Cape York and Torres Strait Regional Resilience Strategy

Queensland Government

Document details

Security classification	Public
Date of review of security classification	July 2022
Authority	Queensland Reconstruction Authority
Document status	Final
Version	1.0
QRA Reference	QRATF/21/7644 | GD 0682

Interpreter

The Queensland Government is committed to providing accessible services to Queenslanders from all culturally and linguistically diverse backgrounds. If you have difficulty in understanding this report, you can access the Translating and Interpreting Services via www.qld.gov.au/languages or by phoning 13 14 50.

Disclaimer

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

The Cape York and Torres Strait Regional Resilience Strategy Regional Resilience Strategy is a partnership between the Queensland Government and the Torres and Cape Indigenous Councils Alliance and the Torres Strait Island Regional Council.

Council	Website/Disaster Dashboard
Torres and Cape Indigenous Councils Alliance (TCICA)	www.tcica.com.au dashboard.tcica.com.au
Aurukun Aboriginal Shire Council	www.aurukun.qld.gov.au dashboard.tcica.com.au
Cook Shire Council	www.cook.qld.gov.au disaster.cook.qld.gov.au
Hope Vale Aboriginal Shire Council	www.hopevale.qld.gov.au dashboard.tcica.com.au
Kowanyama Aboriginal Shire Council	www.kowanyama.qld.gov.au dashboard.tcica.com.au
Lockhart River Aboriginal Shire Council	www.lockhart.qld.gov.au dashboard.tcica.com.au
Mapoon Aboriginal Shire Council	www.mapoon.qld.gov.au dashboard.tcica.com.au
Mornington Shire Council	www.mornington.qld.gov.au dashboard.tcica.com.au
Napranum Aboriginal Shire Council	www.napranum.qld.gov.au dashboard.tcica.com.au
Northern Peninsula Area Regional Council	www.nparc.qld.gov.au dashboard.tcica.com.au
Pormpuraaw Aboriginal Shire Council	www.pormpuraaw.qld.gov.au dashboard.tcica.com.au
Torres Shire Council	www.torres.qld.gov.au dashboard.tcica.com.au
Torres Strait Island Regional Council	www.tsirc.qld.gov.au
Weipa Town Authority	www.weipatownauthority.com.au Weipa Disaster Dashboard
Wujal Wujal Aboriginal Shire Council	www.wujalwujalcouncil.qld.go.au dashboard.tcica.com.au

Foreword

Our region is pristine, remote, and the treasured home to some of Queensland's most iconic landscapes, cultures and traditions.

We share a connection to Country, and a sense of identity that makes our region truly special. Our understanding of our landscape goes back many thousands of years. We recognise there are shared challenges to ensure a stronger and more resilient future for our region.

We celebrate our uniqueness and our cultural connections. We are separate communities but stronger together. Our common voice and collective action can create a more resilient region expressed in economic, social and environmental terms, while maintaining our strong values.

Foundations of a resilient region are built through a commitment to baseline infrastructure and services and an understanding of the challenges and risks we face. Improvements to our region's resilience can have flow on effects that can be far reaching. The baseline health of our region is intrinsically linked to landscape.

We remain dedicated to a cycle of continuous improvement in how we prevent and prepare for natural hazard events. Embedding resilience into planning and decision making will help our region to prosper. A future where we are better able to cope with whatever nature throws our way, and where everyone works together to create shared solutions in response to common problems and challenges.

This Strategy draws upon our expression of these challenges to build a pathways approach to a resilient future for our region. It identifies opportunities to strengthen community and climate-related disaster resilience. It charts a pathway to help us to move towards a vision of connectedness despite isolation and togetherness despite separation. This Strategy is supported by local and regional action plans to guide our focus and priorities over time.

A region that works together is a resilient region.

Cr Robbie Sands

Mayor, Kowanyama Aboriginal Shire Council

Chair, Torres and Cape Indigenous Councils Alliance (TCICA)

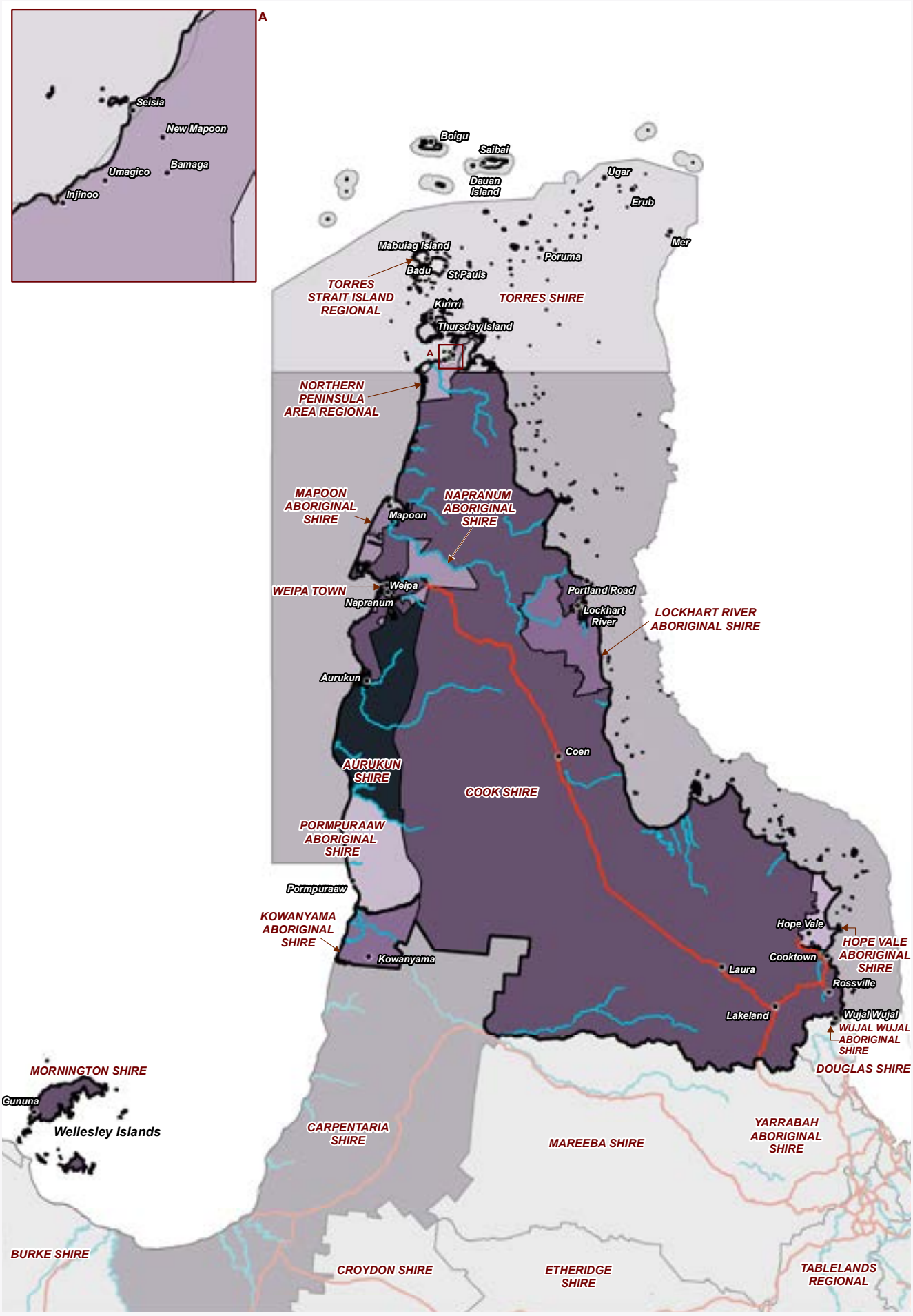
Acknowledgement of Country

We acknowledge the Aboriginal peoples and Torres Strait Islander peoples as the Traditional Owners and Custodians of this Country. We recognise and honour their ancient cultures, and their connection to land, sea and community.

We pay our respect to them, their cultures, and to their Elders, past, present and emerging.

Image: Napranum Beach Art. Courtesy TCICA.

Cape York and Torres Strait Region



Contents

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3440 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Our vision

We are connected in common spirit from Wik in the west to Kuku Yulangi in the east, the Kaurareg people of the Torres Strait and the fusion of cultures in the lower Gulf and Mornington Island of the Lardil, Yangkaal, Kaiadilt and Gangalidda peoples.

We are at one with Country. Our landscapes include the western Cape wetlands and flood plains of the Norman, Embley and Jardine rivers, the peaks of the Great Divide, the majestic Iron Ranges of the eastern Cape, the protected islands of the lower Gulf of Carpentaria and the pristine green and blue hues of the surrounding oceans.

Fresh and saltwater habitat is equally valued. Our Country includes the picturesque Torres Straits, the peaceful calm of the Gulf and the cascading falls of the Bloomfield River. We draw strength from the landscape and ensure its health and vitality through continuation of custodianship and legacy to our emerging elders.

The Peninsula Development Road is the artery with all communities are the smaller veins. We are connected but separate. Drawing on our deep connection to place will increase our resilience.

Our communities are isolated in the wet season, that is part of who we are, but prosperity depends on connectedness. Resilient physical connections by road, air and sea are the lifeblood for our economy and community.

We seek solutions fit for our unique circumstances, consistency in support, and reliability in equitable infrastructure to enable a prosperous future. We know that through working together and harnessing opportunity on all scales we can achieve greater resilience socially, culturally and economically.

Because of this, our communities are places where our youth can embrace local opportunities and where our elders can stay. People can learn and grow.

We understand change and risk and how this land cycles renewal through fires, storms and monsoonal rains. We communicate how our unique isolation and geography defines our experiences of natural hazards, and harness support to improve infrastructure and service provision.

Our visitors come to experience a dynamic landscape steeped in mystery and iconic places from Pajinka to Quinkan Country and islands to mainland. We want visitors to Country to learn our values and culture and respect the places they visit.

We are small communities but together, our region is strong and resilient. We are resilient to times of isolation and celebrate the unique and inherent positive characteristic of isolation.

Isolation to Connection: Separate but Together

About the Strategy

Resilience is everyone's business. Resilience in the Cape York and Torres Strait region is dependent on a shared but also collective responsibility model.

This Strategy encourages a role for everyone in the Cape York and Torres region to rally around and deliver upon a common description of regional resilience, reflecting the voice of our people. It highlights key opportunities to build disaster resilience that are unique to our region.

The end goal for resilience in the Cape York and Torres Strait is to shorten and minimise recovery to future disaster events, and to enable transformation and adaptation to the range of stresses and shocks we experience in the Cape York and Torres Strait region.

Aims

The aims of this Strategy are:

- **tell the unique story of resilience in the Cape York and Torres Strait**
- **bolster what needs to be done to create a baseline of disaster resilience in the communities of the Cape York and Torres Strait region**
- **deliver a clear Regional Resilience Strategy and Local Action Plans to further strengthen disaster resilience for our region.**

Objectives

The objectives of this Strategy are to:

- **identify the region's disaster resilience priorities including baseline gaps**
- **identify actions and initiatives to address resilience needs**
- **prioritise the identified actions and initiatives**
- **connect priorities to future funding and resourcing opportunities**
- **articulate baseline resilience needs and priorities regionally to enable regional solutions as opportunities arise**
- **articulate resilience needs that better facilitated through a regional approach**
- **articulate how risk-informed disaster resilience actions and projects meet local needs and align to state and national disaster risk reduction and resilience policy objectives.**

Values guiding our resilience pathway

The Strategy reflects our values in the Cape York and Torres Strait region, which are unique and make us who we are.

