



A connected catchment

Burnett Catchment Flood Resilience Strategy – an overview

A pilot partnership to improve flood resilience across the Burnett River Catchment

May 2018

Document details:

Security classification	Approved
Date of review of security classification	May 2018
Authority	Queensland Reconstruction Authority
Author	Executive Director, Resilience
Document status	Final
Version	1.0

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Information security

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Queenslanders are disaster resilient when...



Foreword

A connected catchment is a resilient catchment.

The Burnett region has endured several severe weather events in recent years, from the devastating floods of 2013, to local flooding from heavy rainfall and significant property damage from severe thunderstorms.

These experiences have taught us to value the things that make us resilient - our networks, our sense of community, our connection to the landscape and our strong desire for a happy and healthy lifestyle.

It is by building on these strengths that our region will prosper into the future. A future where we are better able to cope with whatever nature throws our way, and where everyone works together across the catchment to create shared solutions to common problems.

A Connected Catchment - the Burnett Catchment Flood Resilience Strategy provides the blueprint to get us there. We are pleased to have the opportunity to work collaboratively across local governments and in partnership with the Queensland Government and other local stakeholders to deliver this state-first approach to flood resilience.

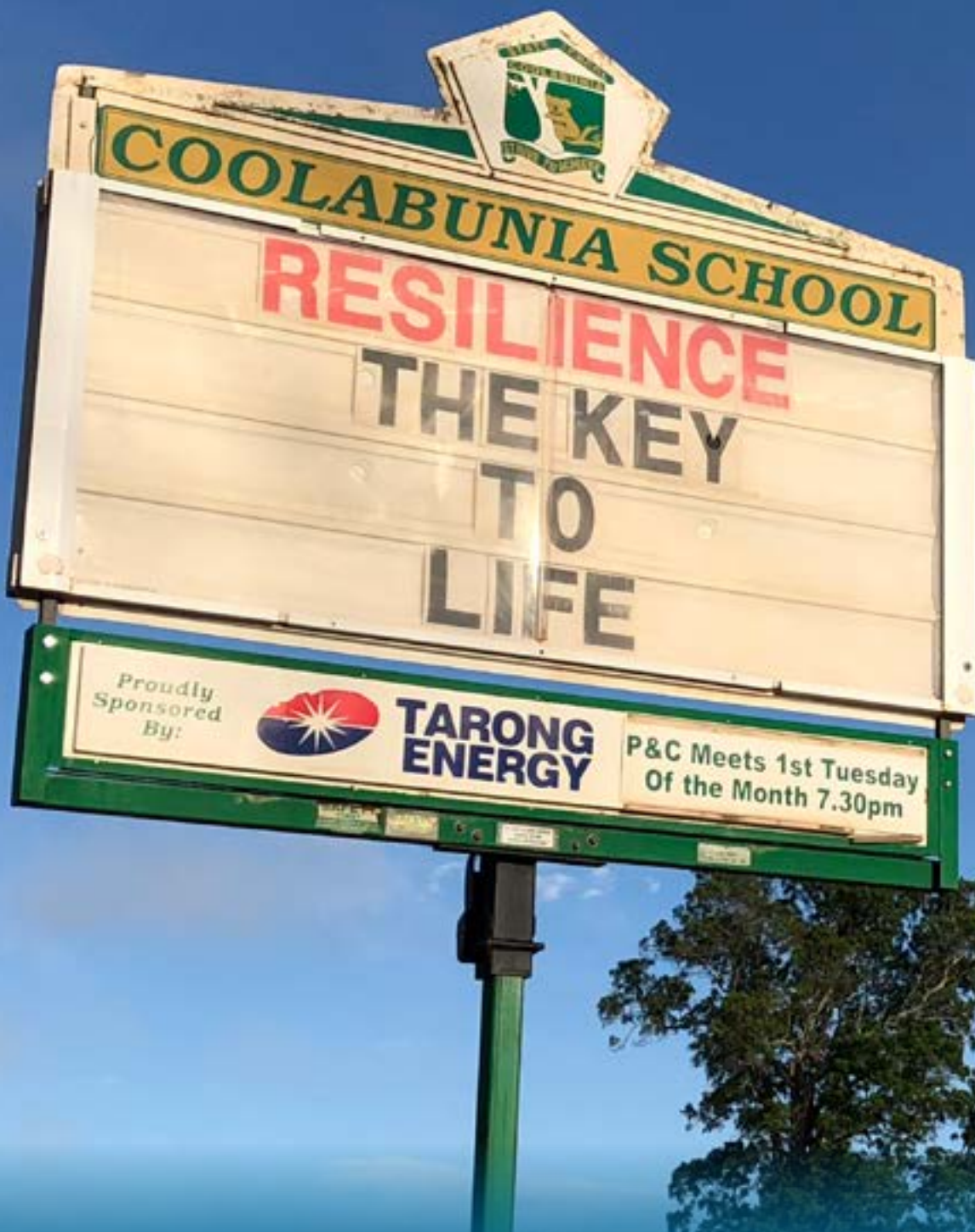
The pilot project was delivered in partnership with the Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, North Burnett Regional Council, South Burnett Regional Council, Wide Bay Burnett Regional Organisation of Councils and the Queensland Reconstruction Authority.

We are proud that the Burnett Catchment has been the first pilot project for a catchment-scale flood resilience plan in Queensland, and hold high hopes that this Strategy sets a new course for how resilience to floods and multi-hazards is improved across Queensland.



