



CITY OF LOGAN RECOVERY REPORT

EX-SEVERE TROPICAL CYCLONE DEBBIE

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Aerial view of the Logan River during the flood. FRONT AND BACK COVERS: Historic flood markers in Tully Memorial Park, North Maclean

MESSAGE FROM THE LOCAL DISASTER COORDINATOR

Logan City Council has robust disaster management response and recovery arrangements and an effective training and exercise capability framework that supports integration with key external stakeholders. Training and exercise programs are coordinated across, and involve all agencies to build professional capability in key functional areas and address priority risks within the city.

The Logan City Logan Disaster Management Group recognises that the agencies have roles and responsibilities and that effective coordination relies on these being understood and documented to reflect legislation and/or technical capacity.

Ex-Severe Tropical Cyclone Debbie saw the effective coordination of response and recovery efforts between Logan City Council and key emergency services personnel, state government agencies and community organisations. This provided an opportunity to build on desktop exercises and interagency relationships.

Liaison officers during events are appointed by each entity, have the skills, experience and authority required to perform the role, and are accessible to all other disaster management entities when required.

The coordination of multi-agency responses during Ex-Severe Tropical Cyclone Debbie maximised the city's disaster response capability and helped to minimise the impacts to the Logan community.

Early identification and implementation of effective strategies by the Logan City Local Recovery Group improved post-event wellbeing and continues to build a more resilient and safe city.



Silvio Trinca Acting Chief Executive Officer
Local Disaster Coordinator



THE EVENT

Introduction

Ex-Severe Tropical Cyclone Debbie spent just over 24 hours passing over South East Queensland, but with it brought rainfall of up to 400mm and winds up to 120km/hr throughout Logan. Whilst the city as a whole was relatively unscathed, impacts were felt along the Logan and Albert rivers as they were pushed to major flood levels. Many residents had to evacuate or shelter in place, and once the waters dissipated the city was left with damaged properties, infrastructure and businesses to repair and recover.

Overview

Severe Tropical Cyclone (STC) Debbie crossed the Queensland east coast at Airlie Beach as a Category 4 system on Tuesday 28 March 2017. After crossing the coast STC Debbie was downgraded to a low pressure system and continued to move down the coast. On Thursday 30 March Ex-STC Debbie began impacting South-East Queensland, bringing heavy rainfall to the City of Logan.

Localised flooding occurred in creek systems on Thursday 30 March and Friday 31 March. Significant riverine flooding occurred in the Albert River on Friday 31 March, and the Logan River on Saturday 1 April. Many homes and businesses were isolated, inundated or in some cases destroyed.

Event Details

Thursday 30 March 2017 to Sunday 2 April 2017

- Most significant flood in Logan since 1974
- Albert River
 - Peaked at Beenleigh 8.02m at 10am on 31 March 2017
 - Greater than 1:100 year event
- Logan River
 - Peaked at McLean Bridge 20.66m at 0:16am on 31 March 2017
 - Approx. 1:50 year event
 - Peaked at Waterford at 11pm on 1 April 2017
 - Approx. 1:20-1:50 year event
- More than 8000 parcels of land had flood water inundation to some degree

Preparation

In preparation for the potential impacts of Ex-STC Debbie the Logan City Local Disaster Management Group (LDMG) were on alert once they were aware that Ex-STC Debbie may impact the City of Logan. Preparations were made at Council and other response agency levels to consider how the City would respond and recover to the event.

Severe weather alerts were issued by the Bureau of Meteorology (BoM) and these were shared with the public through the Logan Early Warning Service and Logan's Disaster Dashboard to ensure that the public were appropriately warned and aware of the potential impacts. Social and traditional media were used extensively during this period to share preparation, response and recovery messages.

Physical Impacts

Ex-STC Debbie and the associated rainfall and flooding impacted the City of Logan in a variety of ways. Each impact was of significance to many individuals and groups across the city.

As a result of water inundation, at least 38 homes were deemed uninhabitable, with almost 200 more experiencing inundation above habitable floor levels. 31 horticultural and nursery properties were inundated, resulting in complete loss of current crops. The estimated net production loss from these properties was \$17 million.

Approximately 15,500 properties were without power, some for up to seven days after the initial impact due to damage to Energex infrastructure as a result of the flooding and high winds.

111 roads were closed, some for up to five days after the impact, whilst the water receded and debris was cleared. These closures included Loganlea Road, interrupting



Community members sweeping out water and removing damaged furniture and goods from inundated properties



Crews working on powerlines

access to Logan Hospital. At least 12 roads suffered damage as a result of the flood water. Alan Wilke and Chardon bridges were severely damaged and the closure of these bridges and roads until repairs were effected dislocated a large number of the community and placed more stress on other roads in the area that were already operating at capacity. Rail networks were interrupted during this period as a result of flooding at Beenleigh station and along other areas of the track. Bus and supply chain routes were also affected due to the road closures.

Community events and facilities were impacted, including the cancellation of the Eats 'n' Beats event scheduled for 31 March. A total of 302 parks, playgrounds and sports grounds were impacted to some degree. 46 sport and recreation facilities were impacted with 21 fields closed due to contamination and the remaining 27 sites requiring infrastructure repair. This caused significant impact on local autumn/winter sports competitions. 29 parks and playgrounds were closed until repairs could be effected.

55 wastewater pumping stations were either inundated, without power, or in overflow mode for extended periods, with five sustaining significant damage. Beenleigh Wastewater Treatment Plant was inoperable for 36 hours and all Wastewater Treatment Plants were in wet weather bypass mode for extended periods. The water filling station at Jimboomba was damaged, interrupting town-water supply to residents not on the water network.

Most significantly was the intangible impacts on individuals and the community as they witnessed the flooding resulting in loss and damage to their properties and interruptions to their regular lifestyle.

Economic Impacts

Council Expenditure

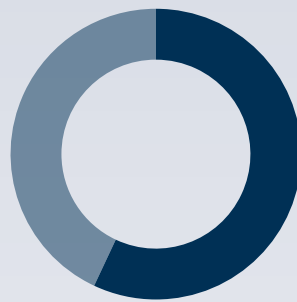
In responding to Ex-STC Debbie, Council has spent in excess of \$4.5 million in clean-up and repair across the City. Due to the extent of the impact, the Logan area was activated for all relief measures under the National Disaster Relief and Recovery Arrangements (NDRRA). Council was able to claim reimbursement of some of these costs under the NDRRA funding arrangements and through insurance.

