# Queensland Strategy for Disaster Resilience

To make Queensland the most disaster resilient State in Australia

# FOREWORD

## Message from the Premier

In the past seven years, the State has experienced natural disasters that have taken 43 lives and cost in excess of $14 billion.

It is proof that we cannot go on with the attitude that big disasters happen only once in a generation.

We have developed the Queensland Strategy for Disaster Resilience as part of our vision to create Australia's most disaster resilient state.

We will bring together the best minds in Government, business and the community to find ways to build a resilient Queensland and we will support Queenslanders as they shoulder their individual responsibility to be ready for the next disaster.

The success of the Queensland Strategy for Disaster Resilience will be assured through strong partnerships with Governments, industry and the people of Queensland.

**Campbell Newman MP**

**Premier of Queensland**

## Message from the Minister for Local Government, Community Recovery and Resilience

In building resilience, we will reduce dependency.

Every Queenslander needs to do their part to become more resilient and face any disaster.

We need to change our thinking to accept that extreme weather is a part of our lives and that we must be able to stand up to disasters and their repercussions.

Governments can only do so much. But we can map a way forward for communities to build their resilience.

The Queensland Strategy for Disaster Resilience creates a safer tomorrow for our community.

Working together will give us the best defence to face the next disaster.

**David Crisafulli MP**

**Minister for Local Government, Community Recovery and Resilience**

# 1. INTRODUCTION

Queenslanders have witnessed a turbulent decade of disasters. In the last 10 years we have experienced cyclones, devastating floods, droughts, bushfires, oil spills and more frequent and extended periods of extreme heat. The Queensland Strategy for Disaster Resilience (the Strategy) is based on the understanding that building resilience to all hazards is vital to the future of our State. It identifies the areas and activities to be undertaken to enhance the foundations of Queensland's disaster resilience to all hazards.

As a community we have learnt that:

- Our knowledge and understanding of the risks associated with all hazards and appropriate management options must be continually updated and expanded;
- Ongoing effort is needed to communicate this information to the community;
- Building better public infrastructure is essential to reducing disaster costs and building resilience; and
- The actions of the individual influence disaster resilience at the community level.

This Strategy allocates lead agencies and provides high-level metrics and anticipated timings of projects undertaken against the State resilience goals and outcomes.

## The Queensland Plan

The Queensland Plan is being developed with the intention of aligning government, business, industry, communities and individuals in working together to achieve real outcomes for the state. Through an internationally recognised community engagement process that resulted in feedback from thousands of Queenslanders, the Queensland Plan will shape the long-term future of the State.

The Strategy recognises that the Queensland of the future, as described in the Queensland Plan, will experience changes in population, lifestyles and technology and growth in regional areas, and that Queenslanders want a state that is well connected, prosperous, diverse and healthy. The Strategy has been developed to support the 30-year vision of the Queensland Plan which will be released in mid-2014.

## National Strategy for Disaster Resilience

The Strategy sets out the Queensland Government's vision for a disaster resilient future and considers the Australia-wide resilience building initiatives being undertaken through the National Strategy for Disaster Resilience. The Strategy also recognises that the efforts being undertaken to build disaster resilience through the National Strategy for Disaster Resilience must be acknowledged when enhancing Queensland's disaster resilience.

## A cooperative approach

The Strategy was developed by the Department of Local Government, Community Recovery and Resilience in conjunction with all State Government departments and stakeholders, such as members of the Local Government Association of Queensland. and seeks to build disaster resilience throughout Queensland.

The Strategy is aligned to arrangements for disaster management that exist in businesses, the volunteer sector and at both levels of government in Queensland, but it does not replace these

arrangements. Instead, it complements them by focussing on those programmes that have the potential to provide the community with the greatest benefit in terms of enhanced resilience outcomes, increased individual and community preparedness activities and timely and cost effective recovery.

The Strategy acknowledges that building resilience is ongoing and is the responsibility of all Queenslanders: *'If you do a little, we all accomplish a lot'*. It also acknowledges that empowering local governments and communities enables them to bring their skills, knowledge and experience to the forefront of disaster preparedness, response and recovery efforts.

**Role of Queensland Government**

The Queensland Government has already demonstrated its commitment to improving the resilience of critical infrastructure and in partnering with communities to achieve better disaster response outcomes. It recognises its own role to quickly respond to, and recover from, natural disasters and other hazards.

The roles of the Queensland Government include:

- In conjunction with Local Disaster Management Groups and District Disaster Management Groups, assessing disaster risks and implementing plans to manage and reduce disaster impact;
- Informing communities of risk assessment outcomes and providing education on methods to reduce their exposure and vulnerability to disaster risks; and
- Providing strategic management and coordination of Queensland's efforts to build resilience across all sectors of the community and enhance resilience to future disasters.

The Minister for Local Government, Community Recovery and Resilience will guide and coordinate the building of disaster resilience throughout the State.

**Role of local governments**

Local governments have a primary role in working with communities to build their resilience to disasters. Key functions include ensuring exposure to hazards is reduced through suitable land use planning, maintaining the natural environment and building community understanding of all hazards and risks.

**Role of business**

Disaster resilience in businesses and key industries is critical to minimise the impacts of disasters on communities and the Queensland economy. Ensuring they understand their exposure to disaster risks and have prepared business continuity plans, businesses are able to reduce the impacts, recover more effectively from disasters and continue to provide services and employment to the affected communities.

The insurance industry can play a key role in identifying and understanding the residual risks to property and structuring insurance premiums accordingly.