This respects the self-identification of our places as individual communities but also our need and desire to connect and collaborate on issues of regional and mutual importance – including resilience. Understanding how communities are distinct and separate while at the same time connected provides opportunities for resilience

There are four underpinning values that guide our resilience pathway:

Connection through culture and identity

The communities of the Cape York and Torres Strait region are connected through their cultural identity, which is reflected in our daily lives, places we walk, visit, celebrate, work, or connect with actively or instinctively. We can enhance resilience by drawing on people's deep connection to place.

Connection through Country, language, story and traditions

We share a common and profound connection to Country and understanding of landscape through continuity in language, story and traditions from elders past and present. We continue to learn from it and value Country as both our past and our future. We can increase our resilience by drawing on place specific and non-place specific indigenous knowledge.

Steadfast support

Our climate is uncertain, but support, leadership and direction is required in a steadfast and consistent way to ensure we do not experience unintended stresses. We value support that recognises our unique circumstances and connections to culture and Country.

Collaboration and empowerment

We value the skills and capacity needed to build an independent region. Local leadership, empowerment and collaboration is paramount in seeking fit-for-region solutions to build resilience. Being separate but together, makes fostering partnerships, recognising opportunity for united action, and working collectively as a region on resilience priorities even more important.

Isolation to Connection: Separate but Together

Copies

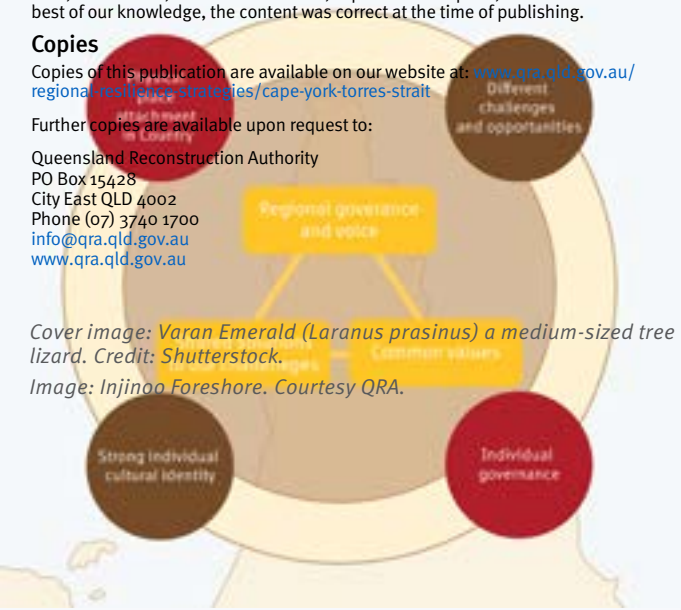
Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.



Strategic alignment

The Queensland Government is committed to strengthening disaster resilience so our communities are better equipped to deal with the increasing prevalence of natural disasters.

By 2022, every region across Queensland will be part of a locally-led and regionally-coordinated blueprint to strengthen disaster resilience.

This Strategy is a deliverable under the Queensland Strategy for Disaster Resilience (QSDR) and Resilient Queensland - the statewide long-term blueprint support Queensland's vision of becoming the most disaster resilient state in Australia.

The Strategy aligns with the QSDR, Resilient Queensland and national and international disaster risk reduction and sustainable development agendas articulated by the Sendai Disaster Risk Reduction Framework and the National Disaster Risk Reduction Framework.

This Strategy supports and aligns to the Queensland Disaster Management Arrangements (QDMA) and builds upon the Queensland Emergency Risk Management Framework (QERMF), the Queensland Climate Action Plan (QCAP), and the pilot Regional Drought Resilience Plan developed by the Department of Agriculture and Fisheries in partnership with the Rural Economies Centre of Excellence.

Figure 1. The Cape York and Torres Strait Regional Resilience Strategy disaster resilience policy line of sight to local, regional, state, national and international levels.

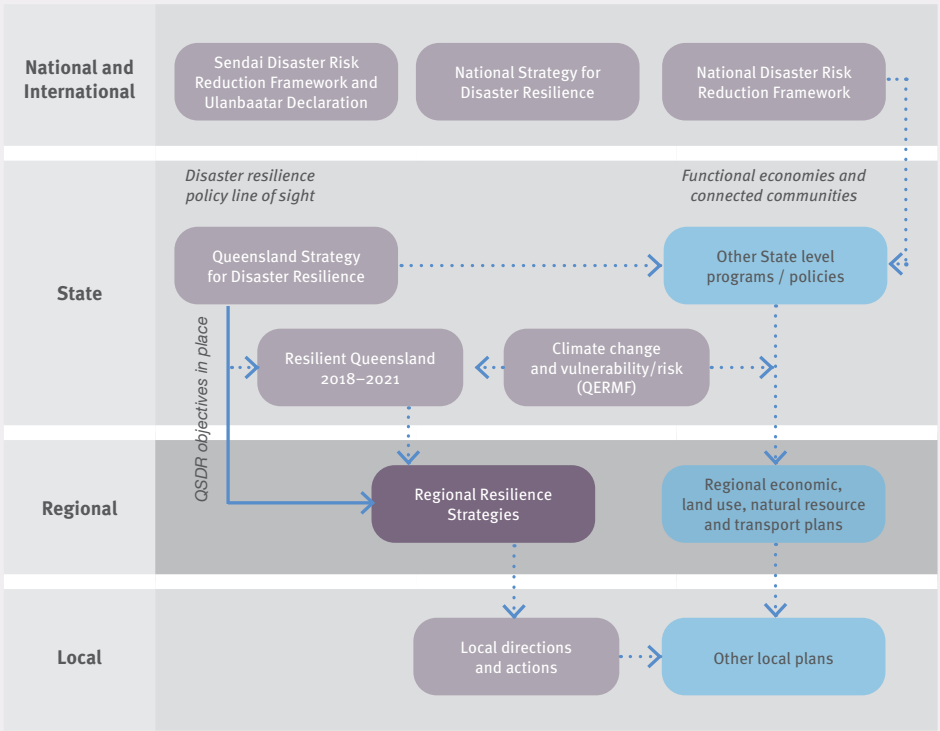
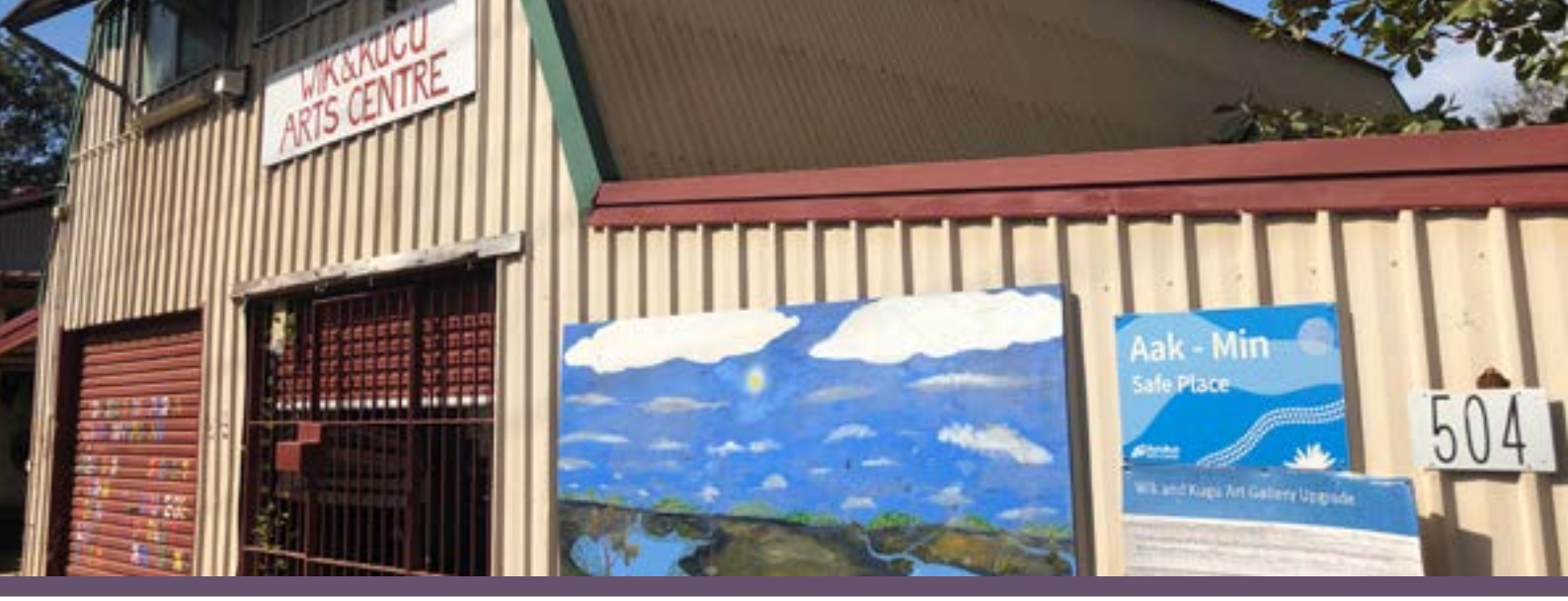


Image: Cooktown. Courtesy QRA.



Our locally-led approach

This Strategy has been developed using a community-led approach with the voice of the locals. To build resilience means to think and deliver systematically – to deliver what is needed in the places it is needed.

We have applied CSIRO's Resilience Adaptation Pathways Transformation Approach (Q-RAPTA) process - a resilience building approach tailor-made for the Queensland context.

An approach that is locally-led, regionally coordinated and state facilitated has allowed us to draw on local leadership and direction for this Strategy to ensure local needs and priorities of the Cape York and Torres Strait Region are reflected.

This approach allows for greater collaboration and coordination of resilience efforts across our region, guided by the principles of:

- local leadership
- flexibility and adaptation
- shared responsibility and collaboration
- prioritisation
- resilience becoming business as usual.

Figure 2. The Resilient Queensland implementation delivery approach (adapted from CSIRO).

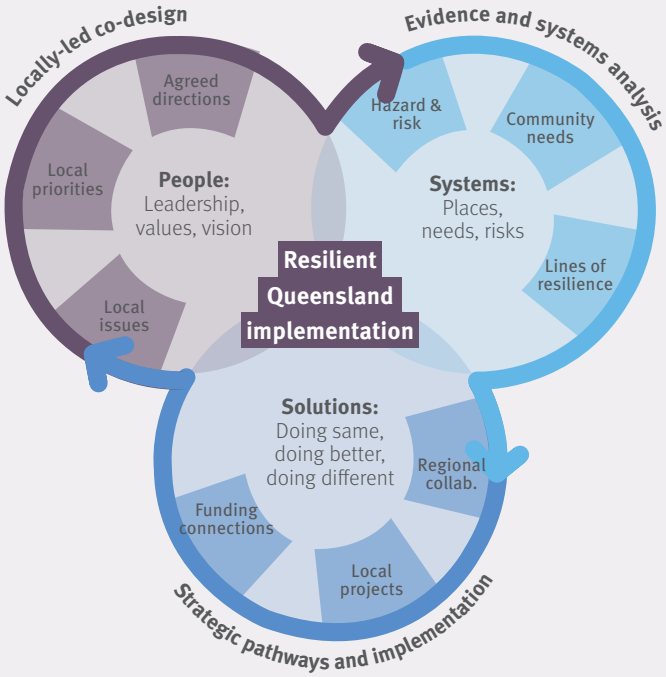


Image: Wik & Kugu Art Centre, Aurukun. Courtesy QRA.