Insurance Claims

The Insurance Council of Australia have released the claims statistics for Ex-STC Debbie (as at 15 December 2017).

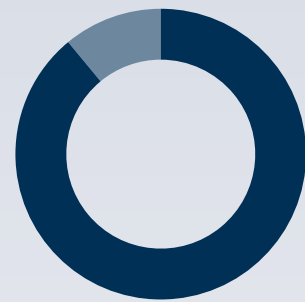
As a result of the impacts of Ex-STC Debbie the losses were approximated to be \$1.613 billion, with Queensland accounting for approximately 89% or \$1.436 billion. Logan alone covered approximately 6% or \$9.678 million of these insurance claims.

Total Losses: \$1.646 Billion



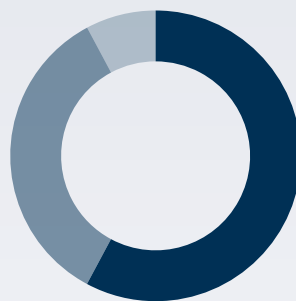
- Domestic
- Commercial

Claims lodged by state (%)



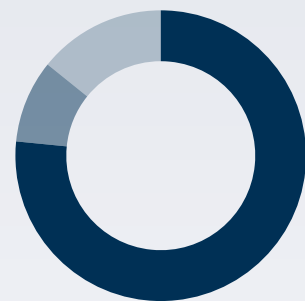
- QLD
- NSW

Domestic claims: 63,817



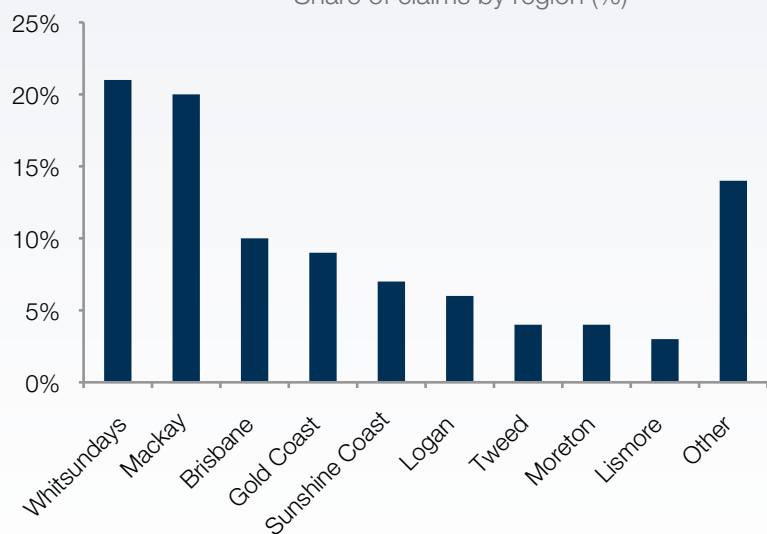
- Home
- Motor
- Contents

Commercial claims: 9014



- Property
- BI
- Motor

Share of claims by region (%)



(<https://disasters.org.au/cyclone-debbie>)

RESPONSE

Local Disaster Management Group

The Logan City Local Disaster Management Group (LDMG) is chaired by the Mayor of Logan and led by Council. It is comprised of representatives from Council and other agencies such as Queensland Police Service (QPS), Queensland Fire and Emergency Services (QFES), Queensland Ambulance Service (QAS), Energex, Department of Communities, Child Safety and Disability Services (DCCSDS)¹ and Red Cross, amongst others, with a shared responsibility for disaster response and recovery in the City of Logan.

During the response to Ex-STC Debbie the LDMG set the strategic direction for response and recovery efforts during and after the impact to ensure that the City of Logan was best placed to return to business as usual as soon as possible.

The Logan District Disaster Management Group, led by QPS, was also activated to support both impacted Councils in the district, Logan City Council and Scenic Rim Regional Council.

Local Disaster Coordination Centre

During the response to the flooding the Logan City Local Disaster Coordination Centre (LDCC) operated 24 hours a day at the Logan City Administration Centre from Thursday 30 March to Sunday 2 April, until the floodwaters started to subside. The Centre then remained operational for a further six days, scaling back to 18 hour operations, and then 12 hour operations for the final four days.

The LDCC was staffed by a full Incident Management Team Structure, consisting of trained Council staff and Liaison Officers from multiple agencies such as QPS, QFES, Energex, DCCSDS and others as required.

Emergency services and Council worked together to ensure that flooding was accurately mapped and that vital intelligence was provided to field staff. This cooperative partnership ensured that the challenges generated by the flooding such as road closures and openings, evacuating and providing accommodation for displaced residents,



Local Disaster Coordinator, Silvio Trinca, briefing the Mayor, Luke Smith, Hon. Shannon Fentiman MP Minister for Communities (2017) and ADF brigadier Chris Field on the extent and impact of the flood

animal welfare, waste disposal, and keeping the residents and the media informed of what was happening, were able to be managed appropriately.

The LDCC coordinated the reconnaissance team that undertook 900 doorknocks prior to the river peaks, to inform residents of the impending flooding, and a further 650 after the event to confirm inundation and assistance required.

As well as the LDCC, there were an additional three satellite centres operating, for staff who were unable to access the main centre, or who were better placed to work from the various Council depots.

The District Disaster Coordination Centre and State Disaster Coordination Centre was also in operation during this period.

¹ Department of Communities, Disability Services and Seniors (DCDSS) formerly Department of Communities, Child Safety and Disability Services (DCCSDS)

Public Information and Technology

Council's Disaster Dashboard provided the community with an unprecedented insight into how the flood was impacting the city, providing a central point for presenting the most accurate information available. Road closures, information on river heights, and images from flood watch and road traffic cameras were just some of the types of information available from the Disaster Dashboard. The Dashboard also provided Twitter feeds from QPS, QFES, Energex, Department of Transport and Main roads and other agencies, as well as regular news summaries. Over the course of the event the Disaster Dashboard had 72,000 visitors and 365,000 page views. 76% of the users accessed the Dashboard from a mobile device.

