

Monthly Report

April 2018

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Disaster Assistance

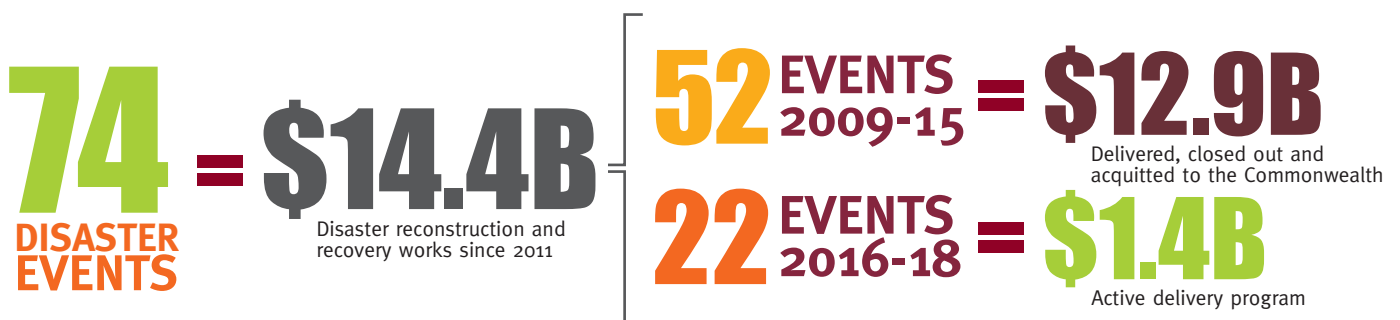
QRA has responsibility to administer Natural Disaster Relief and Recovery Arrangements (NDRRA) measures in Queensland, coordinating the Government’s program of infrastructure renewal and recovery within disaster-affected communities.

Since its establishment in February 2011, QRA has managed and coordinated \$14.4 billion of disaster reconstruction and recovery works for 74 disaster events activated for NDRRA relief measures.

The list of activated disaster events is found on www.disaster.qld.gov.au.

Of the program, \$12.9 billion for 52 events from the 2009-10, 2011, 2012, 2013, 2014 and 2015 events are complete, having been delivered, closed out and acquitted to the Commonwealth in audited claims.

Works worth \$1.4 billion for the remaining 22 events from the 2016 to 2018 event periods are currently in the active delivery phase (**Delivery Program**).

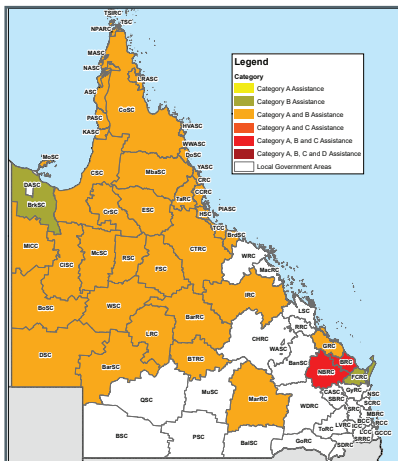


25 COUNCILS ACTIVATED FOR relief measures

3 NEWLY DECLARED DISASTER EVENTS in MARCH 2018

The figures below show the LGAs activated as at 31 March 2018 for NDRRA relief measures for the 2016 to 2018 event periods that are in the Delivery Program.

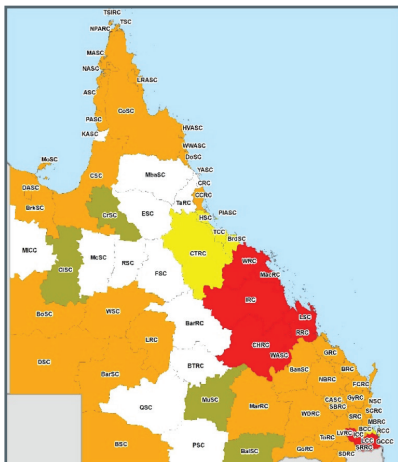
During March, 25 councils were activated for relief measures under NDRRA across three newly declared disaster events.