How the Strategy has been developed

This Strategy has been co-designed with local representatives through multiple engagement opportunities using regional "Big Map" workshops and active listening. The Strategy is developed with the input of elected officials, disaster management group members and council officers. The process has applied the latest in resilience thinking:

- relationship and trust-building engagement
- co-design with local people
- risk-informed
- place-based strategies
- locally-led and regionally coordinated solutions
- integrated multi-objective responses.

The Strategy has a multi-dimensional and cross-disciplinary approach and considers the five elements that contribute to systems-based resilience.

The Strategy was developed taking a disaster lens to our economic, social and environmental systems to ensure the best of disaster management and risk reduction practice can be brought into effect in the Cape York, lower Gulf and Torres Strait over time.

This locally-led approach means identifying and prioritising regional resilience needs that we can strengthen over time by matching these needs with real funding and resourcing opportunities.

Our engagement with local representatives reflected a desire for strong identity and local empowerment to advance meaningful outcomes for communities in Cape York, the Gulf and Torres Strait. Our engagement discussion stemmed from steps from the Guide to Disaster Risk Management in Queensland Aboriginal and Torres Strait Islander Communities (QFES, 2004) in order the natural hazard and resilience issues could be properly applied to place.

This context is then matched to an understanding of the exposure and vulnerability of each community within the region to a range of hazards informed by the Queensland Emergency Risk Management Framework (QERMF), and local disaster management priorities:

- cyclone (severe wind and storm surge)
- bushfire
- flood
- pandemic and other hazards
- heatwave
- earthquake.

Image: TCICA Big Map Workshop, Cairns. Courtesy QRA.

Engagement across the Cape included detailed discussions at regional and local levels with elected members and senior leadership. Locally-led techniques in partnership with local governments or authorities successfully drew out the context of resilience in those individual communities.

The values of local communities were diverse but strong, and engagement focused on exploring community need across the five lines of resilience, with a focus on enabling infrastructure and strengthening social fabric to allow the communities to prosper during extended wet season isolation.

In recent years the disruption, isolation, and public health impacts of the Covid-19 pandemic, heightened tourism activities bringing thousands of additional visitors, coupled with physical isolation and limited resources has amplified vulnerabilities of the remote Cape and islands communities.

The threat of coastal inundation is a further hazard for people who identify strongly with coastal waters, habitat and shorelines. Projects or initiatives arising from the Coastal Hazard Adaptation Strategy (CHAS) program or existing datasets can be incorporated into the action plans developed as part of this strategy.

The impacts of climate change are a key component to long-term resilience and are incorporated, both in terms of relationships with hazards but also by alignment of the Strategy to the Sector Adaptation Plans of the Climate Action Plan and key strategic infrastructure plans.

Figure 3. The five elements of resilience.

Elements of resilience

The multi-dimensional and cross-disciplinary approach of this strategy contemplates five elements that contribute to systems-based resilience. These are:

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Image: TCICA Big Map Workshop, Cairns. Courtesy TCICA.

Integration and alignment

The Strategy reflects previous and existing work at the state, regional and local levels to ensure this work is taken forward, and not 'reinvented', and provides a further mechanism to connect local needs to further funding opportunities at the state and federal levels.

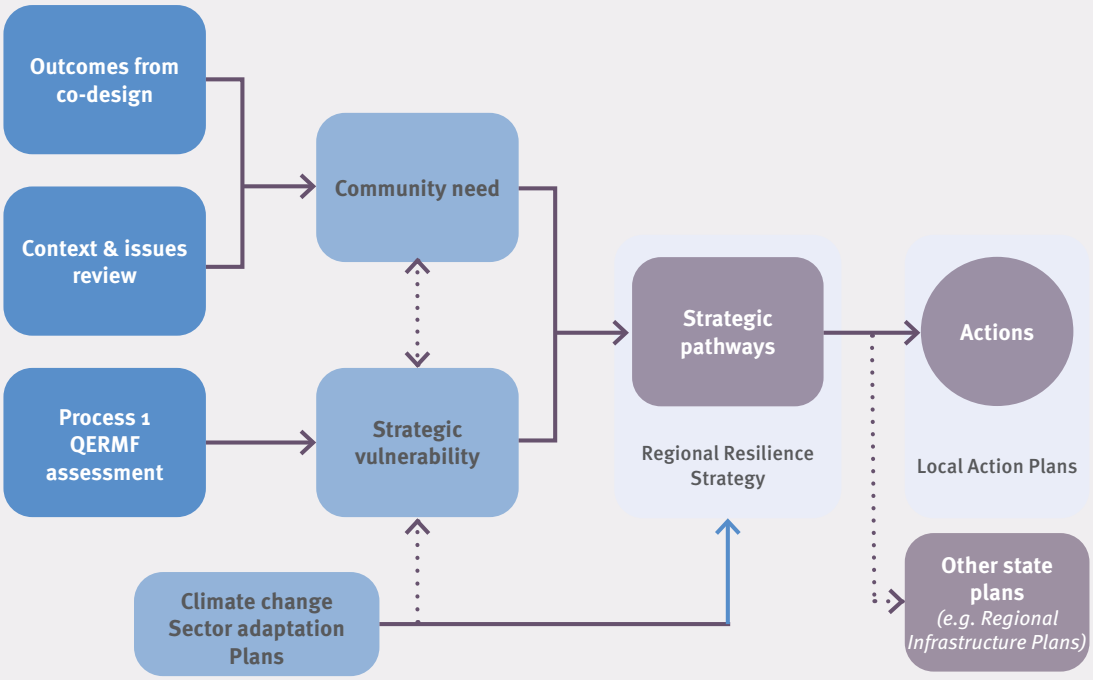
This Strategy culminates in resilience pathways that provide a link between locally-identified actions or projects, and the state, federal and international policy environment. That way, the need for a particular project or action can be justified by it meeting a regional pathway to resilience that meets one or more objectives of the QSDR.

This Strategy is supported by Local Action Plans setting out the specific projects and initiatives that are needed to deliver on the aspirations set out by the Strategy. These Local Action Plans are provided to partner councils to implement.

The Strategy aligns with the following risk management, recovery resilience and adaptation planning initiatives, strategies and plans:

- *Queensland Resilience, Adaptation Pathways and Transformation Approach project (QRAPTA)*
- *Queensland Emergency Risk Management Framework (QERMF)*
- *Queensland State Natural Hazard Risk Assessment and hazard-specific risk assessments prepared by Queensland Fire and Emergency Services*
- *Climate Change Sector Adaptation Plans*
- *Queensland Climate Resilient Councils Climate Risk Management Framework and Guideline*
- *QCoast 2100 Coastal Hazard Adaptation Program*
- *Department of Transport and Main Roads Regional Transport Plans*
- *Department of Seniors Disability Services Aboriginal and Torres Strait Islander Partnerships Masterplans*
- *Torres and Cape Indigenous Council Alliance: Cape, Torres and Gulf Opportunities Plan 2019*
- *The Torres Strait and Northern Peninsula Area Regional Plan*
- *TCICA Digital Connectivity Strategy 2021*
- *TCICA Food Production Hub Study 2021*
- *Commonwealth Torres Strait Regional Authority: Torres Strait*
- *Regional Adaptation and Resilience Plan 2016-2021*

Figure 4. Strategy development process reflects the CSIRO Q-RAPTA resilience building approach tailor-made for the Queensland context.



Isolation to Connection: Separate but Together

Resilience in the Cape York and Torres Strait region

Resilience is a term that means different things to different people. The QSDR defines resilience as:

> *A system or community's ability to rapidly accommodate and recover from the impacts of hazards, restore essential structures and desired functionality, and adapt to new circumstances.*

Communities in the region are predominately geographically isolated. However, this does not mean that communities feel culturally, socially or psychologically isolated, nor feel physically restricted by their isolation. There are unique ways the region addresses isolation and connection that can inspire pathways forward.

This culminated in the understanding that a key theme for resilience in the Cape is **Isolation to Connection**.

Image: Injinoo Foreshore. Courtesy QRA.

This resilience theme respects the unique context of Cape communities who can be periodically cut off because of disruption due to their place context and are therefore highly self-reliant. It highlights the desire of Cape councils to increase the level of environmental cultural and physical connection between these discrete communities and further away from the Cape.

These topics were further synthesised into threads of why certain aspects were important and how we can address this.

The below visual model represents a synthesis of the summary of categories identified to address the resilience theme and topics above is through a response of **Separate but Together.** This respects the self-identification of Cape councils as individual communities but also their desire to connect and collaborate on issues of regional and mutual importance – including resilience.

Resilience meaning took shape in the elected members through the following themes:

- critical infrastructure – its importance and flow on effects to all aspects of our lives
- disruption and isolation – climate or man-made, our region is vulnerable
- cultural connection – informed by traditional knowledge, connection to family, landscape and across communities
- leadership – enabling change and trade-offs
- biosecurity and food security – threats to what we value and our quality of life.

Image: Quintell Beach, Lockhart River. Courtesy QRA.

Copies
Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:
Queensland Reconstruction Authority
PO Box 15428
City East, Qld 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Image: Eastern Water Dragon (Intellagama lesueurii) lizard. Credits: Shutterstock

Case study: Cape York and Torres Strait Disaster Resilience and Recovery Forum initiative

In 2019, TCICA hosted the first two-day Disaster Resilience Forum in Cairns for all the Cape York and Torres Strait Indigenous councils, communities, agencies, partners, and critical infrastructure providers.

The Forum was opened by the then Minister for Fire and Emergency Services and funded under the Queensland Disaster Resilience Fund.

The objectives of the Forum were to:

- share learnings from recent natural disaster events
- discuss ways to improve disaster resilience, readiness, planning and coordination
- identify recovery success factors to embed them in the design of future resilience and recovery planning processes
- build capacity to prepare for and respond to future natural disaster events.

A number of priorities and actions emerged to help improve community resilience and the region's ability to plan for and respond to disaster events.

The sharing of information was a common theme throughout much of the discussion and consensus that the forum was a great first step. Working better together and opening up lines of communication and establish a solid platform for common understanding and improve current disaster management systems was an agreed priority.

The continuation of engagement with stakeholders throughout this Strategy development builds on the outcomes of the Forum including identifying matters for a collaborative or regional focus. This realisation led to the funding of the TCICA regional resilience coordinator in 2021 who played a critical role in the engagement and capacity building for the region. The success meant that a second forum was held in late 2021.

Image:TCICA second Indigenous Local Government Disaster Resilience Forum in Cairns in 2021.

Case study: Wujal Wujal Resilience Award

Wujal Wujal Aboriginal Shire Council was awarded the joint Local Government Award the recent 2021 Get Ready Queensland Resilient Australia Awards for its innovative Elders and Vulnerable Person's project.

The project ensures vulnerable and elderly members of the Wujal Wujal community are disaster ready by approaching preparedness in a way that is easily understandable and accessible to Traditional Owners.

English is not the first language of many of Wujal Wujal's elderly residents and much is lost in translation. That's why Council created disaster preparedness resources in Kuku Yalanji that are culturally appropriate.

Council also creates disaster kits to ensure elderly and vulnerable members of the community have access to everything they need in the event of an emergency and can sustain themselves for at least three days if required.