Councillor Mick Curran

Chairman of the Wide Bay Burnett Regional Organisation of Councils

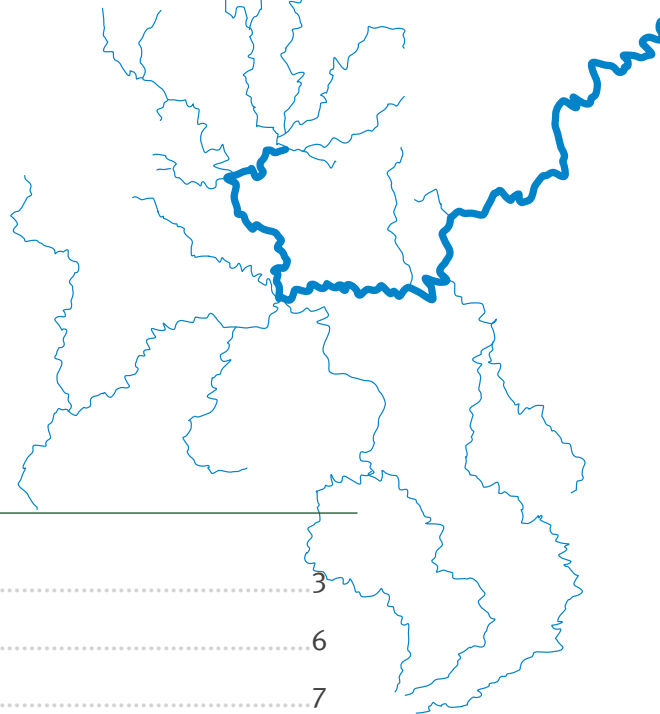


The following organisations were involved in the development of the *Burnett Catchment Flood Resilience Strategy*:

- Wide Bay Burnett Regional Organisation of Councils
- Bundaberg Regional Council
- Cherbourg Aboriginal Shire Council

- North Burnett Regional Council
- South Burnett Regional Council
- Queensland Reconstruction Authority
- Department of State Development, Manufacturing, Infrastructure, and Planning
- Department of Transport and Main Roads

- Queensland Fire and Emergency Services
- Department of Agriculture and Fisheries
- Department of Environment and Science
- Department of Premier and Cabinet



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This document outlines a consistent and coordinated approach to managing flood risk across the Burnett River Catchment. The catchment includes the four local government areas of Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, North Burnett Regional Council and South Burnett Regional Council.

Our shared vision of flood resilience

We are well practiced in preparing for, dealing with and recovering from flood impacts.

We collaborate across boundaries, disciplines and industries to stand together ‘as one’.

We value our local knowledge and eagerly share this with others for the benefit of our catchment-wide community.

We demonstrate grassroots leadership in flood risk management – built from a sense of community wellbeing and connectedness.

We harness the power and capability of our on-the-ground networks of people – formal and informal.

We take timely and committed action for collective benefit.

Our reliance on each other in the face of disasters is what makes us resilient.

We are a connected catchment.

About the Burnett Catchment Flood Resilience Strategy

In recent years, repeated and severe flooding has impacted the properties and livelihoods of those living and working in the Burnett River Catchment. Households, communities and governments have worked together to recover well from these events. However, the region is not immune to future floods of a similar, or possibly larger scale than that of recent years. Therefore, it is critical to investigate ways we can better prepare for the future by coordinating efforts, sharing knowledge and capability, and setting a proactive agenda for improving resilience over time across the catchment.

The purpose of the Burnett Catchment Flood Resilience Strategy (the Strategy) is to guide how we work together to proactively reduce flood risk and increase resilience throughout the catchment. It provides pathways for improving resilience over time, and a clear suite of strategies outlining the range of approaches required to improve the flood resilience of the catchment as well as government systems that are critical to its success.

Strategy objectives

The Strategy is a regional-scale blueprint for coordinated resilience action that will work to the following objectives:

- **build a resilient society** through stronger community networks and a greater ability to adapt
- **enhance economic resilience** through resource management, encouraging business diversity, focusing on collaboration across public and private sectors, enabling infrastructure and business continuity planning
- **improve infrastructure** through pathways for improved communications and transport linkages for societal and economic benefits
- **advance disaster recovery operations** and adapting communities to change
- **increase government capability and capacity** through knowledge sharing and resourcing
- **improve funding certainty** through proactive planning, prioritisation and coordination for collective benefit.

More information is available at www.qra.qld.gov.au/burnett

Integrated catchment planning

Resilience that is locally led, regionally coordinated and state facilitated

The Strategy is built upon a new philosophy in disaster resilience practice. It ties together traditional aspects of the disaster management cycle and links them to broader social, economic, environmental, and settlement systems.

In the past, reliance has been placed on hard infrastructure as a means of improving resilience. While mitigation infrastructure, and catalysing and connecting infrastructure remain critical for resilience, this new philosophy values the need to advance community, individual and resilience solutions just as much as hard infrastructure.

Combining national best practice flood risk management with integrated catchment planning is a new take on the traditional process of flood risk management.

Integrated catchment planning recognises that complex inter-relationships exist across the catchment. It offers a systematic approach to integrated, cross-discipline opportunities, which consider the entirety of the area contributing to our floodplain.

“ Strategic flood risk management is the process of data and information gathering, risk analysis and evaluation, appraisal of options, and making, implementing, and reviewing decisions to reduce, control, accept, or redistribute flood risks. It is a continuous process of analysis, adjustment and adaptation of policies and actions taken to reduce flood risk (including modifying the probability of flooding and its severity as well as the vulnerability and resilience of the receptors threatened). Strategic flood management takes place as part of a wider approach of integrated basin (or coastal) planning and focuses on reducing flood risks and promoting environmental, societal and economic opportunities (both now and in the longer term). It recognises that risks can never be removed entirely and that reducing risk is often at the expense of other societal goals.”