2018 Events – \$373 million NDRRA program

(Works to be delivered by 30 June 2020, with acquittal by March 2021)

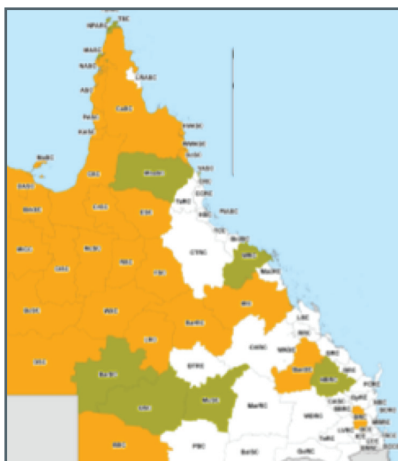
- Severe Tropical Cyclone Nora and Associated Flooding, 24-29 March 2018 (**new activation**)
- North Queensland Flooding, 6-10 March 2018 (**new activation**)
- North and North West Queensland Low and Associated Rainfall and Flooding, 24 Feb – 8 Mar 2018 (**new activation**)
- Central Queensland Storm, 20 February 2018
- Cape York Queensland Trough, 26 January – 2 February 2018
- Central Coast Queensland Severe Weather, 16 – 19 October 2017



2017 Events – \$822 million NDRRA program

(Works to be delivered by 30 June 2019, with acquittal by March 2020)

- Far North Queensland Trough, 21-28 March 2017
- Far North Queensland Trough, 3-10 February 2017
- Severe Tropical Cyclone Debbie, associated rainfall & flooding, 28 March-6 April 2017
- Gulf Tropical Low, 15-24 February 2017
- Far North Queensland Low, 8-11 January 2017
- Western Queensland Flooding, 13-20 September 2016
- Central Queensland Severe Weather, 15-20 July 2016



2016 Events – \$240 million NDRRA program

(Works to be delivered by 30 June 2018, with acquittal by March 2019)

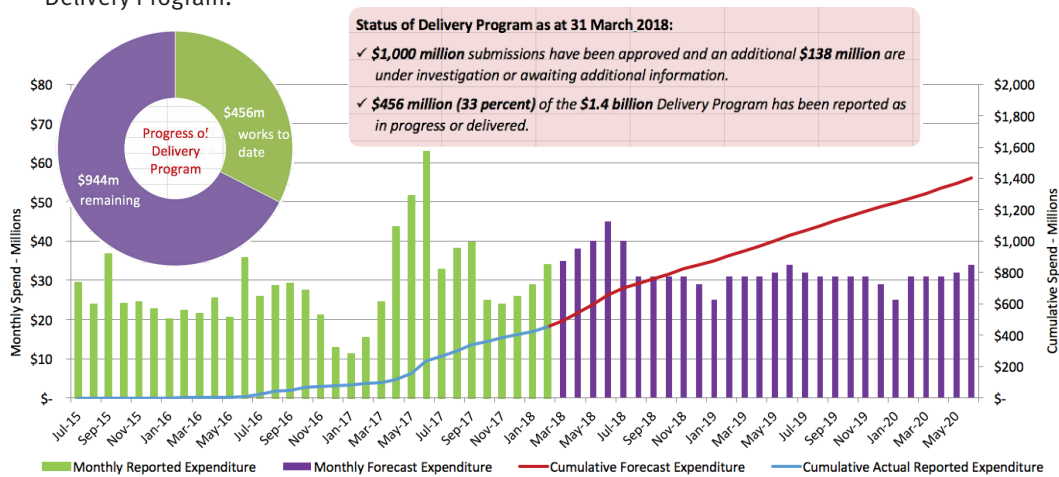
- Central Western Queensland Flooding, 13-19 June 2016
- Far North Queensland Upper Level Trough, 21-23 May 2016
- South West Queensland Floods, 7-9 May 2016
- Far North and North West Queensland Tropical Low, 14-18 March 2016
- Western Queensland Trough, 7-11 March 2016
- Central Coast Surface Trough, 4-8 February 2016
- Central Western Queensland Heavy Rainfall & Flooding, 2-4 February 2016
- Gulf of Carpentaria Monsoon Trough – 20-31 December 2015
- Fernvale Severe Storm, 27 October 2015.