Image: Jalunkarr kadan burayngjiku bayan bubu buyundanman "When the flood came it damaged homes and land". Wujal Wujal 2019 Recovery Plan. Courtesy Wujal Wujal ASC.

Our resilience needs

In the Cape York and Torres Strait region, we have learned a lot about what resilience really means to the people and places of our part of the Cape, lower Gulf and Torres Strait Islands, how stresses and shocks can affect existing levels of resilience, and how future events and trends will impact the ability to remain resilient.

Primary among the core resilience messages in the region was the need to identify and work towards a common standard of baseline resilience across all the communities. This will enable and further strengthen the common understanding of disaster resilience in the mainland and island communities.

Resilience is about looking at people, places and landscapes through the lens of trends, stresses and shocks faced now and into the future. Understanding the trends, stresses and shocks can highlight the resilience needs of the region and the complex interplay between social, economic, built and environmental systems.

There are many geographic, demographic and climatic events that can have major impacts on the communities.

Trends

Transformative forces that could change a region:

- increasing population and high proportions of young people
- limited opportunity leading to young people leaving community for employment and schooling
- creating economic opportunity in community
- increasing bio-security challenges
- securing local and regional food security
- enabling ageing in place
- loss of culture and language
- increasing tourism on our terms and stemming associated damaging impacts
- limited reliable connectivity
- increasing digital enterprise ability
- climate change.

image: Seisia Foreshore, Torres Strait. Courtesy QRA.

Stresses

Long term situations or circumstances, weakening the potential of a given system and deepening vulnerability – they may be periodic or chronic:

- compromise of family and cultural practices and leadership by disconnection to Country due to infrastructure disruptions
- complex land tenure arrangements
- extended isolation physically and digitally
- potential for weed and pest outbreak
- access to enabling infrastructure
- access and stability of services
- stability in leadership
- fluctuations in funding
- support services and baseline service provision
- housing availability, overcrowding, diversity, quality and affordability
- fresh food availability and affordability
- high cost of living generally
- availability of local and regional aged care
- upskilling and training and opportunity availability
- reliance upon larger centres for essential services
- availability and suitability of baseline exposure and risk information for improved decision making
- diversity in achievement of a baseline in resilience in the region.

Shocks

Sudden events with an important and often negative impact on the vulnerability of a system and its parts:

- cyclone, severe storms and wind (including coastal inundation)
- flooding
- bushfire and grassfire
- heatwave
- pandemic
- biosecurity outbreak
- earthquake.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:
Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Lanthanotus borneensis) a medium-sized tree lizard. Credit: Shutterstock.
Image: Injinoo Foreshore. Courtesy QRA.

Core resilience needs

Our core resilience needs are derived from an understanding of trends, stresses and shocks. support for disaster management resources, capability and capacity

- keep culture alive and strong by limiting needs to relocate for health, education and employment
- strategic prioritisation of improvements to supply chain routes to reduce disruption
- continued betterment to community access routes to reduce isolation
- understanding the baseline and achieving baseline resilience in all communities
- continued improvements to alternate transport and access options including airstrips and sea freight
- improved facilitating infrastructure or innovation in digital connectivity, water and energy
- regionally focused service delivery reducing dependency on coastal capitals
- social wellbeing and population stability projects
- celebration of local culture and language into community as a system and highlighting connection to Country
- support for disaster management resources, capability and capacity
- coordinated disability, physical and mental health services
- consistency and commitment to delivery of essential services including housing and health
- support for opportunities for elders to age in place
- natural resource management and landscape sustainability and collaboration especially through local and traditional knowledge
- capacity building in current and emerging leadership
- creating opportunities in remote learning and working
- support to enhance cultural connection to place through transfer of landscape knowledge to younger generations
- support to transition to sustainable waste practices
- support to transition to renewable and independent energy technologies
- enhance food security through access to local affordable nutritious foods
- development of local industries, in agriculture, arts and, tourism
- support to access overseas markets
- improvement in digital connectivity
- employment opportunities for youth
- improve understanding and collaboration on complex land tenure arrangements

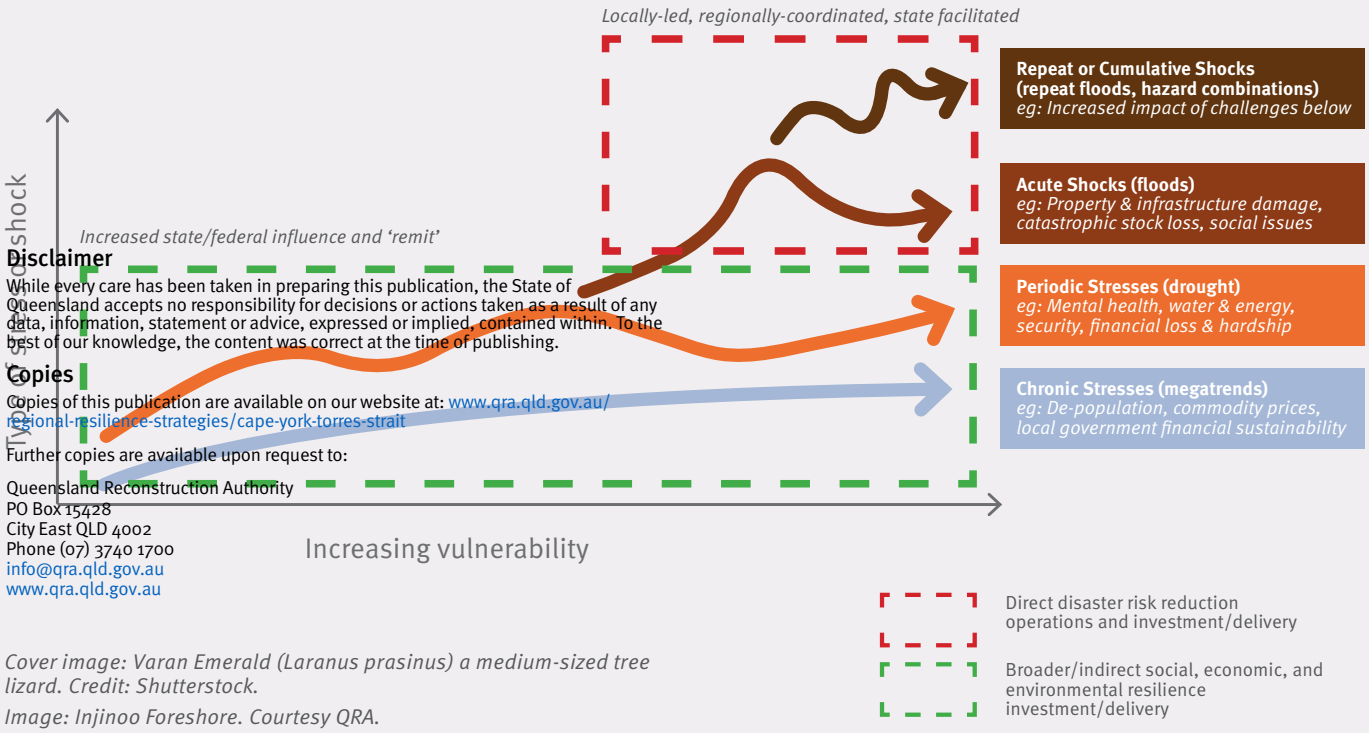
Image: Trunding Creek, Weipa. Courtesy QRA.

How resilience is affected by stresses and shocks

Our disaster management system has traditionally dealt very well with the event-based episodic or acute shocks like floods, cyclones or bushfire. But we need to continue dealing with more of the systemic issues that worsen disaster events when they occur, and place increased burden on our disaster management system.

Investment and effort in building social, economic, infrastructure and environmental resilience helps to reduce the stresses caused by periodic stresses like drought and means that communities are better able to cope with episodic events like floods, bushfires or cyclones when they happen. Investment and effort in building social, economic, infrastructure and environmental resilience helps to reduce the periodic stresses and means that communities are better able to cope with episodic events when they happen.

Figure 5. How resilience is affected by stresses and shocks.



Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Image: Mulligan Highway, Cook. Courtesy QRA.

Rethinking resilience in the Cape York and Torres Strait region

To date our focus has been on post-disaster recovery processes and building resilience through programs like infrastructure improvements that can limit the impacts of recurrent events.

However, with our lived experience of recovery, we now acknowledge the need to proactively identify and deliver over time on initiatives that help avoid the stresses and shocks in the first place – ultimately putting us on a more sustainable track for growth and prosperity.

Limiting impact or shortening recovery from stresses or shocks

This Strategy focuses on identifying actions that limit impact or shorten recovery from stresses or shocks. These will help communities in the immediate aftermath of an event.

It provides pathways for actions to adapt or transform socio-economic settlements or systems to avoid or resist the impact in the first place. This will help our communities in the Cape York and Torres Strait to grapple with long term trends and stresses like climate change, food and biosecurity, and long-term isolation.

This way, we can provide a long-term blueprint for how our region can continue to improve its disaster resilience for years to come.

How we make real and lasting change

To meet our collective challenges, we need to actively take steps to reduce disaster risk and equip the Cape York and Torres Strait Region to thrive in spite of the stresses and shocks they face. We need to match community need with funding and support to deliver – by refocusing efforts to improve our baseline and shift thinking from recovery to prevention and preparedness.

We can make lasting change by living the TCICA philosophy of fostering cooperation and sharing and uniting energy toward prioritised and transformative actions for the region.

Figure 6. Improving our prosperity through resilience (adapted from Joseph Fiksel).

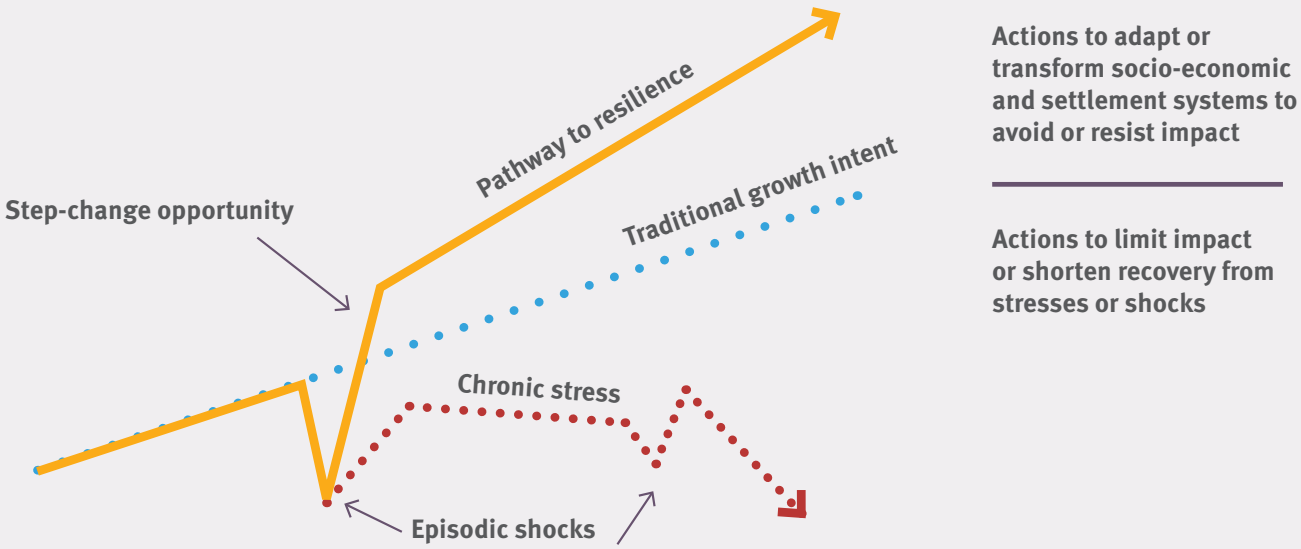


Image: Cooktown local art. Courtesy QRA.