**Role of individuals**

Disaster resilience is dependent on individuals taking responsibility and striving to develop social infrastructure and to actively undertake activities to protect their lives and property. Understanding their exposure to risks, planning and preparing for all hazards and volunteering to assist in times of disaster builds an individual's and also a community's resilience for future disaster.

## What is disaster resilience?

Disaster resilience is often taken to mean the ability 'to bounce back'. However, bouncing 'back' to the pre-disaster state could result in returning to the vulnerabilities that gave rise to a disaster's original impacts.

Disaster resilience is more than just 'bouncing back'. It involves ongoing positive adaptation to a changed and continually changing environment.

Disaster resilience is a powerful concept that will guide and shape how the Queensland Government, local governments, communities, businesses and individuals approach building and securing the future of our State.

| Definition of resilience |
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| The ability of the Queensland Government, local governments, communities, businesses and individuals to prepare for, respond to, and manage potential hazards and disasters, thereby minimising impacts and rapidly recovering to emerge stronger and better able to cope with future disaster events. |

## What is a disaster resilient community?

A resilient community understands the risks of future disasters. It is well prepared financially, physically, socially and mentally to minimise impacts, recover quickly and emerge stronger than its pre-disaster state. Resilience is influenced by a community's awareness of its risks but is also dependant on the strength and diversity of the economy, the robustness of the built environment and the condition of the local natural environment. Preparation, planning and well-practised emergency response arrangements, including a strong volunteer base through individuals and volunteer organisations, is central to building resilience.

| Definition of a resilient community |
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| A resilient community is one that possesses the capacities, skills and knowledge that enable it to prepare for, respond to, and recover effectively from a disaster and adapt positively to a changing environment. It is a community that works together to understand and manage the risks and vulnerabilities that it confronts, and enhances its capacity to address its vulnerabilities to all hazards. |

# 2. QUEENSLAND'S STRATEGY FOR DISASTER RESILIENCE

Queensland will always be exposed to natural disasters and other hazards. As a consequence of our geography, environment, variable climate and population distribution, there are many occasions where a disaster event will be unavoidable. People who choose to live in hazard prone areas of the State must be aware of the disaster risks and accept the responsibility to prepare for and manage, to the best of their ability, their own response and recovery. This attitude of personal responsibility for resilience, as individuals and as a community, is the way forward for Queensland.

By continuing to work together, Queenslanders can further improve their personal and community resilience.

| Vision |
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| To make Queensland the most disaster resilient State in Australia. |

## Scope

The purpose of the Strategy is to build resilience against all hazards such as floods, bushfires, cyclones, severe storms, storm surges, landslips, tsunamis, earthquakes, oil spills, droughts and extreme heat events.

## Aim

Becoming Australia's most disaster resilient State will involve encouraging and supporting all Queenslanders – the State and local governments, communities, businesses and individuals - to ensure that disaster resilience is assumed as a norm in our daily routines and business procedures.

The Strategy aims to:

- Provide strategic direction to achieve the Queensland Government's vision for resilience across all sectors: community, economy, natural environment and the built environment;
- Identify goals and outcomes for improvement in resilience at the State level against all hazards;
- Provide the mechanism to ensure that State disaster resilience activities are aligned appropriately with the Queensland Plan and Government priorities; and
- Provide agreed metrics to measure the performance of the State's disaster resilience activities.

## Guiding Principles

The following principles underpin Queensland's approach to building disaster resilience:

- **Locally owned** - Disaster resilience initiatives are locally owned, driven and developed in partnership with Local Governments, businesses, community groups and individuals.
- **Ongoing** - Disaster resilience is continual, not an end state.
- **Comprehensive** - Governments, communities, businesses and individuals plan comprehensively for resilience across the Prevent, Prepare, Respond and Recover phases of disaster management.
- **Adaptable** - Disaster resilience initiatives are adaptable to all hazards and reflect a wider adaptation to changing circumstances.
- **Logical** - Resilience initiatives encourage innovation and are based on the latest data and reflect best-practise, experience from previous disasters events and local common sense.

## Implementation

### At the State Level

The Strategy provides the State's strategic intent and mechanism to make Queensland the most disaster resilient state in Australia. It identifies the lead agencies responsible for the development and delivery of the State's disaster resilience goals and outcomes. The Strategy also documents the metrics and measurements or tools that will be employed to monitor the progress of the State's disaster resilience building initiatives.

Implementation of the initiatives detailed in Appendix 1 will be achieved through agency specific operational plans. Each of these activities must directly support the Strategy's goals and outcomes, with the progress of these activities monitored against metrics agreed across the agencies at Appendix 1.

Coordination of agency disaster resilience initiatives will be managed by the Department of Local Government, Community Recovery and Resilience.

Each State Government agency is to review and update their disaster resilience operational plan in April each year.

### At the Local and Community Level

Successfully building and maintaining a high level of local and community disaster resilience across the length and breadth of the State is paramount to achieving Queensland's disaster resilience vision.

In addition to knowledge, skills and experience that may be formally documented or passed informally within communities from one generation to the next, enhancing disaster resilience at the grass roots level can be supported through the State and local governments, community organisations and other stakeholders working closely together. For example:

- State agencies and local governments encourage regional, local and community groups, such as land-care groups, non-government organisations and local governments to reference the Strategy when developing future programs and post-disaster activities;
- State agencies provide information to small businesses, including non-government organisations, on business continuity planning and encourage self-monitoring and evaluation;

- State agencies and local governments actively engage with stakeholders, such as energy and water service providers and community services organisations, to share information to build resilience and local emergency response capability; and
- State agencies work closely with local governments to enhance existing capabilities to ensure that councils understand the processes of the Natural Disaster Relief and Recovery Arrangement (NDRRA) reconstruction funding programs and are able to nominate improvements to infrastructure that will result in the best resilience outcomes for their communities.
- Through the Get Ready Queensland Program and the delivery of initiatives detailed in the Strategy individuals, families and households are encouraged to build and maintain risk awareness and self-reliance.