NDRRA Delivery Program status



The **Delivery Program** comprises \$1.4 billion of works for 22 events across the 2016, 2017 and 2018 Events.

The graph below shows the actual reported and forecast monthly remaining expenditure for all NDRRA works since 1 July 2015, and estimated total costs remaining to complete the Delivery Program.



The status of the Delivery Program by event year is as follows:

2016 Events

All submissions for the 2016 events have been pre-approved and works are required to be complete by 30 June 2018 in order to be eligible under NDRRA.

QRA is monitoring and assisting councils and state agencies with progressing their program of 2016 event works through delivery.

2017 Events

Across the 2017 disaster season, 62 councils were activated for NDRRA assistance from seven events.

QRA is currently focused on submission approvals in order to progress the reconstruction program into delivery as soon as possible. Delivery agents have until 30 June 2019 to deliver eligible NDRRA works.

2018 Events

Across the 2018 disaster season to date, 46 councils have been activated across six disaster events, including 25 councils activated for three newly declared disaster events in March 2018.

QRA is currently assisting with activation requests and damage assessments in relation to the 2018 events, as required.

NDRRA Acquittal Program status



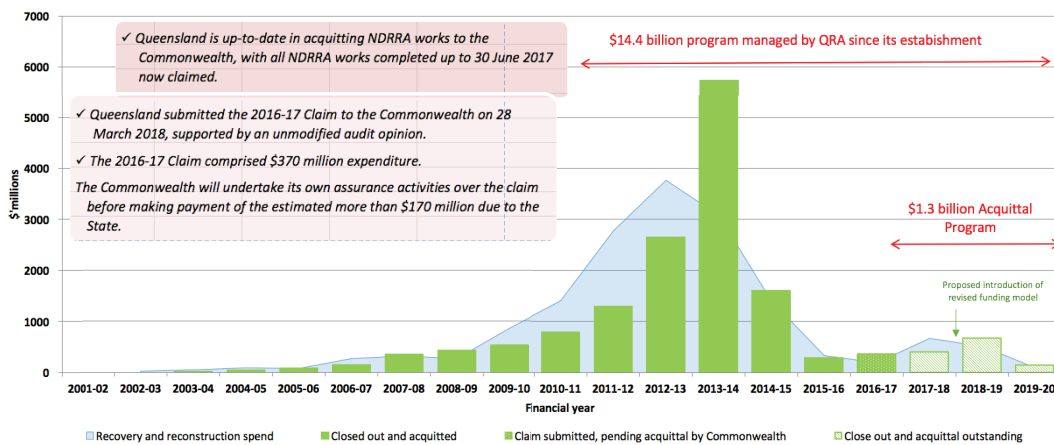
The **Acquittal Program** comprises \$1.3 billion of works that is yet to be acquitted in claims to the Commonwealth, across the 22 events from the 2016 to 2018 Events in the Delivery Program and a small number of projects from the 2015 event period that received extensions of time for delivery.

On 23 March 2018, QRA submitted the State’s annual NDRRA claim to the Commonwealth for works completed in the year to 30 June 2017. The claim included final works from the 2015 events and components of the 2016 and 2017 event works completed by 30 June 2017.

The claim, accompanied by an unqualified audit opinion, comprised \$370 million of State Expenditure and will result in more than \$170 million reimbursement when accepted and acquitted by the Commonwealth.

The Commonwealth will undertake its own assurance activities over the claim before releasing payment and QRA is actively engaging with the Commonwealth to progress the review in order to expedite the acquittal of, and payment due on the claim.

The following graph shows the historical and projected acquittal profile for Queensland as per Commonwealth Claims submitted for the 2001-02 to 2016-17 financial years and preliminarily expected to be submitted for 2017-18 to 2019-20 in order to finalise the Acquittal Program.



