

WHAT WE DO:

QRA is charged with managing and coordinating the Government's program of recovery and reconstruction works within disaster-affected communities, with a focus on working with our state and local government partners to deliver best practice administration of public reconstruction and resilience funds. QRA is also the state's lead agency responsible for disaster recovery and resilience policy, working collaboratively with agencies and stakeholders to improve risk reduction and disaster preparedness.

OUR VISION:

Stronger, safer, resilient **Oueensland communities.**

OUR PURPOSE:

Coordinate action to improve the resilience of Queensland communities and facilitate locally led disaster recovery.

DISASTER ASSISTANCE

December Quarter Update

The Shute Harbour Marine terminal was opened on December 15 by the Honourable Steven Miles and Senator Bridget McKenzie following a four-year reconstruction program. The completion of the \$63.5 million reconstruction project marks the end of a long journey to recovery for the Whitsunday Region after significant damage was sustained during Severe Tropical Cyclone Debbie in 2017.

Construction of the Proserpine Entertainment Centre is also nearing completion following the devastating impact of Severe Tropical Cyclone Debbie. The new state-of-the-art \$18.8 million centre includes capacity for 380 people at tiered seating and a further 500 at round tables for dining and cocktail functions which will enable the Proserpine Entertainment Centre to host world class events for the Whitsunday Region.

With the occurrence of flooding in west/southwest Queensland in late 2021, QRA has continued its support to the flood impacted region. Through careful planning and compliance with health advice, Regional Liaison Officers and Recovery Officers have maintained both in person and remote connections to councils and communities. In December, QRA's General Manager of Recovery Jo Killick was deployed to be based at Goondiwindi as Regional Recovery Coordinator to provide much needed support and assist with locally lead recovery planning.

The focus of the disaster assistance grants program in the December quarter has been to check the finalisation of projects completed up to 30 June 2021 and ensure those projects that have been delayed due to COVID can be delivered as soon as possible. These assessments are important as we shift our focus to working with councils on the compliance activities that facilitate the Queensland Audit Office review in January 2022 of the 2018–2019 event year reconstruction costs. This provides the state with the requisite governance and assurance to recover the maximum eligible costs for disaster impacted regions in accordance with the Commonwealth Disaster Recovery Funding Arrangements.

Disaster Assistance and Resilience Grants Program

Since establishment, QRA has administered a recovery and reconstruction program through the joint State Commonwealth Natural Disaster Relief and Recovery Arrangements (NDRRA) and Disaster Recovery Funding Arrangements (DRFA) worth more than \$16.5 billion. Works for 28 events from the 2019, 2020 and 2021 disaster seasons are currently in delivery with an estimated value in excess of approximately \$3.0 billion.

In addition to DRFA, QRA is currently administering 18 other State, Commonwealth and joint-funded grant programs with a capped value of \$170.5 million, focused on disaster risk reduction and resilience building.

Status of Active Grants Programs administered by QRA

+ + +	2019 Events	2020 Events	2021 Events
NUMBER OF EVENTS	12	5	11
\$3,040M Delivery Program	\$1,466M Program	\$919M Program	\$655M Program
Deadline for Delivery	30 June 2021	30 June 2022	30 June 2023
Time Elapsed	Remainder being delivered under EOT's	75%	21% 100.0%
% Completion	98% complete	52% complete	11% complete

RECOVERY

QRA works extensively on recovery planning with communities impacted by major disaster events, increasing capability and awareness through active participation and providing support.

Current Recovery Operations

Current activations

Central, Southern and Western Queensland Flooding

Between 10 November and 3 December 2021, large parts of Central, Southern and Western Queensland experienced heavy rainfall and flooding. There has been significant disruption to communities, including damage to private and public property, and the agriculture industry.

On 30 November, in the township of Inglewood approximately 800 people were evacuated from their homes, with people moving during the night as rain was falling.

On 9 December 2021, QRA General Manager – Recovery Jo Killick was appointed as the Regional Recovery Coordinator for the event, and will be based in Goondiwindi through to the end of February 2022 to coordinate recovery operations. This role facilitates recovery by working with impacted communities to understand their recovery needs and coordinate locally led recovery planning. This includes identifying suitable grant programs and advising on applications for funding to support recovery, resilience and preparedness for the next severe weather event.