Queensland's experience and exposure to major disaster events and the ever increasing costs associated with recovery and reconstruction necessitate the highest levels of community preparedness and awareness for all hazards. State agency and local government activities should ensure that disaster preparedness within the community is driven, monitored and evaluated.

## Metrics and Reporting

State agencies undertake resilience projects and activities to deliver on the goals and outcomes of the Strategy. Regular monitoring of the progress and effectiveness of these initiatives will be undertaken against the agreed metrics at Appendix 1.

A report which details the progress of the Strategy's goals and outcomes will be provided to Cabinet in November each year by the Minister for Local Government, Community Recovery and Resilience.

## Evaluation and Amendments

Review of the Strategy and continual improvement with regard to the State's initiatives are key considerations to build and maintain Queensland's vision for disaster resilience.

An ongoing process of evaluation and improvement is essential to ensure that limited resources are directed efficiently and effectively to develop and maintain disaster resilience. Post-operational reviews, program evaluations, participation in industry groups, stakeholder engagement and analysis of community data provide valuable information that can inform initiatives and approaches to better support communities to prepare for and recover from disasters.

The Strategy will be amended as required following submission of the annual progress report to Cabinet. At this time the Strategy may also be amended in recognition of lessons learnt after a disaster to improve existing plans and to support the dynamic nature of the State's economy, communities and environment.

## Governance

The Disaster Management Cabinet Committee (DMCC), chaired by the Minister for Local Government, Community Recovery and Resilience, will oversee the implementation of the Strategy.

The Minister for Local Government, Community Recovery and Resilience will drive the building of disaster resilience throughout Queensland and monitor its progress, directing action as required to ensure that Queensland's disaster resilience goals and outcomes are achieved in accordance with this Strategy.

The Chief Executive Officer Leadership Team (CLT) Sub-committee – Community Recovery and Resilience mirrors the DMCC and is chaired by the Director-General of the Department of Local Government, Community Recovery and Resilience. The CLT Sub-committee will:

- Provide strategic advice and recommendations to the DMCC with a whole-of-government focus on disaster resilience and mitigation issues;
- Coordinate State resilience and mitigation activities to reduce the impact of natural disasters within the scope of authority of the DMCC; and
- Recommend annual disaster mitigation priorities by natural hazard and by geographical location to the DMCC.

# 3. QUEENSLAND'S DISASTER RESILIENCE GOALS AND OUTCOMES

We can never completely mitigate the effects of every hazard experienced in Queensland but by building resilience in alignment with the Queensland Plan's foundation areas of community, economy, environment and infrastructure, we can lessen future impacts and recover more quickly.

## Goals

In Queensland, our disaster resilience goals are:

**Goal 1: Understand the risks and proactively prepare for disasters**

The Queensland Government, local governments, communities, businesses and individuals better understand the risks of disasters in Queensland and proactively prepare for disaster impacts and have the resources to drive their response and recovery.

**Goal 2: Minimise disaster impacts through flexible and adaptive planning**

The Queensland Government, local governments, communities, businesses and individuals have flexible continuity plans, utilising adaptable and flexible workforces, which enable the continued operation and provision of services that minimise the impact of disasters.

**Goal 3: The economy is able to withstand disaster events**

The economy is more robust and diverse; business and industry are able to withstand disaster events, recover quickly from disasters and capitalise on emerging opportunities.

**Goal 4: Reduction of risk to the built environment**

The built environment is better planned, constructed, reconstructed and managed to reduce hazard risk through the optimisation of disaster risk mitigation and can be recovered quickly to an acceptable level of service.

**Goal 5: The natural environment is recognised in planning and decision making**

The natural environment is better managed and protected and recognised in planning and decision making for its resilience value.

**Goal 6: Essential infrastructure and transport systems are disaster resilient**

Transport systems and essential infrastructure, including digital and communication networks, water supply and sewage treatment facilities, are more accessible, integrated, safer, efficient and reliable, with a reduction in the time and cost of their recovery and reconstruction after a disaster.

**Goal 7: Governments take a proactive approach to disaster risk reduction**

The Queensland and Local governments take a proactive approach to disaster risk reduction.

**Goal 8: Greater disaster resilience of public infrastructure after disasters**

Disaster response, recovery and rebuilding activities capitalise on opportunities to feature greater disaster resilience in public infrastructure.

## Outcomes

The expected outcomes of these disaster resilient goals are provided at Appendix 1.

# 4. FUNCTIONAL DISASTER RESILIENCE

A functional approach, guided by function specific key principles will be undertaken to achieve the Queensland Government's vision to enhance disaster resilience across all sectors of the state: community, economy, natural environment and the built environment.

## Community Resilience

| What is resilience in the community? |
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| The ability of individuals, families and communities to prepare for, recover from and adapt to the human and social impacts of disaster events. |

### *Key Principles*

- **Taking responsibility** – ultimately, resilience is dependent on individuals, families and communities taking responsibility for building their capacity and capability to withstand and recover from disasters.
- **Engagement and partnership**– resilience cannot be mandated by the Government; building a disaster resilient future requires the engagement of Government with all sectors of society.
- **Balancing support with capacity building** – using needs assessments, support is provided to those with the greatest need and is balanced with programs that encourage communities to apply their own skills and capacities to overcome disaster impacts.
- **Dynamic nature of resilience** - acknowledging the different levels of resilience between each community and individual or family and that these levels change over time.