Additional NDRRA assistance measures – 2017 Events

The State Government in conjunction with the Commonwealth has activated a range of Category C and Category D relief measures to alleviate distress for communities, businesses, industries and the environment impacted by Severe Tropical Cyclone (STC) Debbie.

Category C Community Recovery Fund (\$14.9 million)

- Fund to support initiatives and projects over a two year period to restore social networks and build community resilience and capacity for the future in the Gold Coast, Isaac, Logan City, Mackay, Rockhampton, Scenic Rim and Whitsunday council areas.
- The Queensland Government Department of Communities, Disability Services and Seniors and Queensland Health is delivering three support programs to individuals, and community mental health and community development programs, with detailed status reports provided on a quarterly basis.

Category D Exceptional Disaster Measures (\$96.3 million)

Package	Purpose	Status
Local Council Package (\$17.3 million)	<p>Infrastructure projects to generate employment, boost the local economy and drive community resilience in key impact areas:</p> <ul style="list-style-type: none"> • Shute Harbour Marina (\$15.2 million) - demolish and replace the existing jetty, rebuild the terminal building, repair an existing seawall, and replace ancillary infrastructure • Airlie Beach repairs, Whitsundays (\$850k) – for repairs 	<ul style="list-style-type: none"> • Whitsunday Regional Council are in the process of engaging a design consultant for Shute Harbour. Concept design was completed in March. Demolition works on the Lloyd Roberts jetty and terminal building will commence in April 2018 (delayed due to TC Iris). Functional design brief is nearing completion. • Repairs are underway to Airlie Beach foreshore parklands with insurance covering a portion of the cost. Whitsunday Regional Council are in the process of determining the eligible NDRRA Category D component.
Resilient Infrastructure (Betterment) (\$41.9 million)	<ul style="list-style-type: none"> • To restore or replace essential public assets to a more disaster resilient standard. • The normal cost of restoring or replacing the asset to its pre-disaster standard is funded under Category B NDRRA and the incremental cost to 'better' the asset to a more disaster-resilient standard is funded by a capped allocation from the Betterment fund and Council contributions. 	<ul style="list-style-type: none"> • \$1.9 million has been pre-approved by the Commonwealth to cover the betterment component on the Shute Harbour Marina seawall • Expressions of Interest (EOI) were received from eligible councils activated for Category B (REPA) seeking \$114 million • Of this, over 100 submissions have been received from 22 Councils, with 57 submissions worth \$24 million approved to date and the remaining submissions under assessment.
Environmental Recovery Package (\$35 million)	<ul style="list-style-type: none"> • To ensure the recovery of impacted environmental areas, including the clean-up of beaches, recreational parks, rivers and waterways • \$35 million of the Environmental Recovery Package across five areas: <ul style="list-style-type: none"> A. Coastal B. Environmental C. Riparian D. Mapping E. Water Courses 	<p>A & B (Coastal, Environmental) – \$20 million</p> <ul style="list-style-type: none"> • EOIs were received from 14 of 37 eligible Councils seeking \$31.5 million. Projects were shortlisted and Councils requested to submit detailed applications. • 43 submissions worth more than \$19 million has been approved to date across 15 Councils. <p>C, D & E (Riparian, Mapping, Water Courses) – \$15 million</p> <ul style="list-style-type: none"> • Following receipt of EOIs from seven Natural Resource Management (NRM) bodies, DES has allocated all funding under a two stage process across November and December 2017.
Economic Recovery Package (\$2.1 million)	<ul style="list-style-type: none"> • To support recovery of industry and businesses in and around impacted areas that experienced significant disruption and damage 	<ul style="list-style-type: none"> • Department of Agriculture & Fisheries has Industry Recovery Officers (IRO) in impacted areas across five primary industries including nursery, grazing and cropping, horticulture, sugarcane and dairy. • Rural financial counselling services are delivering support on the ground and IROs have been assisting primary producers with Category C Recovery Grant applications to QRIDA. Agronomic advice is being provided to farmers on a needs basis.

