential to ensure the system continues to evolve and improve. The focus remains on continuous improvement, with a commitment to refining processes, improving doctrine, strengthening coordination, and enhancing community resilience through a shared responsibility.

Looking ahead, the lessons to be learned from this event by all aspects of the system, coupled with the insights from the recently released National Climate Risk Assessment, will guide future preparedness and response efforts. The QDMA will continue to adapt to the changing nature of

disasters, ensuring Queensland is ready to face future challenges with confidence and capability. By building on the progress made and fostering a culture of learning and collaboration, Queensland's disaster management system will remain a cornerstone of community safety and resilience.

This review reaffirms the importance of ongoing reflection, adaptation, and preparation to meet the needs of a dynamic and evolving risk environment. Together, we will continue to strengthen our disaster management arrangements and ensure Queenslanders are well-prepared for whatever lies ahead.

Appendix A

Terms of Reference

Terms of Reference for the reviews of:

- North Queensland Floods (late January to early February 2025)
- Tropical Cyclone Alfred's impact on South-East Queensland (late February to early March 2025)
- Western Queensland Floods (late March to early April).

Functions of the Office

The Office of the Inspector-General of Emergency Management (IGEM) is to provide the Queensland Government and the community with assurance of the State's disaster management arrangements.

Section 16C of the Disaster Management Act 2003 outlines the following functions for the office of the Inspector-General of Emergency Management, including:

- to regularly review and assess the effectiveness of disaster management by the State, including the State disaster management plan and its implementation;
- to regularly review and assess the effectiveness of disaster management by district groups and local groups, including district and local disaster management plans;
- to regularly review and assess cooperation between entities responsible for disaster management in the State, including whether the disaster management systems and procedures employed by those entities are compatible and consistent;
- to review, assess and report on performance by entities responsible for disaster management in the State against the disaster management standards;
- to identify opportunities for cooperative partnerships to improve disaster management outcomes;
- to report to, and advise, the Minister about issues relating to the functions above; and
- to make all necessary inquiries to fulfil the functions above.

Guiding principles and methodology

The Reviews will be guided by the following principles:

- The Standard for Disaster Management in Queensland (the Standard) establishes the outcomes to be achieved for all entities involved in disaster management. It consists of Shared Responsibilities, Outcomes, Accountabilities, and Indicators. The Standard focuses on outcomes rather than setting a minimum Standard that must be met.
- As described by the Standard, the focus is on outcomes, the Standard provides the
 parameters within which disaster management should be conducted across Queensland,
 without being prescriptive about how it should be done.

- The Standard is to be used by all entities in Queensland with a responsibility to contribute to disaster management. This includes those with legislated roles, as well as entities acting on behalf of or under an arrangement with those that do.
- The term 'entity' is defined in the Acts Interpretation Act 1954, at Schedule 1 Meaning of commonly used words and expressions. It determines that an entity includes both a person and an unincorporated body. Consistent with the Disaster Management Act 2003, the Standard uses the term entity to describe those with roles or responsibilities in disaster management in Queensland. This includes all tiers of government, non-government organisations, not-for-profit organisations, disaster management groups, and others with legislated roles in disaster management.

In conducting the Reviews, the Office will engage with:

- relevant entities impacted by these events where DRFA has been activated,
- any other entities providing critical infrastructure support in the preparation and response phase,
- relevant entities engaged in preparation and response activities,
- industry,
- · community,
- · relevant disaster management doctrine, and
- other relevant reviews previously conducted, or which may have commenced, relevant to this review.

The Reviews will be guided and informed by consideration of various sources of evidence, not limited to submissions (written or oral), interviews, official reports, data, case studies, public consultation and the views of experts.

Scope

For the associated events, the IGEM will deliver a separate report, for each identified event. The reports will identify enhancements and good practices to inform and ensure continuous improvement of Queensland's Disaster Management Arrangements (QDMA).

In relation to the associated events, the reports will focus on the following:

- pre-season planning activities undertaken by entities,
- integration of preparedness and response activities between all levels of government,
- opportunities to enhance community resilience to better prepare for, and respond to future disasters,
- ensuring effective communications systems to enable the community to take necessary actions and to ensure connectedness within the community and with response entities,
- provision of information and data to inform and support planning decisions in the preparation and response phases, and

any other matters that the IGEM considers necessary related to preparation and response.

Out of Scope

These reviews will not consider matters relating to:

- · activities solely related to recovery,
- areas outside of the event areas previously identified,
- land use planning, and
- building design, codes and construction.

Deliverables and Timeframe

The review reports will include an analysis of the preparedness and response related to each event. Based on the evidence, the reports may include identified good practice as well as recommendations for improvements in the QDMA and opportunities for strengthening future preparedness and response mechanisms.