QRA is also undertaking a range of activities to support recovery operations, in Balonne, Goondiwindi and Southern Downs Councils with the development of event-specific local recovery plans and on-the-ground engagement with impacted councils to providing strategic, technical, coordination, reporting and communication support.

Ex-Tropical Cyclone Seth

Subsequent to the end of the December quarter, intense rainfall and riverine flooding across the six local government areas (Bundaberg, Cherbourg, Fraser Coast, Gympie, North Burnett and South Burnett) between 7–10 January 2022, resulted in significant damage to commercial and residential properties, transport assets and the agriculture industry across the region. Road closures resulted in the isolation of a number of communities across the region and 400 properties lost power. Two lives have been lost and a third person is missing.

On 11 January 2022, the Queensland Premier appointed Mr Paul de Jersey, AC, CVO, QC State Recovery Coordinator for this event. Mr de Jersey will coordinate locally-led recovery planning and recovery operations, in consultation with local governments, state agencies and the Commonwealth .

Detailed reporting on the impact of Ex-Tropical Cyclone Seth and recovery activities underway will be provided in future QRA Updates.

Queensland Recovery Plan

In December, QRA released the updated Queensland Recovery Plan. The Recovery Plan takes an all-hazards approach to disasters. It guides disaster recovery in Queensland and enables better recovery outcomes for impacted communities. The <u>Queensland Recovery Plan</u> is available on the QRA Recovery Hub.

2021–22 Disaster season activations

	Season to date	Since last report
Events	2	2
LGAs activated	32	32
LGAs activated multiple events	4	4





Image (top): Goondiwindi Town Levee. (Below) Flooding in Yelarbon township.



National Recovery Agenda

The Australia-New Zealand Emergency Management Committee (ANZEMC) is a senior officials committee responsible for informing, influencing and advocating for national policies and capabilities that reduce disaster risk, minimise the potential for harm and uphold public trust and confidence in emergency management arrangements. Each Australian State and Territory is represented on ANZEMC as is a member from New Zealand and the Australian Local Government Association. ANZEMC has two sub committees:

- The Community Outcomes and Recovery Sub-Committee (CORS); and
- The Mitigation and Risk Sub-Committee (MARS).

Queensland Fire and Emergency Services represent Queensland on ANZEMC with QRA support. However, QRA is the Queensland lead for CORS.

Community Outcomes and Recovery Sub-Committee (CORS)

QRA is leading and contributing to key projects developed and delivered through the Community Outcomes and Recovery Sub-Committee (CORS).

Work continues on the Catastrophic Crisis Model Recovery Arrangements, Disaster Recovery Capability Strategy and the Functional Domain Reference Groups. A final draft of the National Recovery Needs Assessment Project has been completed and Queensland has the opportunity to use the draft Guidelines when undertaking recovery operations during the current severe weather season. The draft Disaster Recovery Capability Strategy is being broadly consulted on and there is a Queensland Workshop tentatively scheduled for January.

QRA has also contributed to the development of the revised National Recovery Framework which is scheduled for completion in June 2022.

National Recovery and Resilience Agency (NRRA) National Recovery Training Project

QRA is participating in, and contributing to NRRA's National Recovery Training Project. The intent of the project is to develop accredited training for recovery practitioners. This project has resulted in the development of new recovery training modules that will be delivered as a component of a new Advanced Diploma of Public Safety (Recovery Management) and a Diploma of Public Safety (Recovery Management).

Recovery Governance and Capability Development

Recovery practice is constantly evolving to meet the needs of disaster impacted communities and QRA recognises the importance of ensuring Disaster Management Stakeholders have the knowledge and skills required to support recovery operations.

QRA is focused on ensuring recovery is locally led, and supports local governments and Local Recovery Groups across Queensland to build their recovery capability through training workshops. These workshops focus on finalising recovery governance arrangements and developing recovery sub-plans. During the December quarter, a recovery workshop was undertaken with Toowoomba Regional Council.

QRA also assisted a number of local governments to develop COVID-19 event specific recovery plans using the Recovery Planning Methodology. Cairns Regional Council entered their plan into the National Economic Development Awards and was awarded highly commended for their plan. This is the first time an event-specific recovery plan has received an award.