Additional State non-NDRRA assistance measures – 2017 Events

- The state has committed to fund the full \$110 million of additional assistance measures that it would have funded under its original Category D proposal to the Commonwealth. Of this, the State will fund an additional \$62 million of recovery measures in addition to its \$48 million (50 percent) contribution to the \$96 million NDRRA Category D packages approved by the Commonwealth.
- To date, the State has announced funding of \$2.65 million towards the revitalisation of the Airlie Beach Foreshore. Additional funding is being provided through the state's Building our Regions program (\$2.83 million) and Category D (\$850,000).

Natural Disaster Funding reforms

QRA is continuing to trial and participate in consultation with the Commonwealth and other jurisdictions in relation to the Commonwealth's proposed reforms to natural disaster funding arrangements.

The Commonwealth is investigating a model to provide natural disaster recovery funding based on upfront damage assessments and estimated reconstruction costs.

Should funding reforms be introduced as envisaged from 1 July 2018, the state will administer and submit claims under both the existing NDRRA Determination and also under the revised arrangements for a two year period (2018-19 and 2019-20) whilst the existing model is phased out.



Artist impression of Airlie Beach Foreshore Project (courtesy Whitsunday Regional Council)

Recovery, resilience and mitigation activities

QRA is leading disaster recovery, resilience and mitigation policy in Queensland. A summary of recent progress is set out below:

Activity	Purpose	Status
Recovery Capability Development	<p>Recovery from Severe Tropical Cyclone Debbie and IGEM's 2017 Disaster Management Plan Assessment Report highlighted the varying levels of recovery capability across local governments.</p> <p>The Recovery Capability Development Project aims to address gaps in recovery capability through a series of training workshops and exercises.</p>	<ul style="list-style-type: none"> The Recovery Capability Development project is being delivered in three stages: <ol style="list-style-type: none"> 1. Initial Engagement 2. Training and Exercise Package Development 3. Training and Exercise Delivery (complete by 1 June 2018) The project is being developed and delivered collaboratively with state government and local recovery partners. Phase 1 of the project has been completed for all councils, with the exception of the Indigenous local governments recently impacted by STC Nora. Planning for engagement with these councils is underway. Current engagement with disaster impacted local governments by the SRC and the Recovery Team is providing an opportunity to deliver recovery capability development training, particularly recovery planning. To date, this has occurred in Hinchinbrook and Cassowary Coast.
Burnett Catchment Flood Resilience Strategy (pilot project)	<p>The Burnett Catchment Flood Resilience Strategy is a pilot project to facilitate delivery of improved flood resilience on a catchment scale, and will support LGAs in developing their own flood risk management strategies and resilience plans. The purpose of the pilot is to test and evaluate the relevant methodologies for potential State-wide application.</p>	<ul style="list-style-type: none"> The project has the support of the Wide Bay Burnett Regional Organisation of Councils (WBBROC), who act as the Steering Committee for the project. Formal endorsement of the project was provided by the committee on 1 March 2018. Several risk identification and resilience workshops with local councils and a range of other stakeholders were successfully held in Bundaberg and Biggenden between October 2017 and February 2018. The project is on track to be delivered by mid-2018. An end of quarter Advice Note will be provided out of session to WBBROC to provide an update on progress during 2018 and to communicate emerging directions for the draft Strategy and future implementation arrangements.