Before finalising the review reports, the IGEM will consult with relevant entities on draft findings and recommendations.

The three reports will be delivered to the Minister for Police and Emergency Services by Tuesday 14 October 2025 for consideration of tabling in Cabinet.

Appendix B

Insights

Insight	Location
Community safety may be enhanced with increased understanding and communication between disaster management groups and the Bureau regarding the relationship between Bureau warnings and planned disaster response triggers. The solution lies in strengthening collaboration and information-sharing across jurisdictions and between levels of disaster management groups.	Summary Report, p. 24
Complementary flood monitoring assets such as flood markers and flood cameras can contribute to the accuracy, timeliness and resilience of flood warning intelligence.	Summary Report, p. 31
	North Queensland Floods Event Report, p. 34
	Western Queensland Floods Event Report, p. 33
Improving vegetation management around electricity infrastructure assets may improve access to, and the resilience of the network.	Summary Report, p. 33
	Tropical Cyclone Alfred Event Report, p. 55
Communities plan and prepare for what they know. Communities now need to think about preparing for the type of events they have yet to experience.	Summary Report, p. 34
	North Queensland Floods Event Report, p. 53
	Tropical Cyclone Alfred Event Report, p. 63
Disaster management entities should have resilient business continuity plans that account for communication disruptions.	Summary Report, p. 37
All entities with warning responsibilities should include offline messaging as part of their business continuity planning.	Summary Report, p. 39
It is not always possible to issue local, community-focused warnings for some events. If community warnings are issued,	Summary Report, p. 44

they may not be seen by all members of the community. There is a shared responsibility between entities and the community to understand local risks and be informed and prepared.	
There is an opportunity for coastal councils in Southeast Queensland to adopt storm tide evacuation zones as per the Evacuation Manual, which many northern, coastal local	Summary Report, p. 48
governments have adopted.	Tropical Cyclone Alfred Event Report, p. 43
Information about the potential inundation of the storm tide should be obtained from the responsible LDMGs who have the data and modelling capabilities.	Summary Report, p. 49
	Tropical Cyclone Alfred Event Report, p. 44
Planning for an imminent tropical cyclone event should include a shared understanding of the risk appetite of the relevant disaster management groups that support locally led	Summary Report, p. 49
disaster response operations.	Tropical Cyclone Alfred Event Report, p. 44
Greater awareness of the services offered by storm tide advisors could be promoted to assist coastal disaster management groups.	Summary Report, p. 50
	Tropical Cyclone Alfred Event Report, p. 45
The terminology 'storm tide' and 'storm surge' are used inconsistently in doctrine, public information and by disaster management practitioners.	Summary Report, p. 50
	Tropical Cyclone Alfred Event Report, p. 45
Evacuation sub-plans should include clear activation triggers, shelter options available, communication strategies to inform the community of the risks and request clear courses of action.	Summary Report, p. 52
Shelter personnel should be appropriately trained, available, and well-practiced within fit-for-purpose facilities with a considered business continuity plan.	Summary Report, p. 53
	Tropical Cyclone Alfred Event Report, p. 48
When preparing evacuation sub-plans, consideration should be given to evacuation arrangements for persons external to	Summary Report, p. 54

Common Donata 57
C.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Summary Report, p. 57
Summary Report, p. 58
Summary Report, p. 59
Summary Report, p. 59
Summary Report, p. 60
Summary Report, p. 60
Summary Report, p. 62
Summary Report, p. 62
Summary Report, p. 62
Summary Report, p. 63
Tropical Cyclone Alfred Event Report, p. 50
Summary Report, p. 64
Summary Report, p. 66

Disruption to Queensland's limited freight corridors constrains the movement of goods, heightens supply chain vulnerability and complicates prioritisation decisions during periods when transport capacity is reduced.	Summary Report, p. 67	
Local Disaster Management Plans should include supply chain continuity for communities at risk of being isolated, including defined triggers for resupply when supply routes are compromised.	Summary Report, p. 69	
Clarity in roles and responsibilities in fodder provision decreases the risk of parallel effort, delays and supports timeliness of tasking and delivery.	Summary Report, p. 70	
	Western Queensland Floods Event Report, p. 39	
Improved guidance in key doctrine and establishment of clear roles and responsibilities for entities deploying aviation resources pre-season would strengthen communication,	Summary Report, p. 73	
improve coordination, and enhance operational efficiency.	Western Queensland Floods Event Report, p. 41	
Strengthening aviation capability nationally for an all-hazards approach would be beneficial to Queensland.	Summary Report, p. 78	
Queenslanders are resilient, but this review process has indicated this can be relative to where they live, and their interdependencies with infrastructure and systems.	Summary Report, p. 81	
Research shows connected communities are more resilient.	Summary Report, p. 81	
Local disaster management groups having clear understanding of the Bureau's role, responsibilities and capabilities could improve preparedness, manage expectations, support more effective local planning and decision making during events.	North Queensland Floods Event Report, p. 32	
Communities increasingly rely on telecommunications to remain connected and access disaster related information.	North Queensland Floods Event Report, p. 44	
	Tropical Cyclone Alfred Event Report, p. 59	