Case study: Cape, Torres and Gulf Opportunities Plan

While there has been a large volume of work completed assessing various economic and industry development opportunities, the region needed a cohesive and regionally-led economic strategy to guide sustainable development.

A strategic regional plan to help achieve consistency in economic objectives across the region and to enable communities to be best placed to capitalise on future growth was needed.

The Opportunities Plan will help guide the regional economic growth and guide public and private sector investment in the region. Articulating a shared vision, the Plan identifies transformational strategies that represent the key levers or 'big moves' that will unlock growth for the region.

Importantly, one of these big moves is to be recognised as a resilient region and acknowledges the regional stresses and shocks. Action TS.10 states: *"Develop and implement a resilience framework"*. This Strategy forwards the work of the Opportunities Plan and builds on recognised visions.

The vision: In 2040, the Cape, Torres and Gulf region is recognised across Australia and beyond for its success in building a diverse and sustainable economy by caring for, celebrating, and learning from its people, their culture, and the environment.

Image: Naprunum 'The Farm'. Courtesy QRA.

The changing funding landscape

Under the joint Australian Government-State Disaster Recovery Funding Arrangements 2018 (DRFA), assistance is provided to alleviate the financial burden on states and territories. It also supports the provision of urgent financial assistance to disaster affected communities.

The DRFA replaced the previous Natural Disaster Relief and Recovery Arrangements (NDRRA) on 1 November 2018.

The reforms to the DRFA included, for the first time, a framework to incentivise reconstruction efficiencies to create more funds for resilience and mitigation purposes.

Efforts to realise efficiencies under DRFA are critical to fund resilience and mitigation efforts in the future and will help change the funding landscape from a focus on reconstruction and recovery to a focus on prevention and preparedness.

We now have a clear forward plan for how we can make lasting change into the future through sustained investment in resilience and mitigation activities. Recent changes in funding arrangements will enable the creation of funds for mitigation and resilience, along with a range of other funding programs (e.g. the Local Government Grants and Subsidies Program, Get Ready Queensland) that support resilience building.

Regional Resilience Strategies will provide the 'long list' of locally identified actions that can be prioritised against a wide range of possible funding opportunities (including DRFA efficiencies) to build resilience in Queensland communities over time.

Figure 7. Changing the focus from reconstruction to prevention and preparedness.

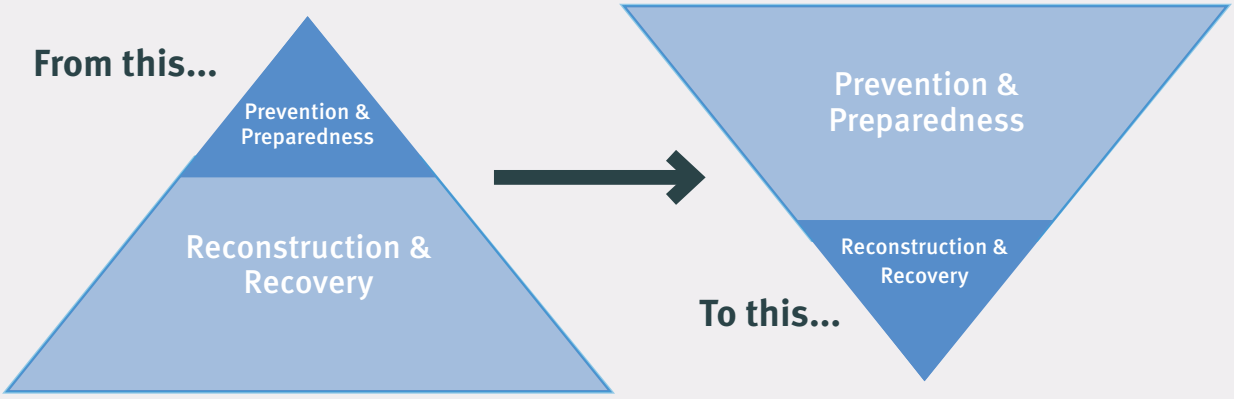


Image: Cooktown mangroves. Courtesy TCICA.

Our region

The Cape York and Torres Strait region is rich in enduring cultural heritage and natural beauty. Traditional owners have deep connections to Country, while our vast wilderness, wide open spaces and pristine beaches bring visitors seeking unique experiences.

The region is **isolated but connected; separate but together**. It is comprised of the Torres Strait Island Regional Council and the 13 local governments and authorities of the Torres Cape Indigenous Council Alliance (TCICA):

- Aurukun Shire Council
- Cook Shire Council
- Hope Vale Aboriginal Shire Council
- Kowanyama Aboriginal Shire Council
- Lockhart River Aboriginal Shire Council
- Mapoon Aboriginal Shire Council
- Mornington Shire Council
- Napranum Aboriginal Shire Council
- Northern Peninsula Area Regional Council
- Pormpuraaw Aboriginal Shire Council
- Torres Shire Council
- Weipa Town Authority and
- Wujal Wujal Aboriginal Shire Council

This region accounts for 0.6% of the state population, and occupies 75% of Queensland's land mass.

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Principal industries supporting the region's economy include grazing, mining, public administration, tourism, and art and carbon farming. Tourism is becoming increasingly important to the economy, as tourists are drawn to rugged and remote landscapes. Tourists can enjoy some of the best fishing in Australia or experience unique indigenous-led tours.

Image: Pormpuraaw Council building art. Courtesy QRA.

The spine of the Cape York Peninsula is the Peninsula Development Road (PDR). Beginning in Lakeland, it runs northward, passing through Laura and Coen before arriving in the mining town of Weipa. This major route has spurs along its length which connect to communities situated on the east and west Cape. Communities further north are accessed by continuing along Telegraph Road, towards Pajinka - the tip of Queensland or to the Torres Strait Islands and the communities of the Northern Peninsular Area.

The region includes mainland communities and three principally island communities: Mornington Island and TSIRC, which are entirely island-based while Torres Shire has some mainland Country with the principal centre on Thursday Island. Together there are more than 35 islands in the region.

There are some stark contrasts in the communities of the Cape region. The Bauxite mining town of Weipa is operated as a town authority rather than a shire council. It has the smallest land area of only 10.8 square kilometres with a concentrated population of 4400 people in full employment. Weipa boasts a personal weekly income of more than double the State average. In contrast, the 12 Aboriginal Shire Councils (ASCs) have in some areas more than 50% unemployment, incomes much lower than state averages and 11 of the shires have 100% of the population in the most disadvantaged quintile of the social disadvantage spectrum.

The 12 ASCs take up 19% of the region and almost 70% of the population. Further contrasting is Cook Shire which occupies 81% of the land mass and 15% of the population. The Shire has some outlying townships with predominant populations of indigenous people but is not an Aboriginal Shire.

The Cape is sometimes referred to in four geographic regions: eastern and western Cape (coastlines), Torres (including mainland and island communities) and the Gulf. The Torres region also has the support of the Commonwealth Torres Strait Regional Authority.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

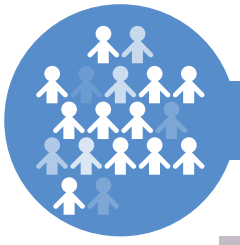
Further copies are available from:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3724 7200
info@qra.qld.gov.au
www.qra.qld.gov.au

A snapshot of community characteristics

Approximately 53 Islands

Governance - 14 Communities
13 Aboriginal Shire Councils; and
1 town authority; and 1 federal authority



Size and population

Total Population 29, 530 or 5% of Queensland

Total Area 131,018 km2 7.5% of Queensland

Indigenous Australians are 66% of the populations of the Cape York and Torres Strait Region and 89% of the population of ASCs

Population of ASCs 20,481 or 69% of the Cape York and Torres Strait Region Over 25,283km2 or 19% of the area

	ASCs	CYTS Region	Qld
Median Age	27.7	34.4	37.4
Growth Rate (population over 5 years)	1.7	1.8	1.6%
Dwelling Ownership	3.5%	10%	28.5%
Homeless Persons (per 10.,000 persons)	550.6	389.1	45.6
Household Size	3.6	3.4	2.6
Income	$ 20,172	$ 25,023	$ 34,320
Internet access (from dwelling)	64.6%	68.6%	83.7%

Employment

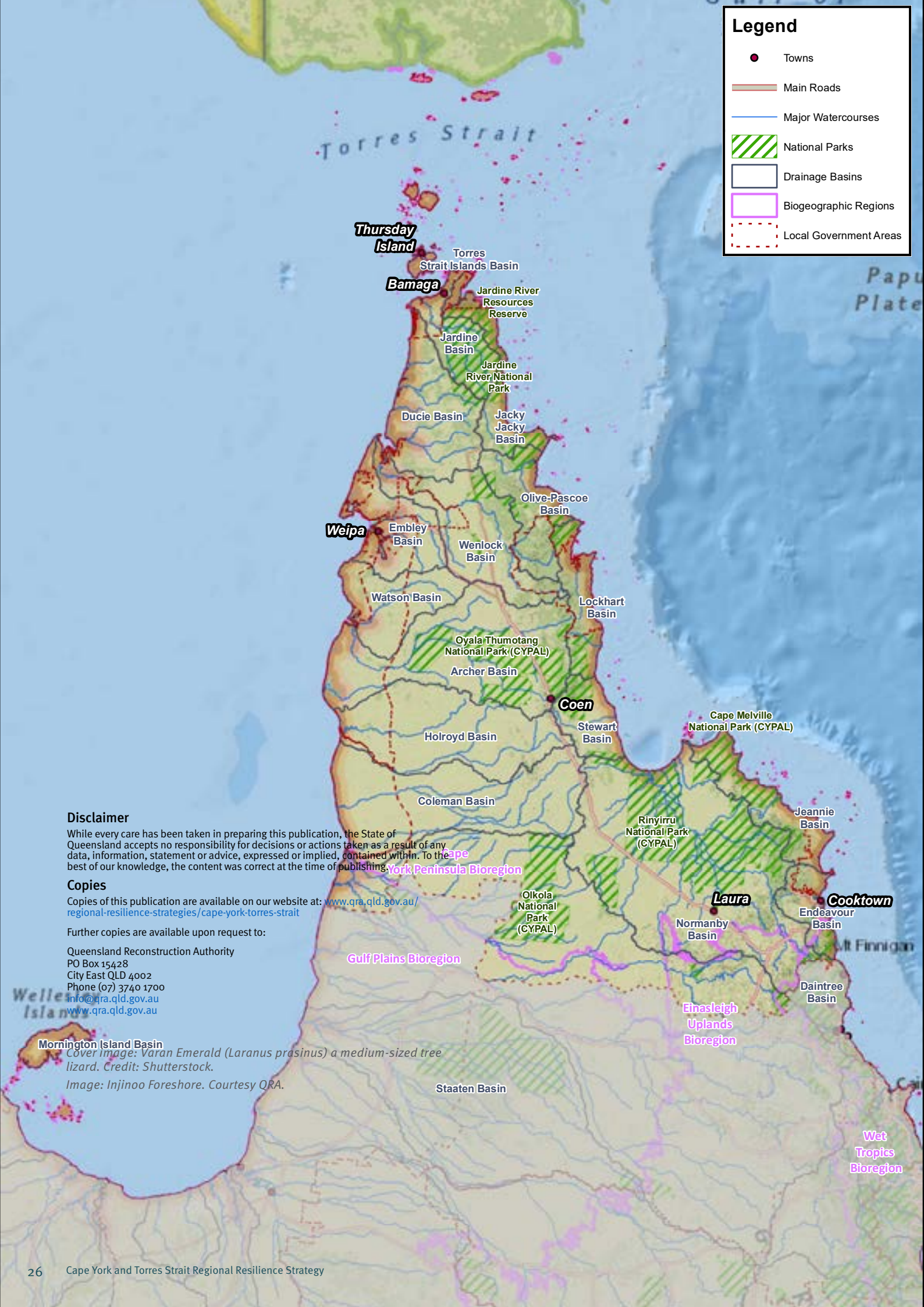
11.6% mining

12% education

6% retail

13% health

18.1% administration



Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

The Gulf

Mornington Shire

The Shire is an island community in the base of the Gulf of Carpentaria about 35 kilometres offshore. Mornington Shire Council comprises of 22 islands of the Wellesley group. The principal township of Gununa on Mornington Island is serviced by regular passenger flights from Mt Isa and Cairns, and a barge operation from Karumba. The land area is 1247 square kilometres. There are dirt airstrips and some dwellings on Bentinck Island near Raft Point and Sweers Island at Inscription Point. There are no official settlements on the other islands.