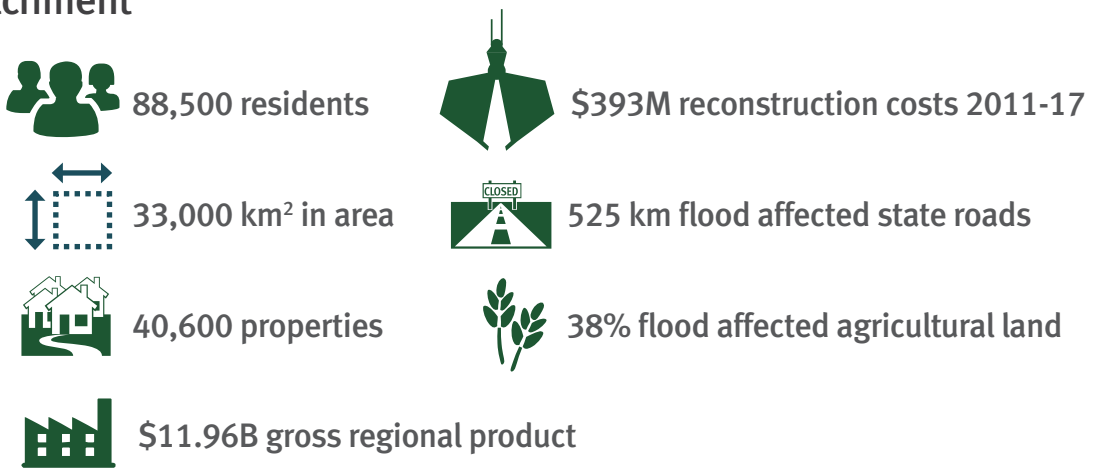
Paul Sayers (2017)



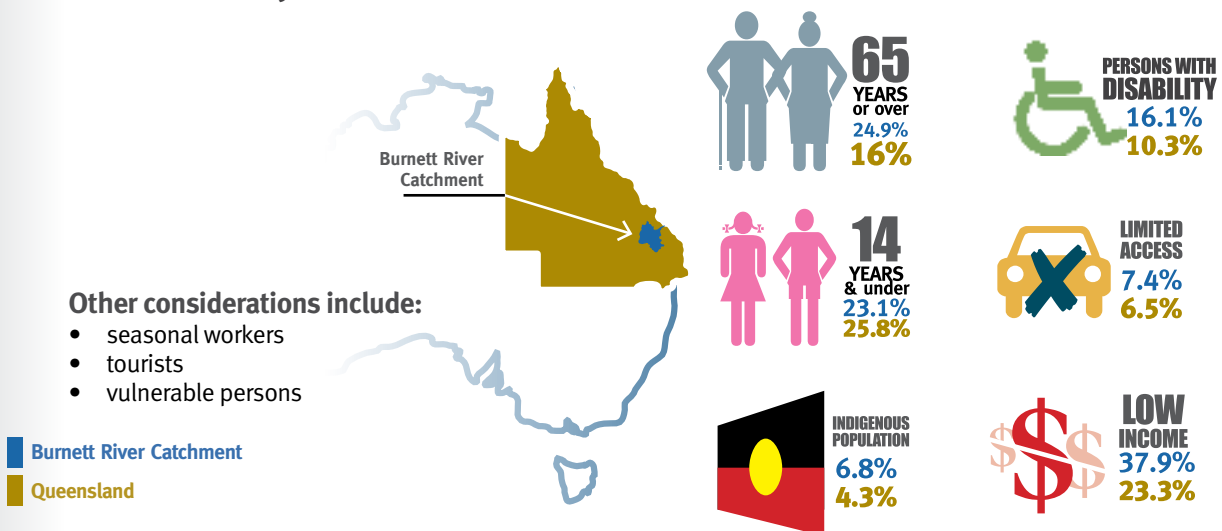
Components of the Integrated Catchment Planning Approach for the Burnett River Catchment

Burnett River Catchment at a glance

Our catchment



Our community



Flood history and behaviour

Location and history

The Burnett River is located on the southern Queensland coast with the mouth of the river located north of the City of Bundaberg. The total area of the catchment is about 33,000 square kilometres with a population of approximately 88,500 people. The Burnett River rises in the Dawes Range, north of Monto and flows south through Eidsvold and Mundubbera. Along the way it is joined by the Nogo and Auburn Rivers, which drain large areas in the west of the catchment. To the immediate west of Mundubbera, the main river is joined by the Boyne River, draining areas from the south before beginning its north-easterly journey to the coast. Between Gayndah and Mt Lawless, the Barker-Barambah Creeks system joins the Burnett River.

The Burnett River continues to flow in a north-easterly direction to Paradise Dam before moving through to Bundaberg and past Burnett Heads where it meets the Pacific Ocean, discharging into coastal waters at the southernmost extent of the Great Barrier Reef Marine Park.

Major flooding in the Burnett River is relatively infrequent. However, under certain meteorological conditions such as a tropical low pressure system, heavy rainfalls can occur throughout the catchment resulting in significant river level rises and floods. These floods can cause considerable damage to rural properties along the rivers and to the commercial and residential areas in some of the smaller towns in the area and in Bundaberg. They can also represent a significant risk to people.

Pre-dating current records, local indigenous history speaks to ‘the big floods’ occurring across the North Burnett, indicating that floods of higher magnitude have and can occur within the Burnett River Catchment.

Flooding in the northern part of the catchment is usually a function of how much rain has fallen in the Dawes Ranges north of Monto, and the hinterland areas that drain into the Boyne and Auburn Rivers.

Significant floods tend to result from large rainfall events that occur in the northern part of the catchment. Given the southerly track of tropical lows and ex-cyclones from the tropics, this is typically the first section of the catchment to receive rainfall. As rainfall patterns move further into the catchment in a south-westerly and/or south-easterly direction, the river starts rising from its headwaters north of Monto.

Rainfall over the western and southern parts of the catchment can result in the Boyne and Auburn Rivers beginning to flood, while Barambah Creek and the Stuart River will also run where rain falls in the southern and eastern areas of the catchment.

Flooding in the southern part of the catchment, drained by Barambah Creek and the Stuart River, tends to occur quickly with limited warning for residents. This is a function of how water flows down off the Bunya Ranges on its way to joining the main Burnett River waterway.

Flooding south of Paradise Dam can occur in multiple ways. Flooding from the upper catchment can make its way over the Dam and through to Bundaberg, while rain falling in the Mount Perry area and other locations south of the Dam can also lead to flooding of the Lower Burnett River into Bundaberg.