QRA is delivering the District Recovery Project which is designed to understand recovery needs at the district level, and provide District Disaster Management Groups (DDMGs) with specific training based on those needs. The Mount Isa, Mareeba, Longreach and Bundaberg Disaster Districts have all participated in a District Recovery Workshop. Mount Isa is reviewing the District Recovery Sub-Plans developed as a result of their workshop. Mareeba, Longreach and Bundaberg are updating the recovery sections of their District Disaster Management Plans as a result of the workshops. Further workshops will be scheduled for 2022.

Monitoring and Evaluation

QRA's monitoring and evaluation capability (M&E) contributes to its strategic objective to produce evidence based data, analytics and evaluative materials that are useful to, and used by, communities and decision makers.

QRA is currently focused on monitoring the progress of the recovery activities identified in Queensland Bushfires Event Specific Recovery Plan. Understanding recovery progress in real time enables impacted local governments and Functional Recovery Groups to ensure their activities are meeting or are continuing to meet the needs of communities and identify any gaps that may have emerged as recovery activities progress.

Evaluation activities are underway to determine the, effectiveness, efficiency, and sustainability of the Disaster Recovery Funding Arrangements (DRFA) Funded programs implemented to support community recovery related to the Far North & Northern Queensland Monsoon (2019), Central Queensland Bushfires (2018) and Queensland Bushfires (2019).

PROGRAM SPOTLIGHT

WHITSUNDAY REGIONAL COUNCIL - SHUTE HARBOUR RESTORATION

North Queensland's reputation for world-class tourism facilities has had a major boost with the reopening of Whitsunday Regional Council's new Shute Harbour Marine Terminal following a \$63.5 million rebuild.

Shute Harbour in the Whitsunday Regional Council area was significantly damaged as a result of Severe Tropical Cyclone Debbie in late March 2017.

Intense driving rain, cyclonic winds and storm tide surges were so severe during Debbie, they destroyed almost everything at Shute Harbour, including the sea-wall, gangways, pontoons and the terminal building itself.

As a key transport hub and tourism facility for some 60,000 people per annum accessing the Whitsunday Islands, its restoration and revitalisation was critical to the socioeconomic resilience of the Whitsundays community.

The Australian and Queensland governments initially approved \$18.3 million under the jointly funded Natural Disaster Relief and Recovery Arrangements (NDRRA) to restore and improve Shute Harbour.

The challenging location of Shute Harbour within a fragile marine ecosystem, combined with the extensive damage to the sea wall, buildings, pontoons and gangways, meant more complex restoration works were required than initially anticipated to restore the facility to its former condition.

This required additional funding and time.

QRA's dedicated team worked tirelessly providing technical advice and expertise to ensure this vital project stayed on track throughout the long months and years of the reconstruction, secured extensions of time for the project from the Australian Government, extending the allowable time limit from 2019 until 31 December 2021 to allow for the complex nature of the project, and approved final budget for costs under the NDRRA of approximately \$60 million with Council also contributing to the project.

The Shute Harbour reconstruction is a fine example of all three levels of government working collaboratively to successfully deliver a project that brings major benefits to the community.











Images above: TC Debbie damage - 2017.

Images above: Works underway at Shute Harbour – February 2020.

Not only has the project seen the complete rebuild of the terminal facility, the finger wharves and the ferry pontoons, a \$1.8 million Betterment project was also incorporated to raise the height of the seawall by up to a metre, helping to protect the new facility against future cyclonic events.

This project has driven employment and economic recovery in the Whitsunday region and is the final piece in the community's recovery from Debbie.

Major works were completed by 30 June 2021, with the finishing touches completed ahead of its re-opening in December 2021.

With the completion of the Shute Harbour Marine Terminal and the opening of the borders following the COVID restrictions, Whitsunday Regional Council is ready and equipped to embark on an exciting new future.







Images from top: QRA officers, with Mayor Wilcox, Senator McKenzie and Deputy Premier Miles at the completed Shute Harbour marine facility, 15 December 2021. Below: The completed facility.

RESILIENCE

QRA is responsible for coordinating the development and implementation of whole-of-government policies for managing flood risks and improving the resilience of communities, and facilitating mitigation against potential disasters.