The islands and surrounding seas are the traditional lands and waters of the Lardil, Yangkaal, Kaiadilt and Gangalidda peoples. The region remains one of the most pristine anywhere, featuring internationally renowned art works, rich cultural heritage, harmonious multicultural communities and one of the best fishing destinations in Australia. The land is covered by native flora like tea tree with swamp flats providing a habitat for many species of wildlife.

Mornington is approximately 55 kilometres long, from Gununa in the south to Thabugan Point in the north. There are substantial areas of intertidal flats, short run creeks and rivers, and fringing reefs associated with most Islands. The entire island group is Aboriginal freehold title and Council administers the township freehold areas. The population is 1231 people with 28% under the age of 14 years and a median age of 27. Personal income is about half the Queensland median.

Image: Kowanyama Cattle Co. Courtesy Kowanyama Aboriginal Shire Council.

The Western Cape

The communities of the Western Cape from south to north include Kowanyama, Pormpuraaw, Aurukun, Napranum, Weipa and Mapoon.

Kowanyama Shire

Kowanyama is located about 25 kilometres inland on the banks of Magnificent Creek. The creek forms part of the vast Mitchell and South Mitchell Rivers estuarine wetlands. The ‘place of many waters’ is the southern-most community on the western Cape coast, sharing a border with Carpentaria Shire in the south. The Coleman River forms the northern boundary with Pormpuraaw Shire.

The community has regular passenger flights but no barge or sea freight service. Road access from the south is via the Burke Development Road or north to Pormpuraaw. All access roads are gravel and impassable for extended periods in the wet season.

The community boasts a brand-new women's centre and a local museum housing an extensive collection of 'national significance' in cultural value. The Kowanyama Cattle Company supports employment and the community is sourcing scientific assistance to forward other projects such as the reopening of the market gardens.

Kowanyama Aboriginal Shire Council administers the trust lands of about 250 square kilometres. The Shire is 2553 kilometres square with an official population of 1003 (1300 unofficial) with a median age of 28. Personal income is about half the Queensland median.

Pormpuraaw Shire

Pormpuraaw is just north of Kowanyama and south of Edward River. It is slightly smaller than Kowanyama at 4394km² right on the western coast. The outlet of the Chapman River is directly south of the community and Moonkan Creek to the north.

Pormpuraaw (formerly Edward River) was established as an Anglican Mission. The township consists of two neighbourhoods known locally as Mungkan side and Thaayorre side under an Indigenous Land Use Agreement (ILUA) area immediately surrounding the township. The community is united by schools, shops, administrative buildings and shire council staff housing.

Pormpuraaw is very low lying and surrounded by the estuarine wetlands, perfect for the Edward River Crocodile farming enterprise.

The airstrip receives passenger services and boasts a spectacular beach side landing strip. Pormpuraaw is accessed by the unsealed Strathgordon Road, connecting to the Peninsular Development Road (PDR) approximately 210 kilometres west.

The community boasts an extensive gallery and art centre housing the famous ghost net art, great fishing and over 100 kilometres of coastline, guest accommodation and community social club. The Shire has a 2020 population of 856 people and median age of 30 years. Personal income is about half the Queensland median.

Aurukun Shire

Aurukun is located north of Pormpuraaw and is a larger Shire of 7424 square kilometres. The shire is bounded by the Holroyd River to the south, Archer Bend National Park to the east and Napranum Shire to the north. It has approximately 107 kilometres of coastline.

Four major rivers discharge into the Gulf in the Aurukun area: the Holroyd, Ward, Archer and the Watson Rivers. The Love, Hey and Kirke Rivers are smaller catchments within. The small township of Aurukun is located on the shore of the convergence of the Archer and Watson rivers with an official population of 1370. The community has a median age of 34.8 years and the lowest annual personal income median on the Cape of $13,520 which is close to a third of the Queensland median.

Aurukun was originally known as Archer River Mission Settlement. It was established in 1904 for the Presbyterian Church. The town eventually became known as Aurukun which has local meaning associated with a large lagoon on the Watson River. The township is defined by a town boundary identifying the extent of the ILUA with the Wik and Wik Way people.

Aurukun is renowned for its carved dogs and has an active and extensive arts centre. The airstrip receives passenger transport and is serviced by regular barge arrivals and the wharf in the Watson River. Road access is via the now partially sealed Aurukun Road to the PDR approximately 110 kilometres east.

Copies
Copies of this publication are available on our website at www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait
Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East Qld 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Varanus prasinus) a medium-sized tree lizard. Credit: Shutterstock.
Image: Injinoo Foreshore. Courtesy QRA.

Napranum Shire

Napranum township is located on the Embley River between Aurukun and Weipa. It is a small Shire of 2004 square kilometres, fragmented into a number of smaller land areas, surrounded by Cook Shire but itself surrounds the township of Weipa.

The Napranum township sits on Albatross Bay which is at the confluence of the Hey and Embley Rivers. Napranum - 'meeting place of the people', is 12 kilometres south of Weipa Town via a sealed road. The community has an official population of just on 1,100 persons (unofficial approximately 1500) and the second lowest median age (after NPARC) of 25 years. The Shire has a personal median income of $14,560 which is second lowest on the Cape and less than half the Queensland median.

Napranum was previously known as the Embley River Mission. Napranum boasts modern facilities such as the Yepenyi-Awumpun Art Gallery, Mary Ann Coconut Library and Indigenous Knowledge Centre, and many new houses being built in the past ten years.

Weipa Town

Weipa has a population of 4445 people, in a town boundary of 10.8 square kilometres. It is located 800 kilometres from Cairns by road at the end of the PDR and perched on Rocky Point between the Embley and the Mission rivers. Weipa is the largest town on the Peninsula after Cooktown. Rio Tinto is responsible for the administration of Weipa, as a purpose-built bauxite mining town, which it carries out through the Weipa Town Authority. The Weipa town area is governed the Weipa Town Authority by virtue of the Comalco Act and the Comalco Agreement, within the limitations set out by those instruments.

The township has a very different profile to the other communities of the Peninsula with a median age of nearly 34 years (also only second to Cook Shire) a median personal income of $68,640 which is double the Queensland median and an unemployment rate of 2.7% where 42% of the population is employed in the mining sector. Despite its beginning as a mining town, Weipa is fast becoming a regional service centre and hub with expanded hospital and allied health services, a prep to year 12 Western Cape College and a full range supermarket.

Apart from mining the township has strong economic base in tourism for camping, excellent fishing and as a base of exploring the Cape York Peninsula. It is an emerging regional service hub. The town is serviced by Qantas, regular barge services and a deep-water port. The PDR ends at Weipa.

Mapoon Shire

Mapoon is reached by driving through Weipa and over the Mission River bridge. The unsealed Weipa-Mapoon Road of approximately 80 kilometres leads to the small community of Mapoon on the south bank of the convergence of the Wenlock and Ducie rivers. It has a land area of only 537 square kilometres and a population of about 339 people. The median age is 30 years with a personal income of just over half the Queensland median.

The Shire also include the small Pennefather River which serves as a boundary with Napranum. Mapoon is dissected by the Wenlock with a small and fragmented area on the eastern shores of the bay and a more substantial land holding to the west and the coastline. The Shire has a strong Land and Sea Ranger program operating in conjunction with Council.

The Mapoon township is situated on the traditional lands of the Tjungundji people. The Mapoon Mission (Batavia River Mission) was established near Cullen Point in 1891. The small community boasts a great cafe, beachside camping grounds, new accommodation.

Image: Napranum Aboriginal Shire. Courtesy QRA.

The Northern Cape and Torres Strait Communities

The communities of the Northern Cape and Torres Strait include the Islands of the Torres Strait Island Regional Council, the Northern Peninsula Area Council and Torres Shire Council.

The Torres Strait is made up of more than 100 islands and traditionally known as Zenadth Kes and occupies all land and sea between Australia and Papua New Guinea. It is divided into five major island clusters:

- the Top Western Group including Boigu, Dauan and Saibai
- the Near Western Group of Badu, Mabuiag and Moa
- the Central Group of Yam, Warraber, Coconut and Masig
- the Eastern Group including Murray, Darnley and Stephen; and
- the Thursday Island Group of Thursday, Horn, Hammond, Prince of Wales and Friday.

The last group also includes the five mainland aboriginal and islander communities of Bamaga, Seisia, Injinoo, Umagico and New Mapoon, on the Northern Peninsula Area of Cape York.

Across Torres Strait there are three language dialects: Kala Kawa Ya (Top Western and Western), Kala Lagau Ya (Central) and Meriam (Eastern) predominate with the 'Creole' language that emerged after the arrival of the missionaries.

The Torres Strait is the body of water between Australia and Papua New Guinea where the Pacific and Indian Oceans meet and where there are 133 islands, sandy cays and rocky outcrops of which 38 are inhabited. The population of the Torres Strait at the last Census (2011) totalled 7490 people.

The Torres Shire is responsible for many islands and the Torres Strait waters with a small mainland area while the Torres Strait Island Regional Council is responsible for a number of islands in the Strait while the Northern Peninsula Area is on the mainland.

Northern Peninsula Area

The Northern Peninsula Area Regional Council (NPARC) is at the very northern tip of Australia. It is a narrow peninsula with the Coral Sea to the east, the Arafura Sea and Gulf of Carpentaria to the west, and the Torres Strait to the north.

Just over 128 kilometres south of Australia's nearest neighbouring country Papua New Guinea, the primary township is Bamaga. The Council area shares a boundary with Cook Shire to the west and south and the Torres Shire to the west and north including the waters of the Torres Strait. The Bamaga Airport is located in the Torres Shire.

The NPA is made up of five Indigenous communities, settled by clans from across Cape York and the Torres Strait. NPARC was formed in 2008 by the amalgamation of the shire and island councils of Bamaga, Injinoo, New Mapoon, Seisia and Umagico. Accordingly, there are council services in all three of the communities; Injinoo, Umagico and New Mapoon, and two Saibai Islander communities; Seisia and Bamaga. Individual cultural and place ties in the three historic boundaries remains.