Social media was also used extensively to keep people informed as events unfolded and to direct people to an accurate source of information. Facebook was the primary platform utilised and was shown to be highly

successful and an effective way of communicating with the community.

During the first three days of the event, Council released 25 official media releases, followed by regular releases on the recovery process and progress. A dedicated webpage was also included on Council's website that included regular updates on recovery progress.

The LDCC and their response to and management of the event relied on new and existing technologies. Geographic Information Systems (GIS) enabled visualisation and mapping of predicted and actual affected areas whilst aerial imagery allowed the staff in the centre to visualise and contextualise the extent of the flooding in the area. All of this intelligence was able to be provided to other agencies and the state government as required.



SES and Rural Fire Service volunteers assisting with the clean up

On the ground

During the two days prior to the rivers peaking, 18,755 sandbags were distributed by Council. The Logan State Emergency Service (SES) completed 807 tasks during the event, including the rescue of a number of people from their homes.

The LDMG deployed teams of volunteers across the city to assist with the recovery efforts. These volunteers were associated with Volunteering Queensland's Emergency Volunteering Crew and they worked alongside professional volunteers such as SES and Rural Fire Service Queensland (RFSQ) to clear houses and properties of debris, whilst supporting the community. Other non-organised volunteers, such as church and local community groups,

self-deployed to assist their local communities where able. Volunteers are integral to the response and recovery efforts after a disaster event, and in this case were involved in the clean-up for more than two weeks after the initial impact.

As part of the assessment of the damage, and for transition into recovery, Rapid Damage Assessments (RDA) were completed by Queensland Fire and Emergency Services (QFES) personnel, with additional assessment and follow-up conducted by Council officers. The RDA process allowed Council and other agencies to gain an understanding of the extent of the impact across the City and where resources would be required. The assessment of the extent of the damage also allowed for categorising of funding arrangements under the National Disaster Relief and Recovery Arrangements.

Funding and Grants

National Disaster Relief and Recovery Arrangements

The Minister for Police, Fire and Emergency Services activated the Commonwealth/State Natural Disaster Relief and Recovery Arrangements (NDRRA) and the Prime Minister approved Category-C Clean-up and Recovery Grants under the NDRRA for communities effected by Ex-STC Debbie.

The relief measures activated under the NDRRA in Logan were²:

- Counter Disaster Operations
- Essential Services Safety and Reconnection Scheme
- Essential Working Capital Loans Scheme for Non-profit organisations
- Essential Working Capital Loans Scheme for Primary Producers
- Essential Working Capital Loans Scheme for Small Businesses
- Freight subsidies to Primary Producers
- Natural Disaster Assistance (Concessional Loan and Grant Packages) for Non-profit organisations

- Natural Disaster Assistance (Concessional Loans) for Primary Producers
- Natural Disaster Assistance (Concessional Loans) for Small Businesses
- Personal Hardship Assistance Scheme
- Restoration of Essential Public Assets
- Special Disaster Assistance (Clean-up and Recovery Grants) for Non-profit
- Organisations
- Special Disaster Assistance (Clean-up and Recovery Grants) for Small Business
- Special Disaster Assistance (Clean-up and Recovery Grants) for Primary
- Producers

The activation of these grants have allowed affected members of the community, small businesses, primary producers and not-for-profit organisations to be able to receive grant funding and assistance for costs of repairs, clean-up and recovery as a result of Ex-STC Debbie. Council has also been able to claim reimbursement for some costs relating to the disaster operations allowing Council funds to be spent where required to better assist the community.

Community Grants

Queensland primary producers impacted by Ex-STC Debbie have received more than \$15 million in Natural Disaster Recovery Grants to assist with clean-up and recovery efforts. The grants provided up to \$25,000 for the clean-up and restoration of primary production, small business and non-profit enterprises affected by the cyclone.

In Logan, as at 1 December 2017, 67 Primary Producer grants were applied for, with 54 successful applications totalling nearly \$428,000; nine Small Business grant applications, with four successful totalling nearly \$8,900; and six Non-Profit grant applications, with four successful totalling over \$51,000. In total 62 successful grants, totalling over \$488,000 have been distributed to affected businesses in Logan, allowing them to continue business and contribute to the local economy.

The Department of Communities, Child Safety and Disability Services (DCCSDS) Community Recovery team administered a total of over \$3.7 million for the following grants:

EX-STC DEBBIE GRANTS PAID FOR LOGAN CITY

GRANT TYPE	APPLICANTS PROCESSED	TOTAL GRANTS PAID	INDICATIVE PEOPLE ASSISTED
Immediate Hardship Assistance	6,904	\$3,229,022.00	18,754
Immediate Hardship Assistance - Essential Services Grant	38	\$16,200.00	108
Essential Household Contents Grant	189	\$281,305.00	520
Structural Assistance Grant	25	\$197,028.59	53
Essential Services Safety Reconnection Grant	17	\$60,403.25	36

² www.qldreconstruction.org.au



Multi-agency response to the impacts of Ex-STC Debbie

RECOVERY

Overview

Similar to disaster response, recovery has governance arrangements in place to support Local, District and State responses.

Community disaster recovery is the coordinated process of supporting affected individuals and communities in the reconstruction of the physical infrastructure, restoration of the economy and environment, and support for the emotional, social, and physical wellbeing of those affected. It can be a long and complex process as different communities recover at different rates.

Effective recovery requires a range of services operating in a coordinated and collaborative way. The integration of government agencies, not-for-profit organisations, community organisations, industry groups, the private sector and whole-of-community is the foundation of recovery.

Experiences from previous events around Queensland have shown that communities that are well prepared and supported before a disaster occurs are more resilient and able to recover faster. Logan City Council and the associated agencies and organisations were focused on Logan's recovery and anticipating the impacts of Ex-STC Debbie before they occurred.

The Local Recovery Coordinator (LRC) was stood up on Friday 31 March to commence implementation planning for recovery whilst the Local Recovery Group (LRG) was stood up on Sunday 2 April to enact the recovery process.

The transitional phase from Response to Recovery commenced on Saturday 1 April as the waters from the Albert River began receding, with the official Response phase standing down on Wednesday 5 April once the Logan River had receded. The transition period was necessary because whilst part of the city was beginning the recovery process, other areas were still in the response phase.