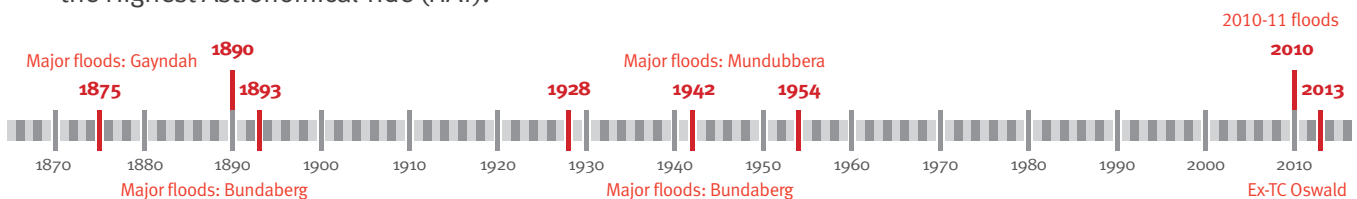
More localised flood events are possible throughout the myriad of creeks in the catchment caused from local rainfall. This is due to the susceptibility of the region to severe storms, which can be very intense. Creeks susceptible to such flooding include Reid Creek near Gayndah, Harkness Boundary Creek through Eidsvold, and overland flow locations around Proston and Hivesville.



Reid Creek near Gayndah

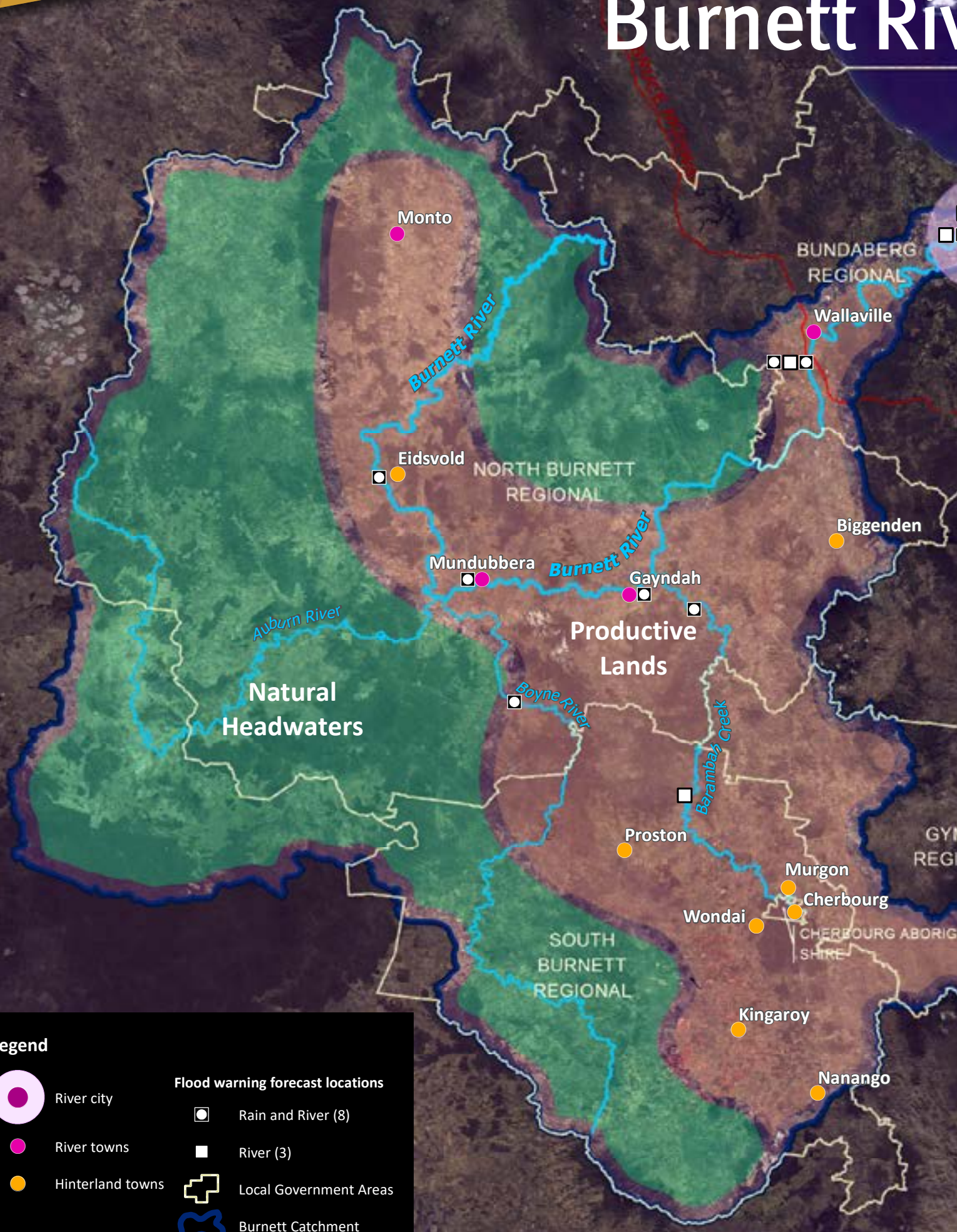
Timeline of flood events

Major floods have been recorded at Bundaberg since 1875, with the most significant event occurring in January 2013 when the river rose to 9.53 metres, approximately 7.34 metres above the Highest Astronomical Tide (HAT).










At Gayndah, flood records extend back to 1864 with more than 15 events recorded that exceeded the 10 metre level and seven events over 15 metres. In Mundubbera, the Bureau of Meteorology flood record commences from 1942 when the river peaked at 23.62 metres. Since then, floods have been well below this level.