Resilience grant programs



Queensland Disaster Resilience Fund (QDRF) and Prepared Communities Fund (PCF)

For 2018–19, \$10.65 million was allocated to 74 projects to strengthen the resilience of Queensland communities, including funding under the fully State-funded QDRF (\$9.5M, 65 projects) and the joint State -Commonwealth funded PCF (\$1.15M, 10 projects). To date, 70 projects are complete and 4 are on track.

Queensland Resilience and Risk Reduction Fund (QRRRF)

Queensland's commitments under the National Partnership on Disaster Risk Reduction are being delivered via the \$13.1 million QRRRF. The fund consists of \$8.3 million in State Government funds and \$4.8 million from the Australian Government.

The 2019–20 QRRRF allocated funds to 67 projects across 53 recipients. A list and interactive map of the successful projects is available on the QRA website. To date, 21 projects are complete, 42 are in progress and 5 are yet to commence

The 2020–21 QRRRF funding round closed for expressions of interest on 7 April 2021 with \$19.1 million available for allocation. As at 30 November, across the three distinct funding programs compiling the QRRRF 82 projects were funded. Two projects are complete, 22 are on track and 58 are yet to commence.

Recovery and Resilience Grants

\$12 million has been made available from the Commonwealth's National Drought and North Queensland Flood Response and Recovery Agency to support locally-led recovery and resilience activities in the 14 local government areas most impacted by the 2019 North and Far North Queensland Monsoon Trough. One project has been completed and all remaining projects are currently in progress.

National Flood Mitigation Infrastructure Program

The National Flood Mitigation Infrastructure Program is funded through the Australian Government's Emergency Response Fund.

Under round one of the program, \$50 million was available nationally. On behalf of Queensland, QRA applied for 20 projects under the Fund, requesting over \$127 million. Queensland was approved just under \$10 million across three projects for this round.

Round two of the program is now open. A further \$50 million is available nationally, with applications closing on 4 February 2022. QRA will again submit applications on behalf of Queensland, and is working with state agencies and local governments to identify potential applications.

North Queensland Natural Disasters Mitigation Program (NQNDMP)

The \$10 million North Queensland Natural Disaster Mitigation Program (NQNDMP) is a fully state funded grant program, announced as part of the 2021–22 state budget. The NQNDMP aims to help reduce insurance premiums for Queensland families and businesses in high-risk and cyclone-prone areas. QRA will administer the program and is currently developing the program guidelines.

Eligible councils have until 18 February 2022 to submit their expressions of interest, with shortlisted applicants to be invited to submit a more detailed application.

Betterment

On 30 September 2021, the Australian and Queensland Governments jointly announced the establishment of a \$20 million betterment program, applying to all disaster events in 2020–21.

Previously only available following particularly large events as part of a Category D package, this Betterment fund is a national first to be funded under the DRFA efficiencies framework, and be available to all communities impacted by all disaster events in a given year.

Resilience projects and activities



Queensland Strategy for Disaster Resilience

In line with international best practice, the *Queensland Strategy for Disaster Resilience* seeks to incorporate the considerable knowledge and experience that exists across government and non-government organisations to deliver a comprehensive and coordinated all-hazards approach to building disaster resilience throughout Queensland.

A key component of the strategy is harnessing local knowledge that supports actions to create stronger, safer, healthier and more secure communities.

The strategy capitalises on the good work already being delivered by our state agencies, local governments and communities and provides a cohesive approach to building resilience throughout the state. www.gra.qld.gov.au/QSDR

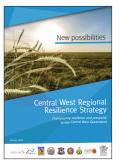
Resilient Queensland 2018–2021: Delivering the Queensland Strategy for Disaster Resilience

Resilient Queensland 2018–2021: Delivering the Queensland Strategy for Disaster Resilience 2018–2021 (Resilient Queensland) is a blueprint for use across government, the community, not-for-profit sector, business and industry that sees regions across Queensland co-develop individually tailored regional resilience plans.

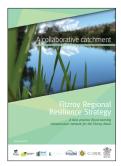
Activities delivered under Resilient Queensland are strengthening our communication networks, encouraging shared knowledge, identifying gaps and opportunities and supporting greater coordination of disaster resilience activities across all levels of government, private and community sectors across Queensland.