City of Logan Local Recovery Plan

The City of Logan Local Recovery Plan (*Annexure 1*) was developed in partnership with the Queensland Reconstruction Authority (QRA) and the Deputy State Recovery Coordinator overseeing South East Queensland during the initial recovery operations. It was included in the State Recovery Plan 2017-2019 Operation Queensland Recovery as part of the whole-of-state approach.

Local Recovery Group

The Logan City Local Recovery Group (LRG) is a sub-group of the Logan City Local Disaster Management Group and works to ensure that an effective, coordinated disaster recovery effort occurs. The recovery process is a complex and potentially protracted process, so to assist with overall effective coordination the aspects of recovery are conceptually grouped into four inter-related functions:

- Human-Social
- Economic
- Environmental
- Infrastructure

The Logan City LRG consists of representatives from the different areas of Council, state government agencies, and not-for-profit organisations (*Annexure 2*). During the recovery phase of Ex-STC Debbie these organisations and agencies worked to ensure that all aspects of recovery were being met and that the residents of Logan could return to their 'new normal' as soon as possible.



Logan River Parklands immediately after flooding



Logan River Parklands following repair works

Human-Social

Human-Social recovery relates to the emotional, social, physical and psychological well-being of individuals, families and communities after a disaster. Human-Social recovery generally aims to address needs such as: access to information, services and practical assistance; and access to emotional, psychological and mental health support.

The Logan City Human-Social Recovery Sub-Group was formed immediately after the impact of Ex-STC Debbie and facilitated the initial and ongoing assessment of the disaster affected area with respect to human-social/welfare requirements, and implemented support measures accordingly.

This group consisted of representatives from Council, DCCSDS, Logan Emergency Relief Network, Queensland Health - Logan Hospital, QPS, Red Cross, The Salvation Army, Save the Children Queensland Australia, SES, St John Ambulance Service, St Vincent de Paul, Lifeline, Uniting Care Communities, Multilink Community Services and GIVIT. The group coordinated the required support for community in a human-social context and the DCCSDS Community Recovery team played a significant part in providing assistance. Council coordinated the delivery of the human-social actions in the Recovery Action Plan.

After the impact from Ex-STC Debbie the state lead agency for human-social recovery, Department of Communities, Child Safety and Disability Services (DCCSDS), commenced the TC Debbie Regional Recovery Coordination Sub-Group that took charge of case coordination for the complex cases across the region (Logan City Council, Scenic Rim Regional Council and City of Gold Coast). This group consisted of representatives from the three councils, state organisations such as DCCSDS, Queensland Health, Department of Housing and Primary Works, QRA, and not-for-profit organisations such as Red Cross, The Salvation Army, GIVIT, St Vincent de Paul, Lifeline, Uniting Care Communities, and similar. This group was able to coordinate support for complex cases in the community by way of temporary housing, application for grants and subsidies under the NDRRA, vouchers and financial support, and access to psychosocial and financial counselling.

As part of the NDRRA funding, Logan City Council was provided with funding to employ a temporary Community Development Officer until March 2019, to assist with coordination of the recovery efforts from Ex-STC Debbie and provide education and resources to the City of Logan in the ongoing recovery space. The region was also provided with capacity to employ additional recovery workers across a number of fields, such as financial counselling, to continue community support.



Orange Sky Laundry assisting residents after the waters receded in Logan Reserve

Economic

The Economic function coordinates planning and implementation of financial and business recovery. Council's Economic Development team, as the lead of the Logan City Economic Recovery Sub-Group worked closely with impacted small businesses and primary producers to assist with grant and loan applications so they were able to recommence business and continue providing goods and services to the community. 55 businesses across the City of Logan were directly impacted by the flood, with a further 77 businesses indirectly impacted by the event. Examples of indirect impacts include the inability to reach the place of business because of road closures, loss of power and disruption in supply chain.

Included in business, 31 horticultural and nursery properties were inundated by flood water. The Chambers Flat and Munruben horticultural properties were most heavily impacted where flood waters resulted in complete loss of crops, and required significant clean up and decontamination. This impact, and the resulting decrease in income for the farms resulted in approximately 50 agricultural labour staff losing their jobs. The majority of these have since regained employment in the sector as growers have been able to recommence business. Work is progressing to establish a Logan Growers' representative and advocacy group to build the network and resilience of these businesses.

The Logan City Economic Recovery Sub-Group included members of Council's Economic Development team working with Queensland Rural Adjustment Authority (QRAA)³, QRA, Chamber of Commerce and Department of State Development

The Economic Development team has continued to promote the city as an investment and business destination. Business attraction, confidence and economic development activities in the Logan area have not decreased as a result of Ex-STC Debbie.

³ Queensland Rural and Industry Development Authority (QRIDA) formerly Queensland Rural Adjustment Authority

Environment

Environmental recovery considers the impacts of a disaster on flora and fauna, air quality, water quality, land degradation and contamination as well as public health and safety and other potential consequences on the natural environment.

Council's Waste Services Program coordinated the removal of over 3000 tonnes of green, hard and hazardous waste from the flood affected areas. 822 tonnes of waste was removed from parks located across the city.

The erosion of rivers and waterways due to the amount of and fast-moving floodwater resulted in bank instability issues in some areas. Council's Natural Environment and Sustainability Program worked with external partners (Seqwater and Healthy Land and Waters) to undertake rehabilitation on these damaged areas and make the Logan and Albert River catchments more resilient to erosion.