<p>Natural Disaster Resilience Program (NDRP)</p>	<p>The Natural Disaster Resilience Program (NDRP) is a competitive grants and subsidies program administered in Queensland by QRA, and jointly funded by the Australian and State Governments under the National Partnership Agreement (NPA) on Natural Disaster Resilience.</p> <p>The objective of the NDRP is to enhance Queensland communities' resilience to natural disasters, and seeks to strengthen community resilience to natural disasters, consistent with the Queensland State Natural Hazard Risk Assessment 2017 and the priority outcomes of the National Strategy for Disaster Resilience (NSDR).</p>	<ul style="list-style-type: none"> • Extension of the NPA on Natural Disaster Resilience occurred in February 2018, and the State's NDRP Implementation Plan approved by the Commonwealth on 4 April 2018. • The 2017-18 NDRP was opened for funding applications on 4 April 2018. Total funding available is \$12 million and the applicant is expected to financially contribute to the project. • NDRP funding applications close on 27 April 2018.
<p>Resilient Queensland 2018-2021</p> <p>Delivering the Queensland Strategy for Disaster Resilience</p>	<p>The Queensland Strategy for Disaster Resilience was released in July 2017 and provides an overarching framework to empower Queenslanders to factor in resilience measures and activities as they anticipate, respond and adapt to changing circumstances.</p>	<ul style="list-style-type: none"> • Resilient Queensland, Delivering the Queensland Strategy for Disaster Resilience 2018-2021 is currently being finalised for release.
<p>Brisbane River Catchment Flood Studies</p>	<p>The Queensland Government, through QRA and partner agencies, and local councils (Brisbane, Ipswich, Somerset and Lockyer Valley) are working together on a long-term plan to manage the impact of future floods and enhance community safety and resilience in the Brisbane River floodplain.</p> <p>The project includes development of a Flood Study followed by a Strategic Floodplain Management Plan (SFMP) that will guide a coordinated approach to planning and response activities to manage flood across the floodplain.</p>	<ul style="list-style-type: none"> • The Flood Study is complete and available to the public following its launch on 5 May 2017. • The Flood Study supports the development of a draft SFMP, which is underway and scheduled for completion in the latter half of 2018. • A range of regional scale opportunities are being investigated as part of the SFMP including structural mitigation options, disaster management, land use planning, community awareness and resilience, building controls and integrated catchment management. • The Cooperative Research Centre for Water Sensitive Cities (CRCWSC) has been engaged to review current practice and develop guidance material for property specific flood resilient design. • Upgrades are underway to the waterRIDE™ software system to provide a standard version of the system containing consistent Brisbane River flood data to be used by the four councils within the Brisbane River catchment area. • Detailed Local Floodplain Management Plans will commence following the completion of the SFMP.

<p>Flood Warning Gauge Network Program</p>	<p>QRA continues to assist the Bureau of Meteorology (Bureau) to ensure the best available information is available for providing flood warnings and forecasts.</p>	<ul style="list-style-type: none"> • All Stage 1 and Stage 2 Flood Warning Gauge Network Investment Plans have been finalised. In total 44 Investment Plans have been issued and 62 local councils identified in a state-wide review as requiring more detailed review of flood warning infrastructure. • The Brisbane catchment audit has now been completed by the QRA and has been issued. The Queensland (rest of state) gauge audit report has been received in draft from the Bureau. QRA has provided feedback and is awaiting the final report back from the Bureau. • QRA is reviewing the status of the Network Investment Plans with councils with regards to implementation of recommendations.
<p>North Stradbroke Island Bushfire Management Plan</p>	<p>The QRA and Quandamooka Yoolooburrabee Aboriginal Corporation (QYAC) are partnering to deliver Township Bushfire Management Plans for Point Lookout (Mooloomba), Amity (Pulan Pulan) and Dunwich (Goompi). QRA is undertaking this project in partnership with QYAC with support from the Department of Environment and Science.</p>	<ul style="list-style-type: none"> • All three plans are scheduled for completion in early-mid 2018. • Community information sessions took place on 27, 28 and 29 March on the concept of the bushfire management plans, to the communities of the three townships. • A short video has been produced in conjunction with QYAC to promote the concept of the bushfire management plans on North Stradbroke Island. This is on QRA and QYAC's websites and has been shared at the community information sessions.
<p>Operation Queensland Recovery Plan and reporting (2017 Recovery Plan)</p>	<p>The Operation Queensland Recovery Plan provides the framework for a community-led approach to recovery following STC Debbie in 2017.</p> <p>The plan focuses on empowering local governments, supported by state agencies, to deliver local solutions to ensure communities are able to lead their own recovery and build resilience for future events.</p> <p>The Recovery Plan includes local recovery plans for the eight most severely impacted local government areas.</p>	<ul style="list-style-type: none"> • The 2017 Recovery Plan was tabled in Queensland Parliament and publicly released on 9 May 2017. • QRA is continuing to monitor and coordinate recovery progress and effectiveness of recovery efforts.
<p>Queensland 2018 Severe Storm, Cyclone and Flood Event Recovery Plan (2018 Recovery Plan)</p>	<p>The 2018 Recovery Plan provides the framework for locally-led approach to recovery following the series of disaster events that have impacted 46 LGAs since mid-January 2018.</p> <p>The 2018 Recovery Plan will help close the gap between local/community based recovery capability and community recovery needs, harnessing the capability of government agencies and the knowledge of recovery partners, as required.</p>	<ul style="list-style-type: none"> • The 2018 Recovery Plan is currently being developed in consultation with recovery partners to frame, define and develop an understanding of recovery needs in the state's disaster impacted regions. • The plan focuses on supporting impacted communities, through their local governments and provides the framework for recovery coordination across the impacted areas. • The plan will include Local Recovery 'Plans on a Page', as approved by the relevant councils. • The 2018 Recovery Plan acknowledges that communities impacted by STC Debbie are continuing their recovery efforts and will work in conjunction with the existing 2017 Recovery Plan, where relevant.