Burnett River

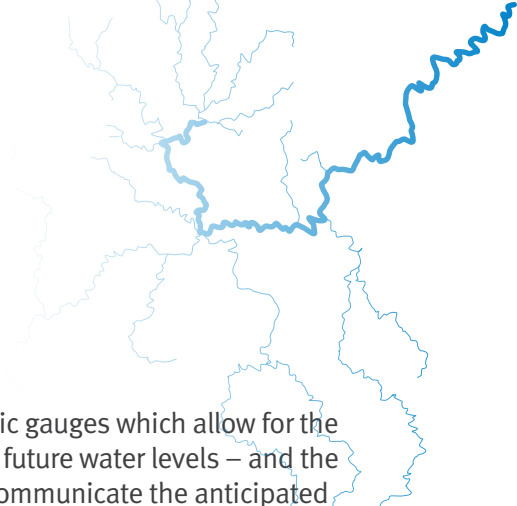


Legend

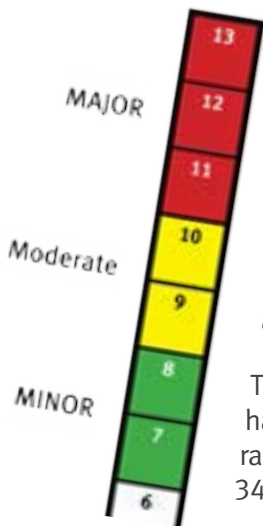
-  River city
-  River towns
-  Hinterland towns
-  Flood warning forecast locations: Rain and River (8)
-  Flood warning forecast locations: River (3)
-  Local Government Areas
-  Burnett Catchment



Catchment



The catchment flood warning network



Across Queensland, flood warnings are issued by the Bureau of Meteorology and relate to ‘flood classifications’ of minor, moderate and major. These flood classifications allow communities to understand the flood level which has been forecast. These forecasts are derived from the flood gauge network across the catchment.

The Burnett River Catchment currently has a total of 162 gauges comprising 57 rain stations, 71 rain/river stations and 34 river stations.

The Burnett River Catchment also has eight forecast locations. Forecast locations

are strategic gauges which allow for the forecast of future water levels – and the ability to communicate the anticipated class of flood (minor, moderate or major). This allows the community to effectively manage and mitigate the flood risk in their given locations.

These forecast locations include Eidsvold Bridge, Dunollie, Mundubbera, Gayndah, Stonelands, Brian Pastures, Walla and Bundaberg. They are supported by numerous upstream gauges providing the necessary data and information for forecast flood heights to be developed by the Bureau of Meteorology across the catchment.

Mid and lower catchment – flooding of the coastal plain

Downstream and where catchment creeks and tributaries enter the Burnett River, communities within *river towns* generally receive a period of warning that flood waters are on their way.

Whilst this area receives greater warning times, inundation levels tend to be higher. The impact on these towns is significant. In serious events, floodwaters can rise very quickly – catching people off-guard in potentially dangerous situations – and causing loss of, and disruption to, essential infrastructure.

Flooding of the *river city* floodplain can be extreme, both in depth and water velocity. In 2013, a number of homes in North Bundaberg were the subject of flood-induced scouring whereby floodwaters swirling around the pylon foundations of raised Queenslanders eventually lead to deep scour ‘holes’ beneath the dwellings. These dwellings were so substantially impacted they collapsed into the scour holes, several metres deep.

Flood impact throughout Bundaberg tends to be widespread, as it is the lowest point of the catchment before floodwaters discharge to the Pacific Ocean. Bundaberg has required evacuation of significant portions of the population due to flooding.

Upper catchment – fast rate of rise and overland flow

The undulating terrain in many parts of the catchment creates mini-catchments that can result in fast flows of water (flash flooding) after significant deluges. Hinterland towns, natural headwaters and upper-catchment productive lands are particularly susceptible to this type of risk. This gives rise to higher levels of risk, as a combination of limited warning time (if any) and fast-flowing water can take people by surprise.

Overland flow events can disrupt agricultural production by eroding contour banks and causing significant damage or complete loss of crops, and cause the isolation of entire communities across the catchment.

Catchment flood exposure

Direct personal and property impact

With more than 40,000 dwellings located across the catchment, residential areas represent one of the more common flood-affected land uses in terms of impact on property. Residential areas within Bundaberg, as the most urbanised centre within the Burnett River Catchment, are unsurprisingly more susceptible to flooding impacts.

Areas including Bundaberg North, Avoca, Bundaberg South and Bundaberg East are amongst those areas most heavily affected, which is reflected by the *Bundaberg 10 Year Action Plan*. Outside of Bundaberg City, upstream locations are also significantly affected including Branyan, Sharon, South Kolan and Wallaville.

In South Burnett, locations such as Kingaroy, Nanango, Memerambi, Hivesville, Coolabunia, Wooroolin and Proston are particularly susceptible to flooding, in addition to Cherbourg. In North Burnett, residential areas within towns and surrounding areas of Gayndah, Mundubbera, Mount Perry and Eidsvold are also exposed, with 50 per cent of residential properties in North Burnett identified as subject to possible flood impact.

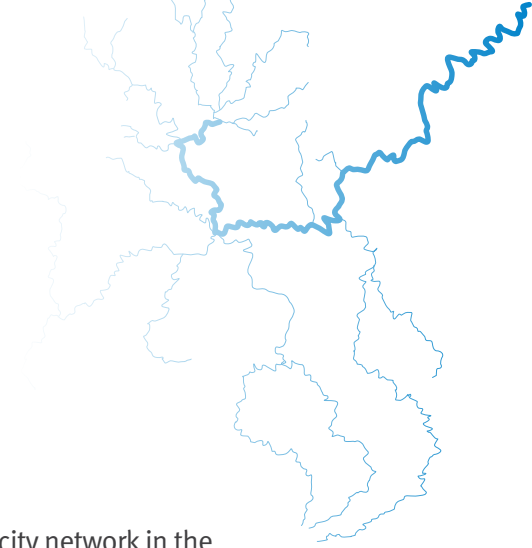
Across the catchment, a considerable proportion of rural dwellings are also exposed to flood risk and isolation.

Roads

The day-to-day activities of the catchment are supported by a complex infrastructure network which becomes all the more essential before, during and after floods. The ability to move around the catchment as well as to maintain access to electricity, water supply, sewer and telecommunications are critical elements underpinning how our community functions in response to flood.

In terms of the road network, state controlled roads span some 1300 km across the catchment, with an estimated 525 km susceptible to potential flood impact. Due to their sheer size, both North Burnett and South Burnett comprise the highest percentages of potentially flood-affected state controlled roads.