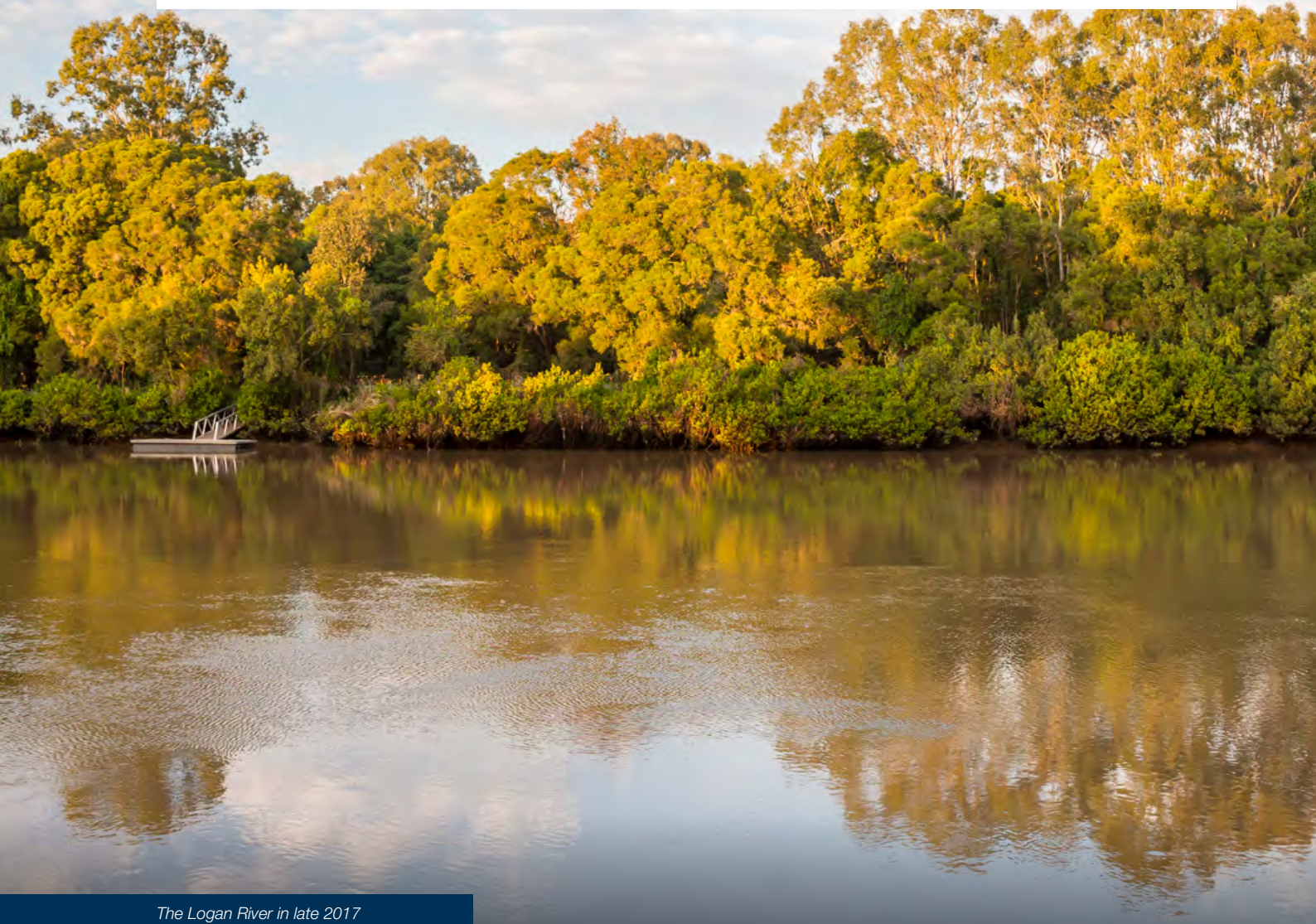
Assessment of bush care sites and walking trails have been undertaken, with impacted areas being revegetated and repaired as required. Over 300 cubic metres of silt was removed from one wetlands area.

Due to the inundation across the City from flood waters, an increased risk of mosquito breeding was identified, and as a result mosquito control measures were undertaken by Council's Pest Services Program.

The loss of power to businesses resulted in potential food safety risks at food providers. Council's Environmental Health Program deployed Environmental Health Officers to attend and inspect all food businesses that were impacted to ensure that food safety standards were continuing to be met.

Council's Sports and Recreation program coordinated the environmental monitoring of playing fields inundated by flood waters, ensuring that playing fields remained closed until such time that the fields were deemed safe.

The Logan City Environmental Recovery Sub-Group included members of Council's Waste Services, Environment and Sustainability, Animal and Pest Services, Parks, Water Business, Water Operations, Community Services and Sport, Leisure and Facilities branches, as well as representatives from Department of Environment and Heritage Protection and Queensland Health.



The Logan River in late 2017

Infrastructure (Building, Roads and Transport)

Infrastructure recovery began with restoration of essential services such as water, wastewater and power (led by Energex). This function also considers the recovery of buildings, roads and other components of the built environment.

The impacted water and wastewater infrastructure was reinstated to business as usual operations within one month of impact.

Damage to the electricity network occurred from direct flooding and the delays occurred due to access to the network for repairs being hampered by flood water. For public safety, Energex was required to turn off transformers that provided power to some flooded areas. They were then required to remove primary network fuses on properties that had suffered inundation, until the properties were deemed safe by a licensed electrician. These impacts resulted in loss of power to 15,500 properties for up to seven days.

The closure of the 111 roads for varying lengths of time had significant impact on the community causing longer travel times and further distances as residents had to use alternative routes and the roads were unable to properly support the added congestion. Clearing and repairs were affected as quickly as possible to enable the road network to operate at standard capacity.

Reconstruction, of the damaged Chardon Bridge was completed in October 2017. The new, two lane, reinforced concrete bridge has been constructed approximately six meters higher than the previous wooden bridge to improve flood immunity. The City of Gold Coast led the repairs of the Alan Wilke Bridge on Stanmore Road and this was

completed in August 2017. The eastern approach to the Alan Wilke Bridge was destroyed, and flood water eroded the banks of the Albert River that join the bridge. This bridge has also been restored to a more flood resilient state.

Beenleigh Railway station was inundated and inoperable for four days whilst the water receded and repairs were affected. Queensland Rail and Department of Transport and Main Roads worked to ensure replacement services were available until all public transport routes were operable.

Seven of Council's flood gauges sustained damage from erosion and debris, however every station and camera site operated without fault. The repairs have been completed and all stations have been serviced. Two additional river monitoring stations have been installed, as well as an additional rain gauge and Flood Watch Camera.

Recovery of the City of Logan's parks, sport and recreation facilities and green spaces commenced as flood waters receded and continued through the April school holiday period. All parks and playgrounds spaces have now been rehabilitated with 48 of the 52 sport and recreation and sporting areas completed. Council is working to complete the remaining spaces in the coming months.

The Logan City Infrastructure Recovery Sub-Group included members of Council's Road and Infrastructure, Road Construction and Maintenance, Parks, Waste Services, Environment and Sustainability, Animal and Pest Services, Water Business, Water Operations, Community Services and Sport, Leisure and Facilities branches, as well as representatives of Department of Transport and Main Roads, Department of Energy and Water Supply, Department of Housing and Public Works, Energex, Telstra and QRA.