Resilient Queensland in Action, released in February 2020, is the 18-month progress report highlighting how Queensland is delivering on the objectives of the Queensland Strategy for Disaster Resilience (QSDR). It showcases achievements including case studies and initiatives by our state agencies, local governments and communities, incorporating climate risk and delivering a comprehensive, all-hazards approach to building disaster resilience. www.gra.gld.gov.au/resilient-queensland











Regional Resilience Strategies

A key outcome of Resilient Queensland is the development of regional resilience strategies to support the coordination and prioritisation of future resilience building and mitigation projects across Oueensland.

By June 2022, every local government in Queensland will be part of a regional resilience strategy that clearly identifies and prioritises actions to strengthen disaster resilience over time.

This locally-led, regionally-coordinated and state-facilitated approach is strengthening relationships between local governments and state agencies to support the development of resilience building strategies that can be better coordinated and aligned to future funding opportunities, providing better value for money and a more disaster resilient Queensland.

Under phase 1 of the project, regional resilience strategies have been delivered for the Central West, Mary, Fitzroy and Burnett Catchment regions.

Phase 2 of the statewide rollout of regional resilience strategies commenced early October 2020 and the project team completed inception visits to all state regions by 31 December 2020. Strategy development is well underway, with two endorsed, an additional four drafted and being prepared for regional stakeholder review, and the remaining five are on track for finalisation by June 2022. www.qra.qld.gov.au/resilient-queensland/regional-resilience-strategies

we continually improve how we prepare, respond and recover from disasters

Brisbane River Strategic Floodplain Management Plan (SFMP)

- QRA continues to coordinate the delivery of the SFMP implementation program, with over 80% of the actions completed or in progress.
- This month the QRA project team completed an action on pre-planning the collection of post-event data, including requirements, specifications, approaches, and the development and improvement of QRA's and QFES's damage assessment templates.
- IGEM has undertaken and completed research in relation to the evaluation of community awareness and resilience activities, and sharing the learnings to inform continual improvement. This is now before the SFMP Management Group for consideration and identification of practical implementation actions.









 ${\it Images: Examples \ of \ different \ classifications \ used \ by \ QRA.}$

we continually improve how we prepare, respond and recover from disasters

North and Far North Queensland Monsoon Trough Cat D - Flood Mapping and Flood Warning Programs

- The \$1 million Burdekin and Haughton Catchment Resilience Strategy Project will develop locally-led
 and regionally-coordinated resilience solutions to address recent and emerging disaster risks for
 councils in the catchment area including Townsville City Council. As at 30 June, this project is now
 complete.
- The \$8 million Flood Warning Infrastructure Network Project has commenced delivery of assets across the three areas of operations (AO), which are Townsville and surrounds, Far North and North West. Completion of works is on track for 30 June 2022.
- The Townsville Recalibrated Flood Modelling and Mapping Project, supporting Townsville City Council to update and recalibrate flood modelling and mapping across the council area including the Ross River, is underway.

Royal Commission into National Natural Disaster Arrangements (RCNDA)

- The Royal Commission's final report was released in late October 2020. It contains 80
 recommendations across 20 themes focussing on improvements to national preparedness,
 mitigation, response and recovery arrangements, including clarification of roles and responsibilities
 of all levels of government, warning systems and community education, and improvements to
 firefighting capabilities and resource sharing.
- QRA continues to work towards implementing the 12 recommendations it is leading. Three of these recommendations have already been delivered.
- QRA continues to work with its partners including the Federal Government to deliver on the remaining recommendations.