Impacts on the catchment-wide road network can present challenges during and following major floods, where reliance upon this network is critical to restoring essential community services and supporting economic and employment activities which are the lifeblood of the catchment.



Electricity and telecommunications networks

Substation infrastructure represents the most common element of the electricity network in the catchment. 11kV substations are the most prevalent – and the most susceptible to potential flood risk, with approximately 32 per cent of these located on land that is subject to potential flooding.

In North Burnett, approximately 52 per cent of all substations are located on land that is potentially susceptible to flood impact. In South Burnett approximately 23 per cent of substations could be impacted.

In terms of telecommunications networks, mobile blackspots remain a critical issue across the majority of the catchment, particularly within the Cherbourg, North Burnett and South Burnett local government areas. In addition, the recent switch across the catchment to the National Broadband Network has given rise to concerns relating to its need for power at both ends to operate (i.e. at home as well as at the node itself) thus requiring uninterruptible power supplies and/or solar or battery back-up.

Schools and hospitals

Schools and hospitals are often the essence of local communities. In many cases, schools double as evacuation centres in times of need. This being the case, only a small number of school facilities are identified as susceptible to potential flooding, mainly to sporting fields rather than buildings.

15 hospital facilities are located across the Burnett River Catchment, with approximately eight hospitals subject to possible flood-related impacts. This does not necessarily mean buildings are inundated, but that major flood events may cause cascading impacts in terms of access to electricity, challenges for evacuation and continuity of care.

Isolation

Many individual properties, localities and towns in the catchment can become isolated due to flooding for extended periods. Locations such as Stanmore in the North Burnett, and Wondai and Proston in the South Burnett can be isolated for several days, while communities such as Cherbourg, Murgon, and the larger towns of Eidsvold and Biggenden can be cut off from other towns for some time.

From an economic perspective, significant impacts upon supply chains can arise as a result of isolation and loss of road connectivity.

Cascading risks to people

Floods often bring with them other ‘cascading’ risks. For example, in situations where evacuation is required or isolation occurs, access to essential medication can become an issue, in particular for people requiring daily treatment. This can also extend to lack of access to other essential needs such as food and water.

In instances where such situations are prolonged, public health issues may emerge, particularly during periods of high temperatures where there is no access to electricity, air conditioning and refrigeration. These conditions impact vulnerable people, especially the very young, elderly and the ill.

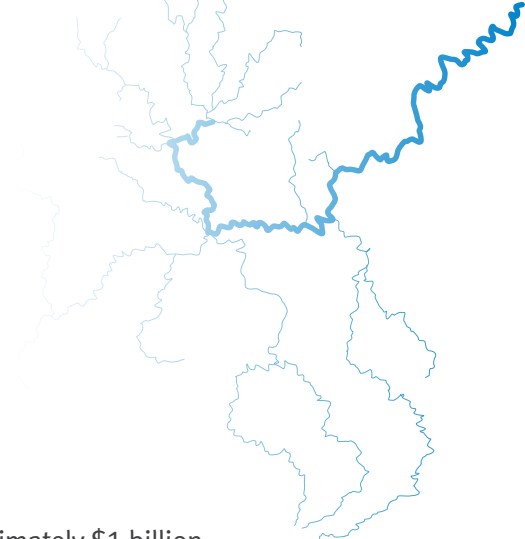
Cascading risks to environment

In addition to flood induced scour, other cascading risks often emerge from flood events across the catchment. These often include the loss of vegetation in riparian zones, biosecurity issues and spread of weed species. In addition to environmental impacts along the Burnett floodplain, additional risks are felt as floodwaters discharge to the immediate south of the Great Barrier Reef Marine Park. These include potential threats to protected loggerhead, flatback and green turtle habitat and nesting sites at Mon Repos, as well as water quality and sediment-laden floodwaters entering the ocean to the south of the Great Barrier Reef Marine Park, located close to the mouth of the Burnett River Catchment.

Long term recovery and emotional wellbeing

Major floods, along with the cumulative effects of repeated flood and other weather events, can take a toll. Sometimes, it can be years before communities recover – and some people may never fully recover depending upon the extent of trauma experienced. Each individual will experience floods and recovery in different ways. Recovery can sometimes be compounded by other social and economic impacts such as impact on family, friends and neighbours, and the financial burden of loss, damage and clean-up activities. In some cases, people may be unable to return to work or return to day-to-day activities previously enjoyed.

Flood recovery is often a very personal experience and can be particularly challenging for our most vulnerable members of the community. However, it can be supported through strong social connections within the community and careful pre-planning and preparedness.