Communities and entities should plan for three days of self sufficiency, in line with advice already provided in the QRA's Get Ready Queensland program.	North Queensland Floods Event Report, p. 53
	Tropical Cyclone Alfred Event Report, p. 51
To help manage expectations and improve community understanding of flood mitigation efforts, councils are encouraged to regularly and clearly engage with its residents regarding planned and completed works programs.	Tropical Cyclone Alfred Event Report, p. 30
When preparing evacuation sub-plans local governments need to include clear triggers for the activation of shelter options, communication strategies informing the community of the risks, the requested courses of action, and shelter options available.	Tropical Cyclone Alfred Event Report, p. 47

Appendix C

Glossary of abbreviations

Term	Meaning
ABC	Australian Broadcasting Corporation
ARC	Australian Red Cross
AWS	
	Australian Warning System
Bureau	Bureau of Meteorology
CALD	Culturally and linguistically diverse
CASP	Crisis Appreciation and Strategic Planning (CASP) Guidebook
DDMG	District Disaster Management Group
DFSDSCS	Department of Families, Seniors, Disasbility Services and Child Safety
DM Guideline	Interim Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline 2024-25
DPI	Department of Primary Industries
DRA	Disaster Relief Australia
DRFA	Disaster Recovery Funding Arrangements
EAs	Emergency Alerts
EMS	Event Management System
ERWG	Emergency Relief Working Group
FWIN	Flood Warning Infrastructure Network
GWN	Government Wireless Network
IGA	Intergovernmental agreement, Bureau of Meteorology
IGEM	Inspector-General of Emergency Management
Interim SDMP	Interim State Disaster Management Plan 2024-25
LDCC	Local Disaster Coordination Centre
LDMG	Local Disaster Management Group
LGA	Local Government Area
NFWINP	National Flood Warning Infrastructure Network Program
NMS	National Messaging System
Office	Office of the Inspector-General of Emergency Management
PIWU	Queensland Police Service, Public Information and Warnings Unit
QDMA	Queensland Disaster Management Arrangements
QDMC	Queensland Disaster Management Committee
QFD	Queensland Fire Department
QPS	Queensland Police Service
QRA	Queensland Reconstruction Authority
QSDR	Queensland Strategy for Disaster Resilience
RFAs	Requests for Assistance

Inspector-General of **Emergency Management**

SDCC	State Disaster Coordination Centre
SES	State Emergency Service
SLS	Service Level Specification for Flood Forecasting and Warning Services, Bureau of Meteorology
SRRG	State Recovery and Resilience Group
Standard	Standard for Disaster Management in Queensland
TC	Tropical Cyclone
TMR	Department of Transport and Main Roads

Appendix D

Reference list

Legislation

Civil Aviation Safety Regulations 1998 (Cth)

Civil Aviation Safety Regulations 1998 (Cth)

Disaster Management Act 2003 (Qld)

Disaster Management Regulation 2014 (Qld)

Meteorology Act 1955 (Cth)

Public Safety Preservation Act 1986 (Qld)

Security of Critical Infrastructure Act 2018 (Cth)

Telecommunications Act 1997 (Cth)

Telecommunications (Data for Emergency Warning Systems) Instrument 2020 (Cth)

Telecommunications (Emergency Management Persons and Emergency Laws) Instrument 2024 (Cth)