- On 13 March 2020, the Council of Australian Governments (COAG) tasked Emergency Management Australia (EMA) to lead a review of the DRFA in consultation with States and Territories.
- Following stakeholder consultation, EMA identified the following key areas for review:
 - national comparison of state and territory DRFA assistance measures;
 - streamlining the Category C activation process;
 - a series of pre-agreed ('off-the-shelf') packages, and
 - new national guidance on essential public asset restoration and betterment.
- On 22 May 2020, at the Ministerial Emergency Management (MEM) Intersessional Meeting, all jurisdictions endorsed a review of the Disaster Recovery Funding Arrangements (DRFA).
- QRA is leading reform negotiations on behalf of Queensland Government agencies.
- Key progress on each of the reform measures includes:
 - National comparison of state and territory DRFA assistance measures The Commonwealth completed its audit of existing recovery measures offered by jurisdictions.
 - Streamlined Category C activation process An updated Category C activation process, which
 removes the need for states to meet the strict criteria previously applied, is in place for the
 2020–21 disaster season.
 - Pre-agreed ('off-the-shelf') packages Jurisdictions are working on 'off-the-shelf' Category C packages to enable fast and efficient delivery of recovery measures, with Queensland leading the development of the Betterment package in consultation with ACT.
 - Review of assurance arrangements for the DRFA QRA is continuing to participate in the review of assurance arrangements.



PROGRAM SPOTLIGHT

RECONSTRUCTION WORKS PROGRESS ON TAMBORINE MOUNTAIN ROAD

Reconstruction works to repair significant damage on Tamborine Mountain Road will continue into the new year.

Transport and Main Roads (TMR) is undertaking rock anchoring, permanent rock catch fencing and rehabilitation works to make the Gold Coast hinterland road safe, following a major landslip after heavy rainfall in December 2020.

Following the completion of emergency works, in July 2021 reconstruction works commenced on Tamborine Mountain Road.

The reconstruction project is challenging, with most work having to be completed by workers hanging on ropes secured to the rock face above the road.

Due to the risk of significant damage or injury posed by continued instability and rock slippages at the site, the road will continue to be closed throughout the remainder

of the reconstruction works. Further safety and geotechnical assessments will be required early next year to determine a date for the reopening.

A combination of treatments is being used to restore safety and stabilise the steep terrain. Crews are anchoring larger rocks to the rock face with approximately 250 bolts and installing more than 3000m² of mesh to prevent other loose material from falling.

Upcoming works include installing a large catch fence on the upslope to protect the road and road users from falling rock and debris. This fence will also provide a safe environment for road workers during construction.

Eligible reconstruction works are jointly funded by the Commonwealth and Queensland Governments under the Disaster Recovery Funding Arrangements (DRFA).



Image: Tamborine Mountain Road – mesh works in progress.



Image: Tamborine Mountain Road – mesh works in progress.

GET READY QUEENSLAND (GRQ)

GRQ is a year-round, community resilience program that helps Queenslanders prepare for disasters. The program integrates a state-wide research driven awareness campaign led by QRA, alongside a grass roots grants program providing \$2M across Queensland's 77 councils and the Weipa Town Authority to deliver locally-led disaster preparedness initiatives.

Get Ready Queensland social media

With the 2021–22 disaster season well upon us, the Get Ready Queensland team is continuing with preparedness and awareness messages on Get Ready Queensland social media.

In December, Get Ready Queensland launched new 3D animations that place viewers at the centre of Queensland's most frequent natural disasters – severe storms, cyclones and flooding – highlighting the risks of extreme weather. These animations continue to outperform all other Get Ready posts on social media, with the cyclone video being the most viewed and liked.



The cyclone video was the highest performing video on social media in December. The video shows viewers the impacts of each category of a cyclone. The videos are presented by experts from the Bureau of Meteorology.

2021 Get Ready Queensland advertising campaign research

The annual Get Ready Queensland advertising campaign concluded in mid-November 2021. Agency 'Marketing and Communications Research' (MCR) has been contracted to undertake independent analysis of the advertising campaign. The research will look at campaign message effectiveness, recall of campaign material and success of channels used.

Results are expected to be presented to the Get Ready Queensland Team in early February 2022. The report will be used to tailor messages and channels for the 2022 campaign. Planning for the 2022 campaign will begin in March-April.

2022 Get Ready Queensland Schools competition

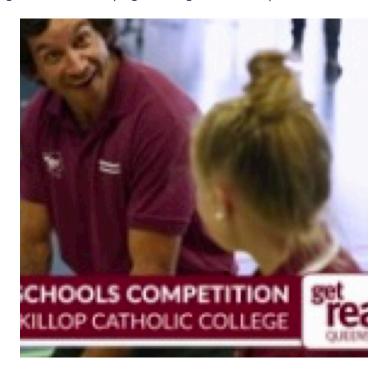
For a third year, the Get Ready Queensland Schools Competition will be delivered statewide. The competition is an initiative to educate young Queenslanders about their local weather risks and empower them to help their household and community be better prepared for future disasters.