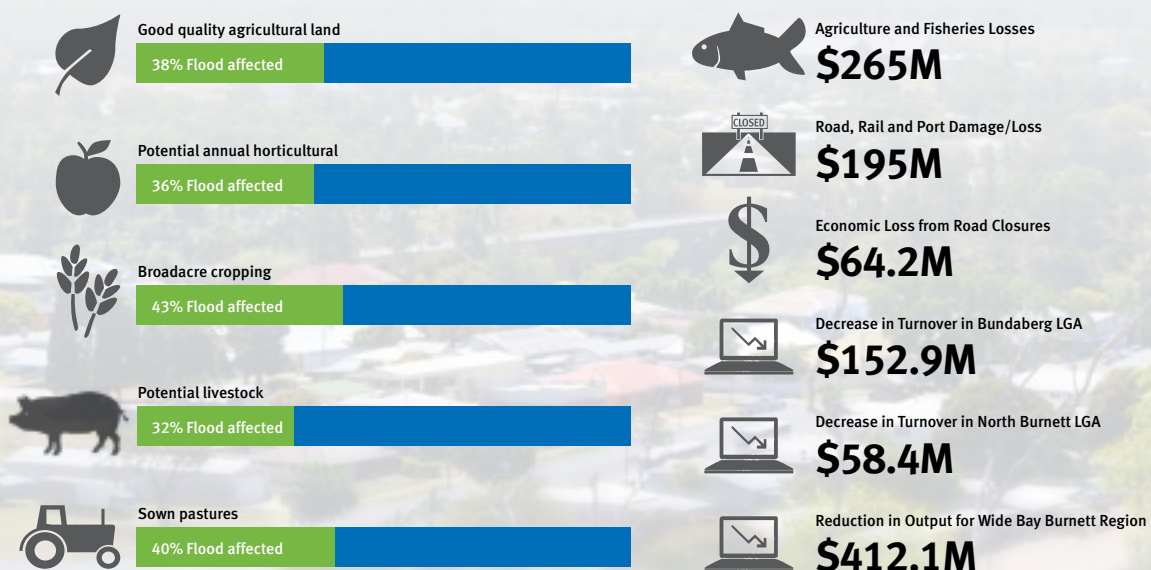
Risks to primary production

During 2010-11 the total value of agricultural output in the region was approximately \$1 billion, with the largest commodity being vegetables which accounted for more than 29 per cent of the region's total agricultural output in value terms. The fertile floodplains upon which much of the catchment's agricultural activity occurs is also prone to flood risk. Recent events, particularly around Monto in the catchment's north, have led to cumulative crop losses over recent seasons – frustrating growers' attempts to diversify cropping and farming methods to recover from these impacts and reduce the impact of future events.

Approximately 38 per cent of good quality agricultural land throughout the catchment is susceptible to flooding. Whilst other industries may be able to recover relatively quickly following a flood event, the impact on agricultural activity can be long-lasting. Impacts include degraded soils as well as damaged and destroyed buildings, equipment, contour banks and fencing. This is in addition to the devastation of stock and crop losses that impacts not only the duration of recovery but the overall ability for business recovery.

Economic impact assessments conducted after Ex Tropical Cyclone Oswald in 2013 indicated agricultural and fisheries losses totalled approximately \$265 million across Bundaberg and North Burnett alone, along with a number of other economic impact indicators, demonstrating the profound economic impacts generated by flood events.

Economic impact of flood



Aspirations for a resilient Burnett River Catchment

Effective floodplain management requires an integrated and whole-of-catchment approach.

This Strategy has been developed as a partnership between the Queensland Government, Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, North Burnett Regional Council and South Burnett Regional Council. Collaboration and integrated engagement across this partnership has been critical to the successful development of this Strategy and has involved a multi-disciplinary approach involving professionals engaging in mental health, engineering, planning, community and economic development, disaster management, transport, environmental management and communications.

This multi-disciplinary approach has informed the development of four key resilience aspirations under the themes of a resilient society, resilient economy, resilient environment and resilient settlements. Holistically, these aspirations support the delivery of our shared vision and guide a regionally integrated approach to floodplain management across the Burnett River Catchment.

A resilient society

We recognise and live comfortably with the prospect of flood as a part of life.

We anticipate flooding and we understand local flood behaviour and what it means for us. We know what to do when action is needed. We have the ability to bounce back quickly and with minimal impact – both physically and emotionally. We understand the risk that flooding presents in how we go about our day-to-day lives and we share responsibility for our own resilience and that of our families and community. We work together to look out for and help those who need it. We care for and respect one another and the environment in which we live, work and play, especially during times of flood.

We work hard to maintain and build strong relationships, we know these networks are the lifeblood of our communities and stand us in good stead during times of recovery. We participate in the decisions which affect us.

We value being prepared.



A resilient economy

We strengthen our local economy against flood impact.

Our experience of past flood, drought and storm events across our catchment has provided us with the ability to explore and identify opportunities to constantly enhance economic resilience to floods. We know the primary elements to enduring flood resilience includes a diverse economy, ensuring continuation of employment as well as the provision of goods and services to those in need. We take action to develop business continuity across industries and build strong supply chains to ensure our communities can bounce back as quickly as possible, with limited impact.

We know our rich primary production and agricultural industries are amongst our largest economic assets, but can remain vulnerable to the impact of flood.

We value collaboration across industries, and across government and private sectors. We value the depth and diversity of our small business offering, and the important role it plays in underpinning the wellbeing of our families, our towns and our communities. Combined with our major economic and employment activities, we are invested in leveraging our economic network – as part of an economic ‘ecosystem’ across the catchment.

We contribute to our individual and collective economic resilience.

A resilient environment

We help our environment to recover quickly from flooding – naturally and sustainably.

We take action to protect our catchment from flood impacts. We know the importance of responding to issues such as soil erosion, loss of riparian vegetation, invasive weeds, the uncontrolled release of chemicals, and waste and land use management practices which can intensify flood impacts and reduce water quality.

We know a healthy and productive catchment is one which underpins and supports all other activity – from social, to physical, and economic activity. Our day-to-day lives are enhanced by the wellbeing of the rich environment in which we live. We know and value how much a resilient environment contributes to a resilient economy in our region – the livelihoods of nearly everyone in the region are connected in some way to the land.

We understand that flooding is a natural process that shapes and forms the landscape, that it can produce changes in riverine morphology and sedimentation, and can contribute to the overall condition of the Great Barrier Reef. We also know some changes caused by flood are of benefit to the environment, and we leverage these opportunities as they occur.

We focus on improving environmental catchment resilience by identifying and addressing key knowledge gaps and prioritising collaboration. We are informed contributors to the health and wellbeing of our catchment. We respect and value the ecology, biodiversity and cultural history of the catchment and take steps to protect and enhance these assets. We are environmentally responsible.

We care for country.

Resilient settlements

Our built environment – our settlements and infrastructure – is the foundation upon which our communities thrive and prosper.

They are the hub for local access to employment, goods and services, and they support the strength of our rich primary production and agricultural industries. Our settlements underpin the social and economic activity of the catchment, connected by reliable infrastructure networks which support our community before, during and after flooding. We know the importance of system redundancy, particularly for critical items of infrastructure (water, sewer, electricity, telecommunications and roads) relied upon by our community.

Our community is well-versed in how flooding impacts our built environment. We know how important it is for emergency services and others to move around our towns and landscapes to help those who need it most, when they need it. Transport networks allow people to move about immediately after flood waters, recede enabling rapid access to resources and helping the community to respond and recover – socially, physically and economically.