Overlooking the flood waters at Logan Reserve Road, Waterford West



Council will continue to install the award-winning Road Flooded signs that successfully operated during the flooding from Ex-STC Debbie in areas across the city

LOGAN – A MORE RESILIENT COMMUNITY

Long Term Recovery

The District and Local Recovery Groups officially moved to stand down in October 2017 after assessing the ongoing recovery efforts and ensuring they could continue as required as part of each organisation's business as usual processes.

Community Recovery can be a multifaceted and protracted process as communities and individuals recover at different rates and adapt to their 'new normal.' Council acknowledges that recovery is more than simply the replacement of what has been destroyed, and that it is a complex social and developmental process.

Acknowledgements are made to the members of the Logan community who have been impacted by Ex-STC Debbie and the ongoing recovery they are facing. Whilst great progress has occurred, and in many cases recovery has been completed, there are still members of our community working to restore their homes, businesses and lifestyles.

Learning and the Cycle of Continuous Improvement

Council is committed to a cycle of continuous improvement. After the response operations had concluded, and as the majority of recovery operations were being phased into business as usual, Council undertook a series of debriefs resulting in a Recommendations Register as part of a Lessons Management System. Many of these recommendations have already been implemented or are well underway, helping Council to be better placed to respond and recover from future disaster impacts.

Residents and businesses who were impacted by, or witnessed the impacts from, Ex-STC Debbie can take steps to implement learnings from the event. There are many tools and resources available that can assist in this planning and preparation.



Ongoing Recovery

Human-Social

The Logan City Human-Social Recovery Sub-Group continues to operate and meet on a quarterly basis to build resilience and the capacity to prepare, respond and recover from future disasters.

The TC Debbie Regional Recovery Coordination Sub-Group continues coordination of complex cases across the region. Whilst the Regional and Local recovery groups have officially stood down, recovery activities are still continuing across the City with the different organisations and agencies.

Members of the community who were impacted by Ex-STC Debbie are now able to access ongoing psychosocial and financial support provided by the NDRRA funding. These services are available until March 2019 and can provide:

- Referral to specialist services
- Provision of psycho-social problem solving and emotional support
- Response to identified Mental Health/Alcohol, Tobacco and Other Drugs needs
- Response to managing stress and anxiety
- Financial Counselling

Logan City Council is also committed to developing a further understanding of community connectors, the existing infrastructure and systems that are in place for

vulnerable groups, local ways of working and community strengths, and vulnerabilities to assist agencies with long term recovery approaches.

Department of Communities, Disability Services and Seniors (DCDSS) continues to work with other agencies and non-government organisations to provide long-term human social recovery support to the affected communities.

Environment

The Logan City Environmental Recovery Sub-Group will continue to support long-term community sustainability needs. This includes rehabilitation and stabilisation of vulnerable waterway and riparian areas, and advancing climate resilience principles for urban planning that contribute to supporting the community in disaster awareness, planning and recovery.

Council's Natural Environment and Sustainability Program is continuing to work with external partners to undertake rehabilitation of our waterways and to prevent possible further damage in future events.

State agencies such as the Department of Development, Manufacturing, Infrastructure and Planning; Department of Agriculture and Fisheries; Department of Tourism, Major Events, Small Business and the Commonwealth Games; and Department of Local Government, Racing and Multicultural Affairs continue their Recovery work as per the State Recovery Plan and in partnership with Logan City Council where appropriate.



Chardon Bridge, restored in October 2017

Economic

Council's Economic Development team will continue to work with business groups to enable learning from their experiences in order to better prepare for future adverse events. The team is providing preparedness education sessions and information for businesses across the city to use.

Council's Economic Development team in partnership with peak bodies, are working to establish a local growers group to better inform and educate the local farming community and identify areas of improvement or adjustment. The team is continuing to work with affected businesses and other businesses in the City of Logan to improve overall capability and resilience which will in turn assist them to better cope with future events like Ex-STC Debbie.

State agencies such as Department of Development, Manufacturing, Infrastructure and Planning; Department of Agriculture and Fisheries; Department of Tourism, Major Events, Small Business and the Commonwealth Games; and Department of Local Government, Racing and Multicultural Affairs continue their Recovery work as per the State Recovery Plan and in partnership with Logan City Council where appropriate.

Infrastructure

Infrastructure recovery into the future involves Council working with asset owners and service providers to implement the lessons identified during the previous recovery period in order to better prepare for future adverse events. This includes ensuring new assets are built to withstand larger impacts, or when restoring or renewing existing infrastructure looking to build it with resilience in mind.

Council will continue to install the award-winning Road Flooded signs that successfully operated during the flooding from Ex-STC Debbie in areas across the City.

Expansion of the Telemetry Network will continue with the intention of making the towers and gauges more resilient to damage.

Energex have also incorporated a number of lessons from the event into their 2018/19 flood mitigation project work. These include replacement of poles and upgrades of clearances in areas, installation of additional switches and links to minimise outages and replacement of components, all to limit the expose to potential flood impacts in the future.

State agencies such as Department of Transport and Main Roads and Department of Housing and Public Works continue their recovery work as per the State Recovery Plan and in partnership with Logan City Council where appropriate.

FINAL WORDS

Although disasters cannot be prevented, we can take steps to better understand the hazards and potential impacts associated with them. This knowledge can be used to implement measures that can mitigate against impacts, reduce recovery and reconstruction costs, safeguard communities and lessen the likelihood of significant consequences in future events.

Resilience is our capacity and capability to prepare, respond and recover from a disaster. The experience we have all gained in the response to and recovery from Ex-STC Debbie can assist us to build our resilience to future events. It is the responsibility of everyone to continue to build resilience in our communities, from state and local governments to individuals and local business. The better we all prepare, the better our response and recovery in future events can be.

As we look at our ongoing recovery for the next 12 months and beyond, we need to consider our resilience and acknowledge and implement the lessons we have identified to make our City of Logan a strong and connected community.



ANNEXURE 1

Current as at 15 March 2018.

City of Logan Local Recovery Plan

The City of Logan is a resilient community and we will rebuild as a community. We have empathy for those within our community who have been negatively impacted and we will assist and support those who need it as we move forward to get back to business as usual as soon as possible.