Program spotlights

2018 – three tropical cyclones in three months

While only one cyclone, Severe Tropical Cyclone (STC) Nora, has crossed Queensland's coast this year, two more cyclones and a series of tropical storms and lows have drenched the state in heavy rainfall, causing significant flooding across the state.

Since the start of 2018, Queensland has endured six major weather events and more than half of Queensland's 77 Local Government Areas (LGAs) have been activated for Natural Disaster Relief and Recovery Arrangements (NDRRA) funding, with estimated damage to public infrastructure exceeding \$370 million.

An active trough in late January coincided with a king tide causing flooding across the Torres Strait islands and producing heavy rainfall throughout the Cape York Peninsula. NDRRA assistance was activated for 11 far north Queensland LGAs.

On 20-21 February, a trough and associated storms in central and southern Queensland led to NDRRA activations in three central Queensland LGAs.

Then, in late February, 19 LGAs in north and north-west Queensland, from Mount Isa across to Burdekin and south to Diamantina and Murweh, were drenched by two weeks of heavy rainfall and flooding caused by a tropical low.

The flooding rains continued in early March, when five North Queensland LGAs, from Mareeba to Hinchinbrook, saw widespread flooding from 6-10 March.

Three days later, on 13 March, TC Linda formed in the Coral Sea before tracking down Queensland's south coast, impacting communities as it moved along the coastline, but no NDRRA activations ensued.

On 24 March, STC Nora crossed Queensland's west coast, knocking out power, flooding streets and bringing down trees across several Cape York communities including Kowanyama and Pormpuraaw, where homes and vehicles were also damaged. The remnants of STC Nora also caused major flooding on the east coast of Queensland.

At the same time, TC Iris lingered off Queensland's east coast, threatening north and central coast communities with gale force winds and flooding.

Throughout all these severe weather events, the Queensland Reconstruction Authority (QRA) has been on the ground working with councils, other government agencies and not-for-profit organisations to help communities prepare, respond and recover.

On 12 March the Premier appointed QRA Chief Executive Officer Brendan Moon as the State Recovery Coordinator, tasked with assisting local councils and communities with their recovery efforts.

Meanwhile, the QRA continues to working closely with councils, other state government agencies and the Commonwealth to assess impacts, refine damage estimates and help councils prepare funding submissions.

The QRA is also liaising with councils neighbouring the activated areas, ready to extend assistance as required.