**Community-led Rebuilding in Bundaberg and North Burnett**

Following Tropical Cyclone Oswald in January 2013, local church groups in Bundaberg identified that a large number of households had been financially unable to complete repairs to their homes, leaving them with an uncertain future.

The Combined Churches of Bundaberg and the Salvation Army joined forces to establish the Community Rebuild Group. The Group is working with vulnerable members of the community who need assistance to complete repairs to their homes, sourcing volunteers and donated materials to assist the rebuilding process.

While supported by the Department of Communities, Child Safety and Disability Services, the initiative has been entirely managed by community leaders, thereby demonstrating a strong local capacity to assist those with the greatest need.

## Economic Resilience

| What is resilience in the economy? |
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| The ability of communities to prepare for, respond to and quickly recover from economic impacts caused by a disaster event. |

### *Key Principles*

- **Foster economic diversity –** a diversified economy promotes economic stability and growth and is less vulnerable to single-sector impacts.
- **Build a more resilient workforce through education and training** – a skilled and well-educated workforce has job mobility and opportunities, providing more options to individuals and communities to recover from disasters.
- **Simplify business regulation** – improved efficiency of regulatory systems provides businesses with the ability to recover quickly from disasters, make productivity-enhancing changes and access new or re-enter existing markets and supply chains.

| Queensland Agriculture Strategy |
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| The *Queensland Agriculture Strategy* establishes a target to double Queensland agricultural production by 2040. Building resilience in the agriculture sector is a key platform for achieving this target.<br>The Strategy emphasises programs which build preparedness and business decision making capability, and facilitate a stronger economic foundation for the industry. |

## Natural Environment Resilience

| What is resilience in the natural environment? |
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| The capacity of the natural environment to respond to a disturbance or on-going change by resisting damage and recovering quickly. |

### *Key Principles*

- **Well managed natural systems** – manage key natural assets, so that healthy and resilient landscapes can help to reduce the impacts of floods and cyclones on the environments, economy, community and infrastructure.
- **Emphasise connectivity** - maintain the connectivity of the natural environment, so that species and ecosystems are better able to withstand or adapt to hazards and changes.
- **Adaptive management** - planning, development and environmental management should apply a flexible, adaptive management approach.
- **Multiple benefits approach** – management of the environment, economy, human and social elements, and infrastructure should be integrated to achieve sustainability and resilience across all sectors.

# Built Environment Resilience

| What is resilience in the built environment? |
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| The ability to reduce disaster impacts and rapidly recover the built environment to a desired level of functioning after a disaster event. |

## *Key principles: Roads and Transport*

- **Multi-modal transport approach** - Apply a comprehensive approach to roads and transport that considers the interaction and interdependencies of modes, routes and systems including assets, people, the community and services
- **Connect Queensland to build prosperity** - prioritise works and focus on an asset's role and purpose so both industry and community needs are met and, where necessary and safe to do so, sacrifice the short term condition of a hard infrastructure asset or service to restore access for community and industry to recover and rebuild.
- **Build value-for-money infrastructure** - build assets and systems that are value for money in the short and long term that include consideration of the probability and costs of future disasters and are designed to minimise impacts and recovery costs.
- **Assess business for resilience -** Design systems and networks with a view to resilience so they withstand disasters and challenge standards and norms to innovate when building assets and developing services.
- **Build our capability and capacity** - Organisations are disaster prepared, staff are well trained and engagement with industry and non-government organisations prior to and during disasters to build capability and capacity.

**Resilient Transport Infrastructure**

Flooding of the Burnett River in late January 2013 caused significant damage to the Tallon Bridge on the Isis Highway in Bundaberg. This bridge provides access for the North Bundaberg community, businesses and agricultural industry to the Bundaberg town centre.

The Department of Transport and Main Roads prioritised repair of the bridge and completed works within two weeks of the flooding. Access was restored allowing residents and recovery services to clean up and repair damaged homes and businesses, and the ability for people to recover and rebuild.

Innovative technology and engineering applied in the bridge repairs ensured a value for money solution and will provide greater resilience for the asset in future flooding event.

TMR staff applied their disaster preparedness training, proving their resilience and both capacity and capability to deliver works in partnership with industry.

## *Key principles: Utilities, Housing and Commercial and Public Building*

- **Safety and health are paramount** – Use designs that address issues relating to safety, health and amenity, and build community resilience to potential impacts of hazards in a cost effective manner.
- **Systematic approach** - Use a systematic assessment of the natural disaster and other hazards on critical community infrastructure to support future adaptation strategies and strengthen the disaster resilience of communities.
- **Evidence-based approach** - Use an evidence-based approach to identify current and future assets at risk and determine appropriate risk mitigation strategies and design built infrastructure to

**Building for Resilience**

In 2012, Queensland adopted the new Queensland Development Code for construction of buildings in flood hazard areas.

The code will protect new buildings against flood hazard through innovative measures such as raising critical services above the defined flood level, protecting drains from sewerage backflow and using materials capable of resisting damage from flood waters.

minimise the cost and duration of recovery while supporting positive urban and economic development.

- **Innovate in design** - Use innovative designs to enhance the disaster resilience of assets and systems, particularly when reconstructing public assets after disasters.

## Betterment

| What is Betterment? |
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| The process of building back disaster-damaged public infrastructure in a way that makes it more resilient to future natural disasters. Betterment can be considered the link between recovery and mitigation against future disasters. |

Following Tropical Cyclone Oswald in 2013 and four previous years of disasters causing major damage in Queensland, the Queensland Government initiated a Betterment Fund. This Fund enables damaged public infrastructure to be rebuilt in a more resilient way rather than just being replaced to current engineering standards under the standard Natural Disaster Relief and Recovery Arrangements (NDRRA).