Other materials

- Australian Broadcasting Corporation, 2025, ABC iView 2025, Landline: S2025 Western Queensland Flood Special, https://iview.abc.net.au/video/RF2404Q010S00
- Australian Climate Service, 2025, Australia's National Climate Risk Assessment, https://climateservice.maps.arcgis.com/sharing/rest/content/items/9d4850b2d64d47e28407c 0d681b0eeca/data
- Bureau of Meteorology, 2024, Bureau of Meteorology's Flood Warning Infrastructure Network (FWIN) Program, <a href="https://www.qld.gov.au/emergency/dealing-disasters/disaster-types/flood/for-councils-and-flood-practitioners/flood-warning-infrastructure-resources/bureau-of-meteorologys-flood-warning-infrastructure-network-fwin-program
- Bureau of Meteorology, 2024, Service Level Specification for Flood Forecasting and Warning Services for Queensland, https://www.bom.gov.au/qld/flood/brochures/QLD SLS current.pdf
- Bureau of Meteorology, Commonwealth Scientific and Industrial Research Organisation, 2024, State of the Climate Report, https://www.bom.gov.au/state-of-the-climate/
- Department of Agriculture and Fisheries, 2024, 8 March, DAF Disaster Management Plan 2024, <a href="https://www.publications.qld.gov.au/ckan-publications-attachments-prod/resources/7acd82cb-16af-4086-a022-d0063df1a843/daf-disaster-management-plan-2023-24.pdf?ETag=7f8b26e98ed43f75b4ba43fa5537c123
- Electrical Safety Office, 2020, Electrical Safety Code of Practice 2020, https://www.worksafe.qld.gov.au/ data/assets/pdf file/0019/18343/es-code-of-practice-works.pdf
- Emergency Management and Coordination Command, 2024, Interim Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline 2024-25, Queensland Police Service, https://www.disaster.qld.gov.au/ data/assets/pdf file/0032/359465/Interim-QPPRR-Guideline-2024-25.pdf
- Inspector-General of Emergency Management, 2021, Standard for Disaster Management in Queensland, https://www.igem.qld.gov.au/sites/default/files/2021-07/Standard%20for%20Disaster%20Management%20in%20Queensland%202.1.1.pdf
- National Emergency Management Agency, 2024, Crisis Appreciation Strategic Planning Guidebook 2024, https://www.homeaffairs.gov.au/emergency/files/casp-guidebook.pdf
- National Recovery and Resilience Agency, 2021, Public Information and Warnings Second Edition, Australian Institute for Disaster Resilience,

https://knowledge.aidr.org.au/media/9104/aidr_handbookcollection_publicinfoandwarnings_2_021.pdf

Office of the Inspector-General of Emergency Management, 2022-23, South East Queensland Rainfall and Flooding February to March 2022 Review, https://www.igem.qld.gov.au/sites/default/files/2024-

05/PROTECTED%20SEQ%20Rainfall%20and%20Flooding%20Reviewreduced 0.pdf

Office of the Inspector-General of Emergency Management, 2022-23, South East Queensland Rainfall and Flooding February to March 2022 Review, https://www.igem.qld.gov.au/sites/default/files/2024-05/PROTECTED%20SEQ%20Rainfall%20and%20Flooding%20Reviewreduced 0.pdf

- Office of the Inspector-General of Emergency Management, 2024-25 Severe Weather Season Review, https://www.igem.qld.gov.au/sites/default/files/2025-02/2023-24SevereWeatherSeasonReviewReport v1.0 FINAL OFFICIAL.pdf
- Queensland Disaster Management Committee, Interim State Disaster Management Plan 2025-25, https://www.disaster.qld.gov.au/ data/assets/pdf file/0031/528448/Interim-Queensland-State-Disaster-Management-Plan-2024-25.pdf
- Queensland Parliament, 2025, 30 July, Estimates State Development, Infrastructure and Planning, Industrial Relations, https://documents.parliament.qld.gov.au/com/SDIWC-1AF9/C20252026-4826/2025_07_30_EstimatesSDC.pdf, p 36
- Queensland Police Service, 2024, Queensland Warnings Manual, https://www.disaster.qld.gov.au/__data/assets/pdf_file/0035/549539/queensland-warnings-manual-v.1-101224.pdf
- Queensland Reconstruction Authority, 2025, Coordinated Fodder Support Package 2025, Western Queensland Trough, Coordinated Fodder Support Package 2025 Western Queensland Trough | Queensland Reconstruction Authority
- Queensland Reconstruction Authority, 2022, Emergency Response Fund FWIN Program (2021-22), https://www.qra.qld.gov.au/ERF/ERF-FWIN-program-2021-22
- Queensland Reconstruction Authority, 2024, Queensland Disaster Funding Guidelines, https://www.qra.qld.gov.au/sites/default/files/2024-12/WEB QDFG V3 December 2024.pdf
- Queensland Reconstruction Authority, 2025, Get Ready Queensland,

https://www.getready.qld.gov.au/sites/default/files/2022-

08/53022%20Get%20Ready%20QLD%20-

%20Protect%20Whats%20Most%20Important%208pp%209 PackAKit%20%28Council%20 Hub%29.pdf

- Queensland Reconstruction Authority, 2025, Queensland's Strategy for Disaster Resilience, https://www.qra.qld.gov.au/qsdr
- Queensland Reconstruction Authority, 2025, Watch for the Warnings, https://www.disaster.qld.gov.au/watch-for-the-warnings

Ulubasoglu, M., Pullabhotla, H., Tong, L., Nicholas, A., The hidden power of community: Unveiling social capital's role in Australia's disaster resilience, Deakin Business School for Australian Red Cross and Centre for Disaster Resilience and Recovery,

https://www.redcross.org.au/globalassets/cms/publications/2024-social-capital-report.pdf