City Vision

City of Logan: Innovative, Dynamic, City of the Future.

Our Purpose

To make a positive difference in people's lives through the quality of the services we provide.

Values

Community first | Our People | Integrity | Excellence | Leadership

Local Recovery Group

- Activated 31 March 2017.
- Local Recovery Coordinator – Ms Marion Lawie, Community Engagement Program Leader
- Four sub groups: Human and Social, Economic, Environment and Infrastructure
- Key stakeholders: A full stakeholder analysis has been completed. The key stakeholders include Logan City residents and business, community groups, primary producers, non-government organisations/non-government agencies, state and federal agencies and authorities and other connected parties.
- Themes for recovery: The impacts on the Logan community are addressed through four themes: **Human and Social** (Community), **Economic**, **Environment and Infrastructure** (Buildings, Roads and Transport).
- The Recovery Plan will address these themes through short, medium and long term strategies.

RECOVERY NARRATIVE

Human and Social

- Flooding – although the number of directly impacted people through inundation is small, the impact on those directly inundated has been devastating.
- At least 38 homes are uninhabitable with approximately 200 inundated above habitable flood levels.
- Long-term psycho-social impacts are as yet unknown.
- 1,179 welfare assistance referral requests for outreach actioned by Department of Communities, Child Safety and Disability Services.
- 15,000 properties without power for up to seven days.
- Events including March 2017 Eats 'n' Beats cancelled.
- Rail and bus networks interrupted for up to five days.
- Access to Logan Hospital interrupted for three days whilst Loganlea Rd was inundated.
- 302 recreational parks, playgrounds and public open spaces were closed during school and Easter holiday periods.
- Rural properties lost water and wastewater services due to flooding of water tanks and lack of electricity to operate pumps.
- Increased risk to public health through increased pests such as mosquitoes.

- At least 50 lay offs of agricultural labour staff.
- 49 businesses were directly inundated with 74 indirectly impacted that council is aware of. The broader impact on small businesses is not yet known.
- Loss of momentum in business attraction, confidence and impact on Logan's economic development activities.

Environment

- 3,000 tonnes of green and hard waste removed from flood affected areas.
- 55 wastewater pumping stations were either inundated without power or in overflow mode for extended periods.
- Erosion of rivers and waterways including bank instability issues.
- Animal management issues due to displaced pets and livestock (risks to animal and human safety).
- Increased risk to public health through increased pests such as mosquitoes.
- Loss of power to homes and businesses resulting in food safety risks.

Infrastructure (Building, Roads and Transport)

- Beenleigh Railway Station inundated and inoperable for four days and bus network disrupted for five days, causing considerable delays to the SE Queensland public transport network.

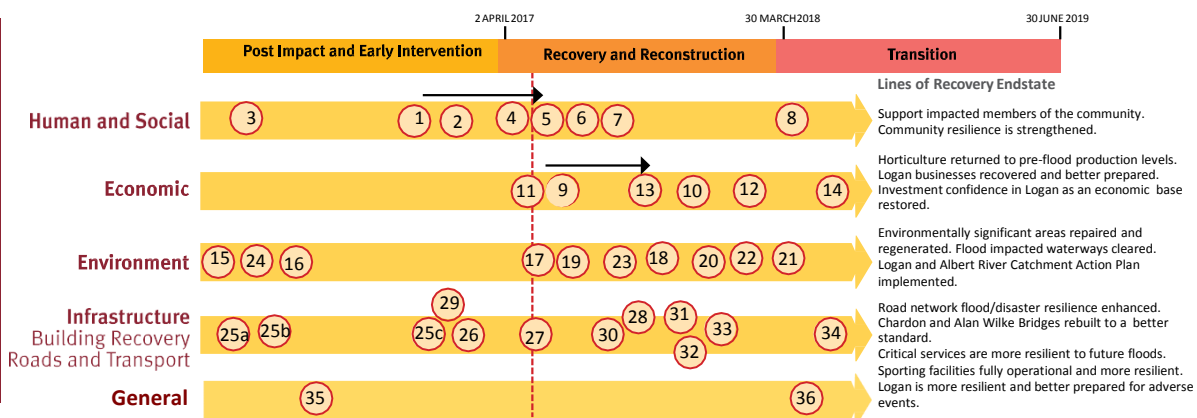
- 111 roads closed for up to five days until cleared of debris. Alan Wilke and Chardon Bridges cut, dislocating a great deal of the community and placing more stress on other roads already operating at capacity.
- At least 12 roads damaged by floodwaters, impacting on community connectivity.
- 46 sport and recreation facilities were impacted. 21 fields currently closed due to contamination. 27 sites require infrastructure repair. Most sites operational within 4-6 weeks, with final sites in three months. There will be significant impact on local autumn/winter sports competitions.
- Water filling station at Jimboomba was damaged impacting those who cannot access town water.
- Beenleigh Wastewater Treatment Plant (WWTP) inoperable for 36 hours. All WWTPs were in wet weather bypass mode for extended periods.
- Significant damage sustained to five wastewater pump stations with 55 either inundated, without power or in overflow mode for extended periods.
- ENERGEX infrastructure damaged resulting in loss of power to 15,000 properties for up to seven days.
- Damage to seven flood gauges resulting in degradation of the network.

Economic

- At least 31 horticultural and nursery properties inundated, resulting in complete loss of current crops – estimated net production loss is \$17M (ref. State Government press release).