Access to Pajinka (the tip of Cape York) and Torres Strait shires is via the Telegraph Road from where it leaves the PDR at the Wenlock River about 300 kilometres south of Bamaga. Travellers must cross the Jardine River (within NPARC) using the council-owned ferry to continue to the tip.

NPARC has a population of 3224 with the youngest median age on the Cape of 23.9 years. The median personal income is about two thirds of the Queensland median. There are regional wharf and Sea Swift depot facilities located at the Seisia Port at Red Island Point. The Shire has an emerging Land and Sea Ranger program operating in conjunction with Council. The small townships have some good accommodation opportunities for camping and cabin style with picturesque bays and beaches and some excellent examples of missionary churches still in use today.

Image: Poruma, Torres Strait. Courtesy QRA.

Torres Shire

The Shire of Torres is the northernmost Queensland local authority. This includes the northernmost part of Cape York Peninsula, together with the islands of Torres Strait. The Shire's administrative centre is located on the very small Thursday Island which also has a port and ferry terminal. There is no airstrip on Thursday Island. Passengers use ferries and either Bamaga or the adjacent Horn Island Airport.

Torres Shire is the only Australian local government which abuts an international border (Australia and Papua New Guinea) and is near the Indonesian province of Irian Jaya. The land area administered by Council, is comprised of 15 islands and portions of Cape York Peninsula:

- Albany Island
- Teran Island (Dayman)
- Zuna Island (Entrance)
- Gealug Island (Friday)
- Palilug Island (Goods)
- Ngurupai Island (Horn)
- Little Adolphus Island
- Mori Island (Mount Adolphus)
- Yarke Island (Packe)
- Yeta Island (Port Lihou)
- Mained Island (Possession)
- Muralag Island (Prince of Wales)
- Waibene Island (Thursday)
- Tamwoy Island
- Mawar Island (Wednesday)

Together, the mainland and the island have a land area of 1107 square kilometres and a population of 3924 people with a median age of 30 years. The median income is $38,480 which is the highest median outside Weipa and slightly above the Queensland median of $34,320. The unemployment rate is 7.5% which is the lowest of all Aboriginal Shires. Torres has the highest level of primary school attendance after Weipa. Employment by sector follows trends in other shires with 21 percent in health care, 18% in public administration and 13% in education but also has strong figures in other industries such as construction, retail, transport and logistics al around 7-8% and accommodation services at 5%.

Image: Ugar, Torres Strait. Courtesy QRA.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-profiles/cape-york-torres-strait

Further copies are available upon request to:
Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3008 7200
info@qra.qld.gov.au
www.qra.qld.gov.au

Torres Strait Island Region

The Torres Strait Island Regional Council represents 15 unique island communities spread across the outer Torres Strait. The Council area is land only and is surrounded by the waters of Torres Shire.

These communities are spread across five groups of islands. The communities are made up of diverse traditional language and dialect groups. Torres Creole is used commonly across the 15 islands. There is one Mayor and 15 Councillors, one for each of the island communities of:

Gudaw Maluligal Nation

- Saibai
- Dauan (Mt Cornwallis Island)
- Boigu (Talbot Island)

Kulkalgal Nation

- Iama (Yam Island)
- Masig (Yorke Island)
- Poruma (Coconut Island)
- Warraber (Sue Island)

Kemer Kemer Meriam Nation

- Mer (Murray Island)
- Ugar (Stephen Island)
- Erub (Darnley Island)

Maluligal Nation

- Badu
- Arakai
- Wug (St Pauls Island)
- Mabuyag (Jervis Island)

Kaiwalagal Kaurareg Aboriginal Nation

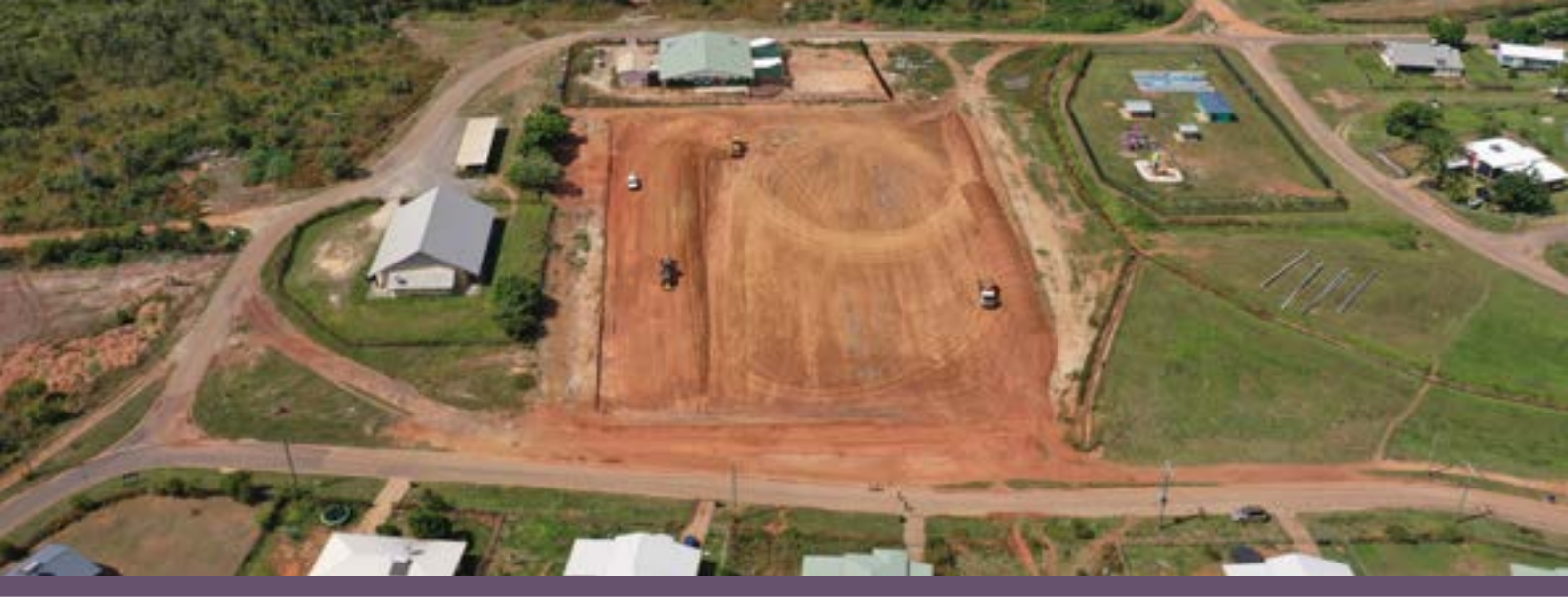
- Kirriri or Keriri (Hammond Island).

Most essential services and infrastructure are replicated on each island. Each Island community has reticulated water, wastewater, an airstrip (except Ugar and Wug), barge or jetty access, waste, education and health services.

The Torres Strait Islands are distributed across an area of 48,000 square kilometres. The distance across the Strait is around 150 kilometres at the narrowest point with islands scattered in between, extending 200 to 300 kilometres from east to west. The island are closest to the Papua New Guinea border with Sabai only about five kilometres off the PNG mainland and Boigu about eight.

The first inhabitants of the Torres Strait migrated from the Indonesian archipelago 70,000 years ago, when Papua New Guinea was still attached to the Australian continent.

The combined islands have the largest population on the Cape of 5178 people with a median age of 27 years. Personal income is just over half the Queensland median.



The Eastern Cape

The communities of the Eastern Cape include Hope Vale, Wujal Wujal and Lockhart River.

Lockhart River

Lockhart River is an isolated shire in the eastern Cape surrounded by Cook Shire. The township is on the northern extreme of the shire, just north of the Claudie River nestled on a rise a few kilometres inland. It is approximately 12 kilometres north of the tangled delta of Lockhart River.

Lockhart River Aboriginal Shire encompasses 3540 square kilometres of thick rainforest Country, adjacent to the majestic Kutini-Payamu (Iron Range) National Park (CYPAL), renowned for its scenic beauty and rewarding bird watching.

There is an active football and social club, a renown arts centre, an active dance troupe, and pristine coastline at Quintell Beach. The township areas have some large reserves and is administered by Council as trustee. The community has big plans to solidify their place as a leading dance troupe with their proposed performance facility and associated campground at Quintell Beach.

The community has a primary value of Strong Puuya (life force) and an official population of 800 people with a median age of 27 years. The median personal income is about half the Queensland rate. Council has worked hard in recent years to establish a construction enterprise or the region to provide employment opportunities. Lockhart is quite remote with no close neighbours and is accessed via an unsealed road about 100 kilometres off the PDR an a weekly barge service.

Wujal Wujal Shire

Wujal Wujal (meaning 'many falls') was previously known as Bloomfield or Bloomfield River Mission. It was founded in 1886 by Lutheran Missionaries; however, due to difficulties of isolation, the area was abandoned. The principal local people are the Kuku Yulangi. Council administers the township are as trustee.

Wujal Wujal is the smallest Aboriginal Shire in the Cape region at just 12 square kilometres, on the banks of the Bloomfield River which serves as a boundary with Douglas Shire to the south. It is located on the unsealed Bloomfield track in steep wilderness of the Bloomfield Valley approximately 60 kilometres north of the Daintree River ferry. The road to Cooktown 60 kilometres north is sealed. The Shire gets significant through traffic which sets it apart from others which are at the end of the road.

The Shire has some facilities located in Douglas Shire and land beside the river is very flood prone. It boasts the spectacular Wujal Wujal falls, and the impressive Bana Yirriji art centre. The community has an official population of 316 people and a median age of 33 years. Annual median personal income is $15,288 which is one of the lowest on the Cape and less than half the Queensland median.

Hope Vale Shire

This township is located at the top of the Endeavour River catchment on a sealed road, 10 kilometres off the Mulligan Highway and approximately 35 kilometres from Cooktown. The shire is surrounded by Cook Shire.

At just over 1000 square kilometres, Hope Vale township is situated 46 kilometres northwest of Cooktown. It is home to thirteen clan groups who mostly speak Guugu Yimithirr and other related languages, as well English. Endeavour Valley Road between Hope Vale and Cooktown is fully sealed, making access for tourists and visitors to Hope Vale a scenic and enjoyable drive. The township is located at the very south of the 1100 square kilometre Shire. There are a number of large rural residential style allotments to the north of the township.

The official population is 1140 people with a median age of 27 years. Personal income is just under half the Queensland median. Hope Vale boasts its own aged care facilities, a new community centre and is looking forward to a revamp of the central township area and shops. The Shire was previously home to a substantial banana plantation which was damaged by cyclones in successive years.

Image: Lockhart River football field under construction. Courtesy Lockhart River ASC.

Cook Shire

Cook Shire is the largest Shire in Queensland by land area (105,000 square kilometres) with a population of just 4604 people, the second largest on the Cape after TSIRC. The Shire has the highest median age at 41 years which is eight years above the next Cape shire and four years above the state average. The median income is just under the state median. Unlike the Aboriginal Shires, Cook has freehold land which enables dwelling ownership of 31% which is slightly above the Queensland figure of 28%. Cook has a high unemployment rate of 21%, equal to many other shires of the Cape and employment is dispersed with public administration, health, education, construction all between 9-11%. Agriculture is a standout at 13%, as is accommodation and food services at 12%. The Shire's economy is anchored by grazing and agriculture along with tourism, commercial fishing and administration.