The Queensland Government's $40 million investment was matched by the Commonwealth Government, creating the $80 million Queensland Betterment Fund.

### *Key Principles*

- **Safer and more usable infrastructure** - the intent of the Fund is to construct public infrastructure to be safer and more useable during and after a disaster, while at the same time reducing future expenditure on asset restoration.
- **Reduction of impacts in future disasters** - investment in more resilient public infrastructure such as the raising, realignment or reconstruction of damaged roads, culverts and bridges to a higher standard will assist in the reduction of future impacts from flooding and heavy rainfall. Communities will be less isolated during and after disaster events.
- **Avoid repeated damage** - Betterment is particularly relevant for infrastructure that has been repeatedly damaged, where it has been rebuilt to its previous standard only to suffer further damage.

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| Queensland Betterment Fund in the North Burnett |
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| Gayndah-Mundubbera Road is an essential freight and transport link for the North Burnett region, connecting the highly productive agricultural towns of Gayndah and Mundubbera.<br><br>The road sustained significant damage in 2011 and again in the 2013 floods, when approximately two kilometres was completely washed away. The damage closed the road for three months, forcing the local community and emergency services to use an alternative route.<br><br>North Burnett Regional Council's betterment project will relocate the two kilometre section of the road uphill by up to 11 metres, and construct new stormwater drainage to provide more flood protection. These works will increase the resilience of the section that was washed out as well as provide better functionality of the entire Gayndah-Mundubbera Road.<br><br>The total cost of the Gayndah-Mundubbera Road betterment project is estimated at $8,857,472, with $1,971,765 provided through the Queensland Betterment Fund, a joint State and Commonwealth initiative. |

# APPENDIX 1: ACHIEVING QUEENSLAND'S VISION OF DISASTER RESILIENCE

Initiatives and projects to be undertaken by lead agencies to meet the vision to make Queensland the most disaster resilient State in Australia.