All competition activities align to the Australian Curriculum for lower and upper primary.

Following feedback from teachers in 2021, entries for the 2022 Get Ready Queensland Schools Competition will open during term 2 and close at the end of term 3 to allow teachers and students ample time to complete activities.

The social media posts about the Get Ready Queensland school competition winners (right) were the next highest performing posts.

Get Ready Queensland Ambassador Johnathan Thurston joined the team at Mary MacKillop Catholic College in Toowoomba in November. The school was the random draw winner of the 2021 Get Ready Queensland Schools Competition.



PROGRAM SPOTLIGHT

CUNNINGHAMS GAP SURVEY WORK WINS TECHNICAL EXCELLENCE AWARD

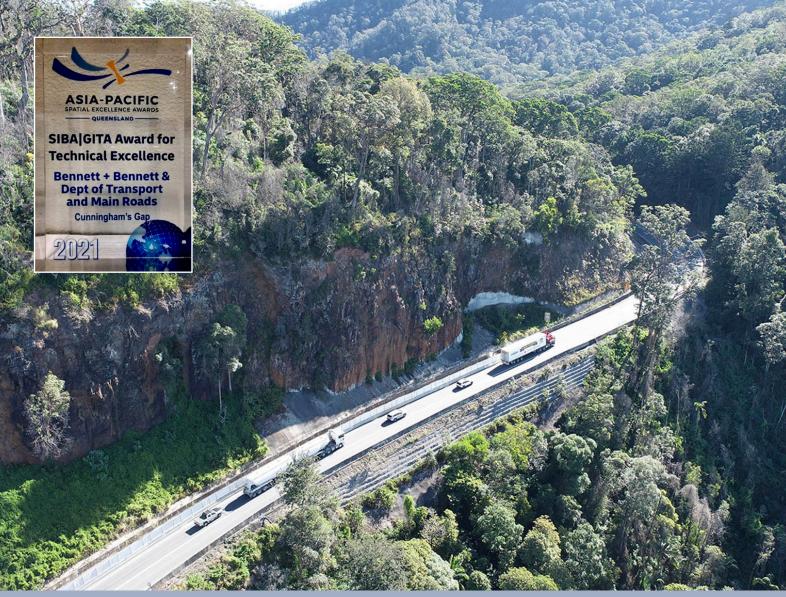


Image: Cunninghams Gap damage site. Inset: Project award for survey work on the Cunninghams Gap reconstruction project.

Topographical survey work on the Cunninghams Gap reconstruction project has been recognised by industry for its innovative approach, recently receiving the 2021 Asia-Pacific Spatial Excellence Awards' category prize for Technical Excellence (Queensland).

Transport and Main Roads (TMR) partnered with surveying consultant Bennett + Bennett to construct and deliver a ground and feature model for Cunninghams Gap, along a two-kilometre stretch of the Cunningham Highway over the Great Dividing Range, between Warwick and Brisbane.

Detailed geospatial information was required to assess rockfall risk and inform value-for-money treatments to repair slope damage caused by major bushfires in the area in late 2019.

Previous surveys of this nature involved surveyors using rope access to scale the embankments. The survey methodology involved using remote sensors to minimise the need for people to access the steep cliffs, roadways and rockfall zones, and minimise disruption to traffic.

Technologies used to measure the site with greater detail and clarity included Mobile Laser Scanning (MLS), Terrestrial Laser Scanning (TLS), Drone Aerial Laser Scanning (DALS) and Airborne Photogrammetry. The survey work was also informed by canopy penetration lessons learned by the team from previous surveys undertaken on Tamborine Mountain.

The results were consolidated to create a single, concise model of the terrain, which enabled informed decision-making during the design process and reduces risk during construction on this complex project.

The Technical Excellence Award recognises surveying and spatial projects that apply existing technology and methodologies to an exceptionally high technical standard, overcoming significant technical challenges and delivering outstanding results.

Eligible reconstruction works are jointly funded by the Commonwealth and Queensland Governments under the Disaster Recovery Funding Arrangements (DRFA).