We take action to concentrate settlement and infrastructure expansion in low risk areas. We value the many ways in which our built environment and its systems and networks help us to get back on our feet quickly, with the least amount of effort necessary. When we endure loss, we make sure to build back better.

We recognise the individual character and identity of the settlements which form our catchment. Each is different in its own way and we recognise that different communities have different expectations about how our built environment and its systems and networks perform during times of flood.

We understand that our own resilience and that of our families, community and visitors can reduce the pressure placed on these systems and networks at the time when they are most needed. We forward-plan our own redundancy and put measures in place to keep us going when we need it.

We support the essential services and built environment networks upon which we rely.



Strategic pathways to

A range of strategies to inform collaborative approaches to flood resilience activities in the catchment are identified, forming a regional 'blueprint' for coordinated action across the Burnett River Catchment.

Resilient Society

Change the conversation
Severe weather is a fact of life in the catchment, not an aberration

Understand and share the way the catchment and its systems work
Improved data intelligence, monitoring and reporting

Resilient Economy

Develop pathways for infrastructure resilience over time
Make sustained improvements over time to support economic growth and community mobility

Evolve land management and agricultural processes
Increase capacity/capability to manage land more sustainably

Resilient Environment

Develop a strategic environmental management approach, based on risk
Deliver region-wide programs that address regional risks such as waste, weeds and riparian vegetation

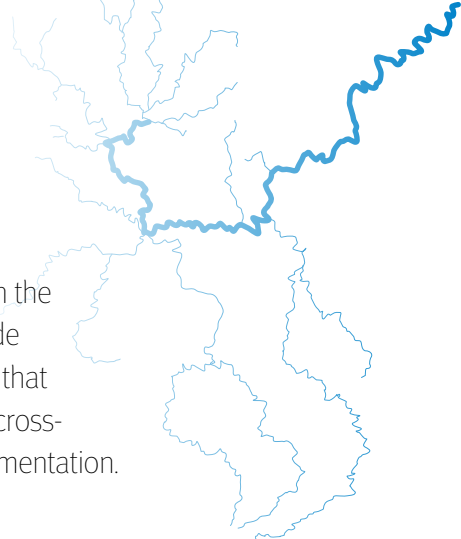
Increase focus on post-event environmental recovery
Clarify pathways for recovery/resilience funding for environmental purposes

Resilient Settlements

Connect disaster management into land use planning
Develop in a risk-responsive way, accounting for evacuation, isolation and inundation

Build redundancy into infrastructure
Focus on improving gaps in power and telecommunications over time

strengthen flood resilience



Implementation of the Strategy will be delivered as a partnership amongst all stakeholders in the catchment, driven by local leadership and regional resourcing, under the auspices of the Wide Bay Burnett Regional Organisation of Councils. This approach to implementation recognises that while actions are best delivered locally, regional level support is also required to encourage cross-jurisdictional collaboration, provide technical assistance, and proactively assist project implementation.

Enhance contextualisation of data and warnings
Speak in a language people understand

Focus community awareness on risk, not just hazard
Empower the community to make better, risk informed decisions

Connect people to each other
To improve health and wellbeing

Enhance resource stewardship for economic and social sustainability
A sustainable environment means a sustainable economy

Business continuity planning as business as usual
Lead awareness and action by small and medium enterprises to anticipate shocks

Climate adaptation as business as usual
Expand existing efforts across agriculture, business and government sectors to adapt to our changing environment

Resilience in asset management and renewal
Take opportunities to improve asset resilience in upgrade and renewal processes

Queensland Strategy for Disaster Resilience

As Queenslanders, we are disaster resilient when:

1 we understand the potential disaster risks we face

2 we work together to better manage disaster risk

3 we seek new opportunities to reduce disaster risk

4 we continually improve how we prepare for, respond to and recover from disasters

Strategy outputs

As part of the Strategy, the following information has been produced for councils in the Burnett River Catchment:

- Technical Evidence Report
- Strategic action plan for further prioritisation and delivery overseen by Wide Bay Burnett Regional Organisation of Councils
- Governance strategy for enduring integrated catchment planning approaches
- Comprehensive list of existing resilience-related funding streams
- GIS mapping and data for local governments that can be further developed over time
- Education video about flood behaviour in the catchment.

Pilot project for Resilient Queensland


The *Burnett Catchment Flood Resilience Strategy* has been delivered as a pilot project for *Resilient Queensland*, which is the implementation plan for the *Queensland Strategy for Disaster Resilience*. The success of this pilot project is informing the delivery of further pilot projects to deliver resilience strategies across a range of urban, rural, remote and coastal communities in Queensland. This Strategy along with further pilot projects will be evaluated in 2019, before plans are further implemented across Queensland. By 2021, all communities across Queensland will have a resilience strategy to support the goal of the *Queensland Strategy of Disaster Resilience*, which is to be the most disaster resilient state in Australia.


Monitoring and evaluation


A key aspect of delivering the Strategy is the establishment of a clear standards-based implementation framework for integrated catchment planning. The identification and establishment of a ‘resilience maturity’ model-based approach to benchmarking will be developed in a collaborative effort as part of the implementation of the Strategy, with the support of the Queensland Reconstruction Authority (QRA).




More information

 Visit www.qra.qld.gov.au/burnett for further information about the *Burnett River Catchment Flood Resilience Strategy* and proposed actions

 Visit www.qra.qld.gov.au/qsdr for further information about how this pilot project is delivering on *Resilient Queensland 2018-2021 – delivering the Queensland Strategy for Disaster Resilience*

 Contact the QRA on **07 3740 1700**

 Wide Bay Burnett Regional Organisation of Councils
www.wbbroc.org.au

Bundaberg Regional Council
www.bundaberg.qld.gov.au

North Burnett Regional Council
www.northburnett.qld.gov.au

South Burnett Regional Council
www.southburnett.qld.gov.au

Cherbourg Aboriginal Shire Council
www.cherbourg.qld.gov.au

Queensland Reconstruction Authority
www.qra.qld.gov.au

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Integrated
catchment
planning

a new take on the
traditional process of
flood risk management