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| **Goal 1: Understand the risks and proactively prepare for disasters**<br>The Queensland Government, local governments, communities, businesses and individuals better understand the risks of disasters in Queensland and proactively prepare for disaster impacts and have the personal and financial resources to drive their response and recovery. | Improved self-reliance and resilience of individuals, families and communities to disaster events. | DLGCRR | Annual Resilience Action Plan. | Annual Resilience Action Plan is developed with regular reporting to Cabinet | 2013 to 2017 |
| | | DCCSDS | Review of the Community Recovery Reforms. | Grants and Payment Data<br>Rapid Damage Assessments / Targeted Activation Zones<br>Referrals to Queensland Police Service | Phased implementation over 2013-14 and 2014-15 severe storm seasons |
| | | QH | An increase in the level of community awareness of psychological first aid.<br>An increase in capacity to manage mental health referrals or cases. | Flood recovery program and post-disaster reporting | Phased implementation over four years to 2017. |
| | Improved access to locally relevant knowledge about disaster risks. | QFES<br>QPS<br>IGEM | An increase in the level of disaster risk awareness and preparedness in the community. | Queensland Resilience Index | Four year campaign to 2017 through an annual delivery program. |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | | QFES | River profile for each catchment developed identifying real-world impacts on population centres.<br>Business Continuity Planning Resource for Aged Care Facilities<br>SES Volunteer Community Education promotes risk assessment, planning and preparedness activities by households. | Flood warnings reference local known land marks.<br>Website Downloads<br>Queensland Community Preparedness Survey<br>SES resources distributed | 2014 Season and beyond<br>Ongoing<br>Annual |
| | Engagement with key partners in the business sector and NGOs to build resilience. | DLGCRR | Businesses develop greater understanding of disaster risk exposure and develop appropriate business continuity arrangements.<br>Business and NGOs are actively involved in building community resilience. | Get Ready Queensland evaluation report | Four year campaign to 2017 through an annual delivery program. |
| **Goal 2: Minimise disaster impacts through flexible and adaptive planning**<br>The Queensland Government, local governments, communities, businesses and individuals have flexible continuity plans, | Improved capacity of local governments and communities to plan and manage their local disaster preparedness plans and local human and social recovery plans following a disaster. | DLGCRR<br>IGEM<br>QPS | Amount of project funding distributed through the Get Ready Queensland Initiative.<br>Level of household preparedness for disaster events. | Get Ready Queensland evaluation report<br>Queensland Community Disaster Preparedness Survey.<br>Queensland Resilience Index Survey | Four year campaign to 2017 through an annual delivery program. |
| | | QFES | Business Continuity Planning | Website Downloads | Ongoing |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| utilising adaptable and flexible workforces, which enable the continued operation and provision of services that minimise the impact of disasters. | | | Resource for Aged Care Facilities. | | |
| | Local Governments have the capacity and capability to identify and mitigate risks to the community. | DLGCRR | Amount of project funding distributed through Local Government Grants and Subsidies Scheme and the Natural Disaster Resilience Program to assist local governments to implement disaster risk reduction strategies. | Grants Management System | Annual, ongoing |
| | | QFES | Number of local governments with current disaster management plans that include recovery activities. | Annual Evaluation of Local Disaster Management Plans | 2014 evaluation timetable and process to be determined |
| | Economic resilience is emphasised in planning activities and plan for the support and redeployment of displaced workers following disasters. | DSDIP | Improved planning and floodplain management of the Brisbane River Catchment. | Brisbane River Catchment Flood Study completed and Floodplain Management Plan developed | Completion due end of 2017 |
| | | DNRM DSDIP | Regulatory Framework and Assessment codes for levees developed. | Regulatory Framework in Place | Completion due first half of 2014 |
| | | DSDIP | Planning schemes implemented under the Single State Planning Policy. | Number of planning schemes endorsed as integrated by the Single State Planning Policy | Annual, ongoing |
| | Encourage local government water businesses to commit to | DEWS | Level of integration of mutual aid arrangements in local disaster | All drinking water service providers have approved | Reviewed and updated by the |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | mutual aid arrangements for the rapid repair of critical drinking water and sewerage infrastructure in the immediate aftermath of natural disasters. | | management plans. | Drinking Water Quality Management Plans<br>Service providers are encouraged to engage with other local service providers to respond to damage after natural disasters | end of the approval period.<br>Maximum approval period is 5 years. |
| **Goal 3: The economy is able to withstand disaster events**<br>The economy is more robust and diverse; business and industry are able to withstand disaster events, recover quickly from disasters and capitalise on emerging opportunities. | Businesses and key industries have prepared for and can recover effectively from disasters. | DLGCRR | Level of disaster preparedness and business continuity planning in businesses and key industries. | Get Ready Queensland evaluation report | Four year campaign to 2017 through an annual delivery program. |
| | | DAFF<br>DSITIA | In line with the National Drought reform process*:<br>Develop and deliver training programs to better integrate climate risk such as drought and natural disasters into farm business planning<br>With DSITIA, develop and deliver decision support tools to assist producers integrate climate risks such as drought and natural disaster into farm business planning<br>* Subject to current budget and cabinet processes. | Training package developed<br>Tools produced and rate of adoption measured via online activity | 2014/15 |
| | | DNRM | Number of hectares treated for pest plants. | Proponent reporting on relevant flood recovery | Annual, ongoing |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | | | Number of properties assisted with soil conservation advice. | grant programs | |
| | | | Reduced risks relating to mine, gas and explosives amongst industry and within the community.<br>Reduced issues post disaster event due to more effective planning and preparedness by industry/community | Peak industry body and community group feedback | |
| | | DSITIA | Contact centre scripting and on-line content are delivered to assist to client agencies under the terms of service level agreements. | Key performance indicators and reporting arrangements.as per individual agreements | Monthly reporting to client agencies (business as usual) |
| | | DTESB<br>DSDIP | Provision of information via the web to assist business prepare for and recover from a disaster event. | Number of website visits and information downloaded.<br>Number of clients assisted. | Annual, ongoing |
| | Critical economic infrastructure has been identified, prioritised and invested in to minimise disaster impacts. | DSDIP | Royalties for the Regions investment is consistent with State Budget commitment. | Amount of project funding approved through Royalties for the Regions Program. | Funding available from 2012 to 2016 |
| | | QldRA | Amount of project funding distributed through the Betterment Fund (funding to be approved in 2013-14 financial year). | QldRA monthly reporting (publicly available via QldRA website) | All funded projects complete 2015 |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | | | NDRRA Category D projects (Brisbane Riverwalk and Ferry Terminals) completed. | Quarterly progress reports from Brisbane City Council | Brisbane Riverwalk due July 2014<br>Brisbane Ferry Terminals due June 2015 |
| | Key supply chains have been identified, protected and sustained. | DSDIP | The final Queensland Ports Strategy released. | Public Release of Qld Ports Strategy | December 2014 |
| | | DTMR | Bruce Highway Action Plan projects completed in accordance with the schedule. | Bruce Highway Upgrades Investment Reporting | Projects being delivered over 10 years to 2022. |
| | | DSITIA | Timely completion of ad-hoc payments to providers of response and recovery activities, sustaining capacity to respond and 'good will' within the business community. Services are delivered to client agencies under the terms of service level agreements that establish key performance indicators and reporting arrangements. | As per individual agreements through:<br>Queensland Shared Services<br>Corporate Administration Agency | Monthly reporting to client agencies (business as usual) |
| **Goal 4: Reduction of risk to the built environment**<br>The built environment is better planned, constructed, reconstructed and managed | Integrated, reliable and regular reports on the impact of a disaster and progress of recovery and reconstruction phases, and the forward program of works are provided. | DTMR | Improved 13 19 40 Traffic Information Service functionality and capability.<br>Accurate and timely provision of 13 19 40 Traffic Information Services to the community and | Expert usability assessment of each major upgrade<br>Focus group feedback with internal stakeholders<br>Audit of quality and | Ongoing |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| to reduce hazard risk through the optimisation of disaster risk mitigation and can be recovered quickly to an acceptable level of service. | | | agencies.<br>Positive feedback from stakeholders regarding the 13 19 40 Traffic Information Services. | timeliness of regional data provision to 131940<br>Customer satisfaction survey | |
| | | DTMR | Accuracy and accessibility of spatial data across TMR.<br>Priority spatial data available across TMR. | Accuracy of reporting<br>Spatial data available is current | Ongoing |
| | | DTMR | Increased level of Geographic information System (GIS) data sharing with other agencies via web service access. | Duplication of effort is reduced across Qld government<br>Number of spatial datasets being consumed by and published to the Open Geospatial Consortium (OGC) web service | Ongoing |
| | | DTMR | Continuity Process, Continuity Network Response Plan and the Extreme Weather Event Contingency Plans/Cyclone Contingency Plans are reviewed each year. | Assessment and review of activity and the value derived annually | Annually and post-event |