DAMAGE AND IMPACTS

LINES OF RECOVERY



Human and Social

1. Assessment of human and social impact on Logan community completed and reviewed
2. Arrangements for human and social recovery coordination and communication activated and maintained
3. Suitable and emergency and/or temporary housing solutions for displaced households implemented and managed
4. Engagement of non-government organisations to support the provision of human social recovery services for the community - organised, coordinated, and effective
5. Disaster impacted individuals and families directly supported in the community (Communities, Child Safety and Disability Services (DCCSDS) led)
6. Disaster impacted individuals and families requiring ongoing assistance supported inc assistance applications (DCCSDS led)
7. Existing community support structures supported and maintained
8. Flood commemorated at 12 months anniversary

Economic

9. Economic assessment completed; full impact understood

10. Horticultural crops replaced, first crops harvested, farm production returned to pre-flood levels
11. Facilitate access to grants, funding, and other assistance programs for businesses
12. Growers' representatives and advocacy groups established
13. Business disaster preparedness/resilience initiatives activated
14. Investor confidence in Logan restored and improved

Environmental

15. Inspect all food businesses that were without power to ensure food safety standards are met
16. Post flood mosquito and pest control completed
17. Water quality returned to pre-flood levels (in waterways)
18. Bush care sites and walking trails assessed
19. Flood related waste cleared
20. Logan and Albert River catchments assessed for erosion/damage
21. Logan and Albert River catchments stabilised and made resilient to stormwater erosion
22. Bush care sites and walking trails revegetated and/or repaired
23. Environmental consequences of clean up operations are assessed and monitored
24. Animal welfare issues are assessed and managed

Infrastructure

25. Utilities restored: a-water, b-wastewater, c-power (Energen led)
26. Roads and public transport reopened (some TMR led)
27. Pump stations repaired & improvement innovations reviewed
28. Alan Wilke bridge repaired; detoured roads reinforced (GC led)
29. Beenleigh Waste Water Treatment Plant (WWTP) and Jimboomba WWTP restored to full treatment / operational capability
30. Public parks, sporting facilities and playgrounds are assessed, restored and improved where applicable
31. River flood gauge network repaired and reviewed
32. Local roads repaired and made more flood resilient where possible
33. Chardon Bridge replacement complete; made more flood resilient and open to traffic.
34. SE QLD rail and bus networks improved; resilience and connectivity assured (TMR led)

General

35. Community, businesses and stakeholders engaged and communicated with in recovery process
36. Community and key agencies better prepared for adverse events

LOCAL RECOVERY OBJECTIVES

ANNEXURE 2

Roles of other Agencies in Recovery

Queensland Reconstruction Authority (QRA)

The QRA manages and coordinates the Government's program of infrastructure reconstruction within disaster-affected communities. The QRA focuses on working with state and local government partners to deliver value for money and best practice expenditure and acquittal of public reconstruction funds. The QRA is also the lead agency responsible for disaster recovery, resilience and mitigation policy.

Department of Communities, Disability Services and Seniors (DCDSS)

DCDSS delivers services to strengthen and support the wellbeing of Queenslanders, particularly those who are vulnerable and most in need. DCDSS seek to deliver integrated and coordinated human and social recovery services including Immediate Hardship Assistance, Essential Services Hardship Assistance, Structural Assistance and Essential Services Safety Grants. In Logan District they were the lead for Human-Social recovery, incorporating the Case Coordination group. DCDSS was previously known as Department of Communities, Child Safety and Disability Services (DCCSDS).

Department of Human Services (DHS)

DHS provides assistance to those adversely affected by significant disasters through the provision of Disaster Recovery Payments (DRP) or Disaster Recovery Allowance (DRA).

Department of Housing and Public Works (DHPW)

DHPW delivers a range of services to ensure in-need Queenslanders have access to housing and homelessness assistance. After a disaster, DHPW will assist by facilitating immediate and longer-term temporary accommodation solutions, and will coordinate building damage assessments across impacted areas.

Department of Transport and Main Roads (DTMR)

DTMR is responsible for the delivery and maintenance of the integrated transport network across Queensland. DTMR provides information regarding disruptions and closures across the road, rail, aviation and maritime networks.

Insurance Council of Australia (ICA)

ICA is the representative body of the general insurance industry in Australia. It aims to promote insurance protection and security to the community and provides a range of practical information to support consumers.

Queensland Health (QH)

QH is responsible for planning and managing public health emergencies and disaster events. During a disaster, QH provides pre-hospital response, aeromedical transport to support the Queensland Ambulance Service, and the provision of information, advice and services to the community and partner agencies.

Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP)

DSDMIP exists to deliver Queensland's economic prosperity by championing the interests of business and industry. DSDMIP seeks to identify and address issues and risks that affect ongoing economic impacts and rate of recovery. DSDMIP was previously known as Department of State Development (SDS).

Department of Environment and Science (DES)

DES is committed to a vision of a healthy and resilient environment for a sustainable and prosperous Queensland. DES seek to identify early environmental impacts after an event and will assist in prioritising environmental recovery actions. DES was previously known as Department of Environment and Heritage Protection (DEHP).

Queensland Fire and Emergency Services (QFES)

QFES is the primary provider of fire and emergency services in Queensland. QFES aims to protect people, property and the environment through the delivery of emergency services; awareness programs; response capability and capacity; and, incident response and recovery for a safer Queensland. QFES encompasses the State Emergency Service (SES), Rural Fire Service Queensland (RFSQ) and Fire and Rescue (F&R).

Department of Agriculture and Fisheries (DAF)

DAF provides advice on various financial support arrangements available to primary producers including freight subsidies, disaster loans, essential working capital loans and leasehold rent relief.

Queensland Rural and Industry Development Authority (QRIDA)

QRIDA administers financial assistance to disaster affected primary producers, businesses and non-profit organisations under the Natural Disaster Relief and Recovery Arrangements (NDRRA). QRIDA was previously known as QRAA (Queensland Rural Adjustment Authority).

Department of Innovation, Tourism, Industry Development and the Commonwealth Games (DITID)

Department of Innovation, Tourism, Industry Development and the Commonwealth Games (DITID) focuses on the success of Queensland's tourism industry and small business to create a diverse Queensland economy that grows jobs now and creates jobs in the future. DITID is responsible for identifying the impact on small business post disaster, and assists in the development and implementation of recovery activities. This department was previously Department of Tourism, Major Events, Small Business and the Commonwealth Games (DTMESB). Small business has now moved to a newly created department, Department of Employment, Small Business and Training (DESBT).

Volunteering Queensland (VQ)

VQ is the state peak body dedicated to advancing and promoting volunteering. VQ links people who want to volunteer before and after disasters with organisations across the community who need valuable assistance. People with the required skills and availability are referred into areas of the community that require assistance the most.

Charity Organisations

A number of charity organisations were actively involved in providing emergency aid services throughout Logan during the response to and recovery from Ex-STC Debbie.

- Australian Red Cross
- UnitingCare Community
- St Vincent de Paul Society
- Salvation Army
- GIVIT
- YFS
- Orange Sky
- Wesley Mission
- ACCESS Community Services



LOGAN
CITY COUNCIL