The remote Aboriginal community of Kowanyama bore the brunt of Severe Tropical Cyclone Nora



STC Nora dumped rain on already flooded catchments in Far North Queensland, turning Coralie Road in Croydon Shire into a waterway



Tully Gorge Road impacted by the North Queensland flooding event in March 2018

Program spotlights

\$24 million injected into regional communities to build back better following STC Debbie

Local councils across Queensland are set to receive \$24 million in the first round of funding approved from a \$40 million Commonwealth-State Betterment fund to improve the resilience and recovery of public assets damaged during Severe Tropical Cyclone (STC) Debbie.

Fifty-seven infrastructure assets across 16 councils will be rebuilt to a more resilient standard, keeping Queenslanders safe and helping communities withstand the impacts of future disasters.

The Betterment funding will see improvements to roads, floodways and bridges and the construction of a new seawall at Airlie Beach's Shute Harbour.

Highlights from the first round of Betterment funding include \$1.8 million for Scenic Rim Regional Council to replace the timber Jerome Bridge with a more resilient concrete bridge.

North Burnett Regional Council will receive \$1.4 million to increase the resilience of Monal Road, enabling it to better withstand flooding and provide safer community access.

In addition to the \$40 million fund, the Commonwealth and State Governments have approved \$1.852 million in Betterment funding under the Category D Local Council Package for Whitsunday Regional Council to raise the height of the Shute Harbour seawall, which bore the brunt of wild seas and extreme cyclonic winds during STC Debbie.

"While standard NDRRA funding provides impacted local councils with much-needed funding for clean-up, recovery and restoration of essential public assets after natural disaster events such as floods and cyclones, Betterment funding is designed to increase Queensland communities' resilience to natural disasters while reducing future restoration expenditure," Queensland Reconstruction Authority CEO Brendan Moon said.

"The Queensland Reconstruction Authority (QRA) has successfully managed the delivery of more than \$100 million in Betterment funding following natural disasters in 2013 and 2015.

"Ninety-six percent of projects completed by April 2017 that were impacted by subsequent natural disasters remained undamaged or sustained only superficial damage, avoiding restoration costs of more than \$104 million."

The Betterment fund is provided under Category D of the joint Commonwealth-State Natural Disaster Relief and Recovery Arrangements (NDRRA) to improve essential public infrastructure, helping reduce injuries and fatalities during and after natural disasters, helping to make Queensland communities safer and more resilient.

For more information on the 2017 Betterment program and other Category D funding associated with STC Debbie, visit <http://qldreconstruction.org.au/ndrra/exceptional-circumstances-category-dfunding-following-stc-debbie>.



Damage to the existing Jerome Bridge following STC Debbie

Program spotlights

Soil nailing to stabilise Sarina Range landslip site

Soil nailing to stabilise the main landslip site on Sarina Range is progressing well, after heavy rainfall associated with Severe Tropical Cyclone Debbie in March 2017 weakened the slope, resulting in the closure of Marlborough–Sarina Road.

Soil nailing is used to stabilise and strengthen material around where the nail is drilled. The spacing and quantity of nails used is based on the strength of the material required to be supported.

Transport and Main Roads adopted the technique to stabilise the upslope at the main landslip site, after geological mapping of the damage identified a large tension crack. Soil nailing on the upslope will allow excavation of the damaged road materials to occur safely. Soil nails will be used on the downhill side of the slope to secure unstable material over the steep failure.

Soil nails are installed by first drilling or pounding holes in rock using lightweight drill rigs that are controlled by workers who abseil on the slope. Each soil nail is passed up or down the slope by hand, using ropes. Slips and cracks in the ground condition have meant approximately one-quarter of the area has had to be re-drilled.

It takes approximately one-and-a-half hours to drill each hole. If the soil nails were laid end to end, approximately 2.4 kilometres of nails will be used for upslope stabilisation and 1.5 kilometres used for road reinstatement and stabilisation on the downslope.

Soil nailing for the upslope was completed in February 2018. Reconstruction works are expected to be completed by December 2018, weather permitting.



Above: Drilling for the soil nails at the main landslip site, Marlborough–Sarina Road