| | Identification of the acceptable and non-acceptable consequences for infrastructure due to a disaster. | DHPW | Development and dissemination of guidelines and materials to state government agencies. | Agency satisfaction<br>Agreed timelines met | End of 2014 |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | Consideration of building design, the expected longevity (and continued operation) of the building before, during and after a disaster. | DHPW | Monitor existing National Construction Code requirements and update guidelines and materials as appropriate. | Timeliness of release of updated guidance material | Ongoing |
| **Goal 5: The natural environment is recognised in planning and decision making**<br>The natural environment is better managed and protected and recognised in planning and decision making for its resilience value. | Queensland communities and the built environment are better able to adapt to climate conditions by drawing on natural environment solutions. | EHP | Percentage of actions implemented under a climate adaptation strategy for Queensland. | Queensland climate adaptation strategy annual implementation report | Annual from 2016 |
| | Promotion of innovative and more effective environmental and land management practices by protecting land and water for its conservation and resilience values. | EHP | Uptake of best practices across industries and sectors. | State of Environment Qld Report<br>Water Quality Report Cards (eg. Reef; Gladstone Healthy Harbour Partnerships; SEQ Healthy Waterways) | End of 2015<br>Annual |
| | | DAFF | | Management practice indicators as measured through Annual Reef Plan Report Card | Ongoing |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | | DEWS | | Number of electricity Community Infrastructure Designations (CIDS) approved under the Sustainable Planning Act 2009 that includes assessment criteria of flood planning controls and erosion mitigation measures | Ongoing |
| | | DNRM | Areas under improved land management practices to improve the condition of natural assets and reduce flood impacts. | Specific flood recovery program reporting | Ongoing |
| | | DAFF | Improved level of soil quality. | As measured through participation in the BMP program. | Ongoing |
| | | EHP | Greater level of access and use of science / research information and tools that support improved water quality and long term productivity. | Number of hits to environmental-climate datasets made available through the Queensland Globe and other government websites (eg. eReef; WetlandInfo; longpaddock) | Annual |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
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| | The natural environment is more resilient to hazards. | EHP | Improved condition of ecosystems. | State of Environment Qld Report<br><br>Water Quality Report Cards (eg. Reef; Gladstone Healthy Harbour Partnerships; SEQ Healthy Waterways) | End 2015<br><br>Annual |
| | | EHP<br>DNPRSR | Proportion of the state listed as Protected Area Estate. | State of Environment Qld Report | End of 2015 |
| **Goal 6: Essential infrastructure and transport systems are disaster resilient**<br>Transport systems and essential infrastructure, including digital and communication networks, water supply and sewage treatment facilities are more accessible, integrated, safer, | Queensland keeps moving by building road and transport network assets and systems which are more resilient to disasters. | DTMR | Reduced annual NDRRA expenditure on upgraded locations.<br>Reduced annual duration of closures on the state-controlled network.<br>Improved safety, flood immunity and capacity of the Bruce Highway. | Financial reports to track NDRRA expenditure.<br>131940 data<br>Road crash data, 131940 data and Annual Average Daily Transit (AADT) data | To June 2014<br>2022 for Bruce Highway Action Plan |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| efficient and reliable, with a reduction in the time and cost of their recovery and reconstruction after a disaster. | Reduced time and cost of repairing assets following disasters. | DTMR | Reduced annual NDRRA expenditure on upgraded locations.<br>Reduced annual duration of closures on the state-controlled network. | Financial reports to track NDRRA expenditure.<br>131940 data | Ongoing |
| | Critical infrastructure owners (including Government Owned Corporations) work together to improve response arrangements | DEWS | Increased level of access to key situational information for timely decision-making. | Representation at State, district and local disaster management groups;<br>Number of training exercises and post incident reviews;<br>Number of post exercise/incident recommendations implemented<br>Reviews of emergency communication plans | Reviews of plans annually |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
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| | Dam operations are identified for balancing flood mitigation and water supply security. | DEWS | Approved Flood Mitigation Manuals are in place for Wivenhoe, Somerset and North Pine Dams | Compliance with Water Supply (Safety and Reliability) Act 2008 | As required.<br>Flood Mitigation Manuals are approved for 5 years as a maximum however can be reviewed at any time by the dam owner or at the request of the Minister. |
| | Public health issues concerning drinking water after a disaster are managed, and preventative actions are undertaken if required. | QH | Water service providers are monitored. | Report of monitoring outcomes | Ongoing during disaster recovery |
| | | DEWS | Evidence of inclusion in Drinking Water Quality Management Plans of appropriate mitigation strategies for the impact on continuity of drinking water supply of adverse water quality events. | Assessed through risk assessment and incident and emergency management sections of drinking water quality management plans | At the time of approval of drinking water quality management plan |
| | Emergency Action Plans (EAPs) are in place for referable dams to ensure appropriate action is taken by dam owners in the event of a | DEWS | Plans and incidents are regularly reviewed | Greater than 90% of EAPs are submitted by the due date. | EAPs are reviewed and submitted by the end of the approval period. |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
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| | disaster. | | | | This can be between 1-3 years. |
| | The Betterment Fund is administered and funds are distributed to local governments<br>. | QldRA | Funding is distributed to eligible NDRRA projects that will result in an improved level of flood immunity and resilience, and improved community benefits.<br>All successful projects approved by June 2014.<br>All funded local government projects are completed by 2015. | QldRA monthly reporting - 220 projects, $78.5 million approved (remainder being withheld).<br>Quarterly progress reports from Brisbane City Council | All funded projects complete 2015<br>Post-future disasters. Funding to be approved for 2013-14 financial year. |
| | | QldRA | Ongoing discussions to facilitate betterment fund availability for future events for State and Local assets | Flood recovery program reporting | Post future disasters |
| **Goal 7: Governments take a proactive approach to disaster risk reduction**<br>The Queensland and local governments take a proactive approach to disaster risk reduction. | Enhance local governments' awareness of their exposure to hazards and proactively identify disaster mitigation and resilience funding initiatives for their communities. | DLGCRR | Natural Disaster Resilience Program grants are effectively administered and linked to risks and Queensland Government risk based priorities. | Grant management system | Annual.<br>Funding amount to be determined with Federal Government. |
| | | DLGCRR | Local Government Grants and Subsidy Program is effectively administered and targeted to at-risk Local governments. | Grant management system | Annual.<br>$25m 2013-14 |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | | | Local government projects are completed within specified timeframes. | | 2013-14 |
| | | DSITIA | Science Delivery Division provides scientific and engineering advice to government agencies through memorandums of understandings and other service arrangements that determine key performance indicators and reporting expectations. | As per individual agreements. | Reporting to client agencies (business as usual) |
| | | DNRM | Up to 60 additional towns to be completed with Level 2 flood mapping, up to 20 river basin modelled at a strategic level, and previous work updated to meet Council requirements | The number of towns/ basins / upgrades will be reported by status quarterly | To Dec 2014 |
| | | DNRM | Provision of Flood Check portal and ensure a coordinated approach to the provision of flood warning information by establishment of guidelines for operation. | The utility of the webportal will be measured by the number of web visits. | Ongoing |
| | Governments are able to manage their public records, particularly vital records and records of | DSITIA | Queensland State Archives provides effective guidance and advisory services in relation to | Assessment of agencies accessing records | Annual review of documented guidelines and |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | permanent value, appropriately. | | disaster preparedness and response for public records and on the preservation and restoration of critical public records. | completed annually. | advice upon request. |
| **Goal 8: Greater disaster resilience of public infrastructure after disasters**<br>Post-disaster recovery and rebuilding activities capitalise on opportunities to feature greater disaster resilience in public infrastructure. | Delivery of services that enable greater business outcomes across government. | DTMR | Conduct an exercise engaging key maritime and industry peak bodies to raise awareness of the Queensland Coastal Contingency Action Plan. | Assessment of business activity completed annually. | Annually |
| | | DTMR | Data is used for multiple purposes within TMR and other government agencies<br><br>Extend data capture to cover greater portion of the state controlled road network. | Number of TMR business units accessing data.<br>Number of external organisations accessing the data.<br>Geographical Information System (GIS) data available.<br>Kilometres of the State Controlled Road Network captured | Ongoing |
| | Local government projects are assessed in terms of their resilience outcomes and their | QldRA | Local Governments are assisted to rebuild damaged infrastructure to a more disaster | Quarterly progress reports. Post-disaster damage assessments for | To June 2015<br>Post-future |

| Goal | Outcome | Lead Agency | Metrics | Measurement Method/Tool | Anticipated Timing |
|---|---|---|---|---|---|
| | eligibility under NDRRA. | | resilient standard. | future disasters. | disasters |
| | Initiatives from the Queensland Floods Commission of Inquiry Report, 2012 are undertaken to ensure critical infrastructure remains operational during and immediately after a flood of a particular magnitude. | DEWS | Degree to which infrastructure and systems remain operational during and immediately after impact by a disaster (with reference to the *Sustainable Planning Act 2009* and the *Electricity Act 1994*). | Number of electricity Community Infrastructure Designations (CIDS) approved under the Sustainable Planning Act 2009 that includes assessment criteria of flood planning controls.<br>Situation Reports advising of the effective deployment of generators and other assets during flooding event/s | Ongoing |
| | | DEWS | New requirements for dedicated assets and electricity infrastructure to be built at or above applicable defined flood levels | Completed Annual Network Management Planning<br>Completed Flood Risk Management Plans<br>Completed Summer Preparedness Plans (as required)<br>Disaster Management Plans reviewed and updated. | Plans reviewed regularly or as required<br>Updates placed on GOC websites in September and November |

# APPENDIX 2: ABBREVIATIONS

| | |
|---|---|
| BMP | Best Management Practice |
| CLT | Chief Executive Officer Leadership Team |
| DAFF | Department of Agriculture, Fisheries and Forestry |
| DCCSDS | Department of Communities, Child Safety and Disability Services |
| DEWS | Department of Energy and Water Supply |
| DHPW | Department of Housing and Public Works |
| DLGCRR | Department of Local Government, Community Recovery and Resilience |
| DMCC | Disaster Management Cabinet Committee |
| DNRM | Department of Natural Resources and Mines |
| DNPRSR | Department of National Parks, Recreation, Sport and Racing |
| DSDIP | Department of State Development, Infrastructure and Planning |
| DSITIA | Department of Science, Information Technology, Innovation and the Arts |
| DTESB | Department of Tourism, Major Events, Small Business and the Commonwealth Games |
| DTMR | Department of Transport and Main Roads |
| EHP | Department of Environment and Heritage Protection |
| GIS | Geographic Information System |
| IGEM | Office of the Inspector-General of Emergency Management |
| NDRRA | Natural Disaster Relief and Recovery Arrangements |
| NGO | Non-Government Organisation |
| NSDR | National Strategy for Disaster Resilience |
| QFES | Queensland Fire and Emergency Services |
| QH | Queensland Health |
| QldRA | Queensland Reconstruction Authority |
| QPS | Queensland Police Service |
| SDCG | State Disaster Coordination Group |
| SDMG | State Disaster Mitigation Group |
| Strategy | Queensland Strategy for Disaster Resilience |