The Shire extends from the Bloomfield River in the south, sharing a boundary with Douglas Shire to just north of the Jardine River on the top of Cape York. it is approximately 600 kilometres from south to north and extends to both the east and west coasts of the Peninsula, sharing boundaries with 12 of the Cape York Peninsula communities. The Shire hosts the main access road for all the communities: the Peninsular Development Road and access roads to most communities are within the Cook Shire. The principal township is Cooktown, on the east coast, located about 300 kilometres north of Cairns. Other towns include Laura, Ayton, Rossville and Portland Roads.

Cooktown is situated on the Endeavour River and is accessed by the sealed Mulligan Highway to the Tablelands and Cairns or the unsealed Bloomfield track through the Daintree rainforest along the coast. Cooktown has regular passenger air services and barge arrivals.

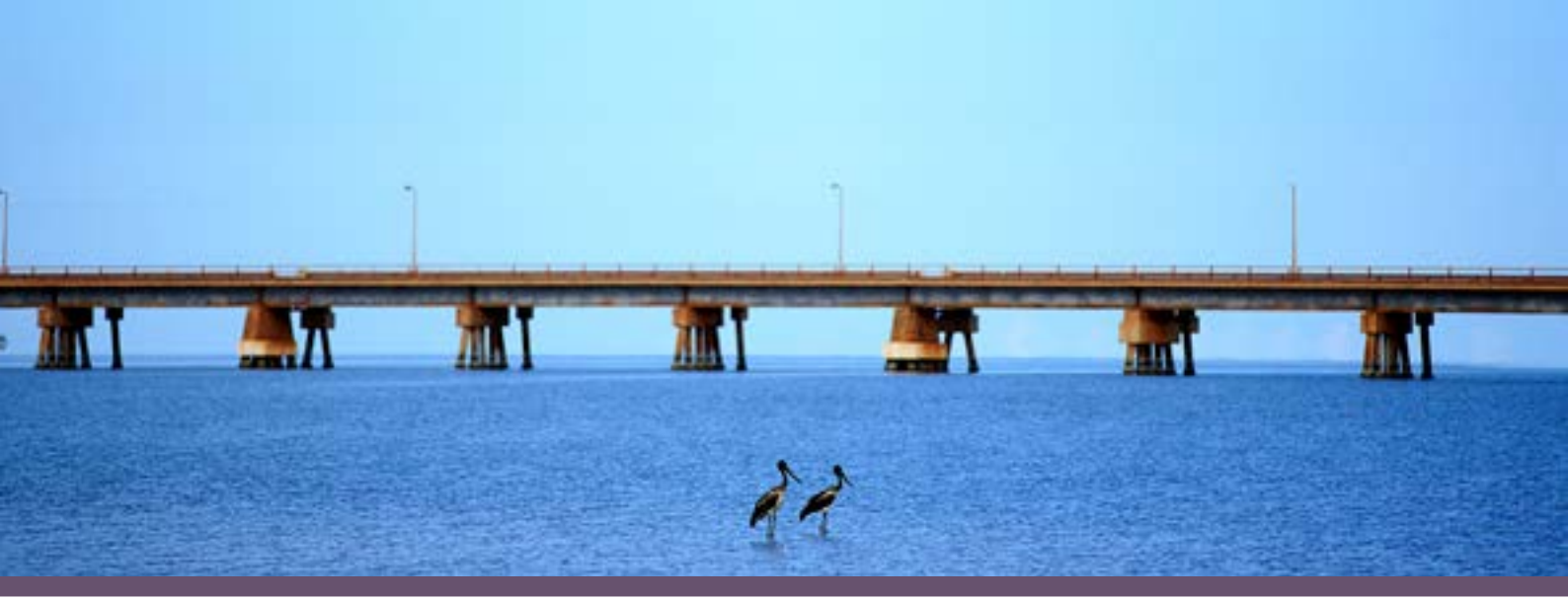
Cook Shire's size, population base, vast distances and responsibilities for pristine natural areas and an extensive road network present substantial challenges for the effective administration of the region. Cook Shire has over 25,000 square kilometres of national park and protected areas which is 24% of the Shire and 19% of the State's protected areas.

Shire and 19% of the State's protected areas.

Image: Injinoo Foreshore. Courtesy QRA.

Copies
Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait
Further copies are available upon request to:
Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3741 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Image: Coen, Cook Shire. Courtesy QRA.



Our landscape

The Cape York and Torres Strait Region extends from vast gulf savannah plains up to the Torres Strait and islands, including the Wellesley Island group in the Gulf of Carpentaria. These landscapes have unique intrinsic value and diversity. Community members of this region have strong cultural connections with the land, sea and biodiversity across the region.

Cape York Peninsula is dominated by the topography of the Great Divide, surrounding plains and rivers flowing through fresh and saltwater wetlands, mangroves and deltas.

Eucalypt and melaleuca woodlands occupy the lowlands, and thick rainforests hug the east coast. The Peninsula is fringed with biota rich coastal vegetation, dunes and estuarine ecosystems. Around half of this landscape is used for cattle grazing, principally in the central spine and plains. The resilience region takes up all the Cape York Bioregion as well as the northern parts of the Wet Tropics, Einasleigh Uplands and Gulf Plains Bioregions.

Our catchments

The 17 river systems and catchment boundaries are distinctly east or west flowing: the Great Divide forms the watershed boundary. On the east coast, relatively short and small river systems collect rainfall from the rugged mountains in a band about 50 kilometres wide and discharge into the Great Barrier Reef and Coral Sea.

The Normanby River is the exception on the east coast as one of the largest rivers on the Peninsula. Its headwaters on the eastern side of the Great Divide starting at the Daintree catchment (Bloomfield River), flowing north towards Princess Charlotte Bay. The bay features significant seagrass meadows and large marine turtle and dugong populations. East of the Normanby the band of smaller catchments includes coastal rivers of the Bloomfield, Endeavour, and Jeannie each flowing directly into the Coral Sea.

Further north are the small catchments of the Stewart, Lockhart, Olive-Pascoe Rivers and Jack-Jacky Creek, extending to the tip of Cape York. These catchments are dominated by rainforest scrub vegetation and coastal heath flora typical of the east coast. The Jack Jacky is a complex array of deltas, small islands, marshes and wetlands of Kennedy Inlet and Newcastle Bay.

The catchments discharging to the west are vastly different, taking up about 80% of the width of the Peninsular flowing west to the Gulf of Carpentaria. These rivers also have headwaters in the Great Divide with waterways snaking across the flat peninsular Eucalypt woodlands to low lying wetlands, wide multi-channel deltas and tidal flats. All these catchments have numerous sub basins, and many have multiple rivers.

In the south, Mitchell River rises on the Einasleigh Plains, and flows westward across Melaleuca woodland and low depositional plains towards the Gulf of Carpentaria.

Further north, the Coleman, Edward, Holroyd and Kendall rivers catchment flows across expansive plains toward the tussock grassland of the coast to mangroves and salt marshes common around Kowanyama and Pormpuraaw.

The Embley and Mission Rivers each have headwaters west of Weipa and flow north and south of the town, respectively. The Wenlock is a large catchment central to the Peninsular, and winds its way north to Mapoon, joining with the Ducie River before discharging at Port Musgrave. The Ducie catchment includes short and very low-lying systems of the Skardon, Jackson, Macdonald, Doughboy and Cotterell Rivers.

At the tip of the peninsula, Jardine River is a large central catchment which flows into the ocean at Endeavour Strait just south of Injinoo. Most of the river is in the Cook and NPARC shires, but the large wide sandy delta is in Torres Shire.

Image: Weipa Bridge. Courtesy TCICA.

Our islands

The Torres Strait was formerly a land bridge connecting the present-day Australian continent with Papua New Guinea. Sea levels have risen, leaving only the peaks of this land bridge, which are now the islands of the Torres Strait. Geographically, there is the eastern group of high volcanic islands; a central group of low sandy islands; a western group of high islands composed of volcanic and granitic rocks; and a northern group of islands consisting of mangrove muds and peats.

Mornington Island is generally flat and fringed by mangroves forests and estuaries. There are a number of short run watercourses including the Dugong River just west of Gununa and the Elizabeth and Towbulbulan rivers at the north end of the Island. The broad vegetation group for the island is low open eucalypt woodland with spinifex understory. Two other islands in the Wellesley Island group, Manowar and Rocky Islands, are internationally important breeding locations for seabirds.

Our parks

The Cape region is home to 15 land-based parks and 13 island parks and together they cover almost 20% of the land mass. 13 National Parks are on freehold Aboriginal land with majority managed jointly.

Protected areas cover most of the Jardine River to the north, the rugged Kutini Payamu (Iron Range) National Park (CYPAL) and picturesque Chilli Beach to the east and Lyk Wykan and Orford Mitchell Rivers to the west.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Our flora and fauna

The Cape York and Torres Strait region is flora and fauna rich with exceptional biodiversity. There are over 10,000 plant species and several thousand animal species. It is home to over 15% of Australia's species, principally due to the isolation and uninhabited nature of the region.

Cape York is home to extensive wildlife including butterflies, over a third of Australia's bird species, frogs, mammals and reptile species, and the richest concentration of freshwater fauna in Australia.

Approximately 240 plant species are endemic to the region and 350 species are on various threatened species lists.

Extensive wetland vegetation provides habitat for a wide range of important flora and fauna and aquatic plants such as the rare red lily, frogs, crocodiles, turtles, birds and platypus.

The diverse wetland habitats support waterbird roosting, feeding and breeding areas. Waterbirds of the Cape catchments include the comb-crested jacana, green pygmy-goose, cotton pygmy-goose, magpie goose, Radjah shelduck, brolgas and black-necked stork.

The abundant saltwater deltas and estuarine reaches provide important feeding areas for the estuarine crocodile, and support marine turtles, dolphins, and fisheries species such as barramundi and mud crab.

Image: Thursday island. Credit: Shutterstock.

Case Study: Mapoon Land and Sea Rangers

The Mapoon Land and Sea Rangers are responsible for the management of the traditional lands and seas of the Tjungundji people at Mapoon on Cape York Peninsula. In 1989, a Deed of Grant of Land in Trust covering 183,900 hectares was handed back to the Mapoon people by the Queensland Government.

The rangers work within the Western Cape York Peninsula beaches of north Queensland. This area is home to a nationally listed important wetland, as well as 18 threatened species and 75 listed marine species such as the flatback, green, olive ridley, and hawksbill marine turtles.

Mapoon Rangers undertake a range of environmental works, including the development of a traditional knowledge and cultural heritage geographic information system (GIS) database, weed and feral animal control, the protection and conservation of wetlands, controlling visitor access, reintroduction of traditional fire management, crocodile surveys and water quality monitoring.

For more information:

www.niaa.gov.au/indigenous-affairs/environment/mapoon-land-and-sea-rangers

www.qld.gov.au/environment/plants-animals/conservation/community/land-sea-rangers/about-rangers

Image: Mapoon Land and Sea Rangers. Courtesy Mapoon Shire Council.

Case study: Aurukun Access Road - Building back better

The Aurukun Access Road has been made even more resilient thanks to $1.2 million in betterment funding.

Aurukun Shire Council's betterment project involved installing gravel to infill scoured sections of Aurukun Access Road and stabilising the shoulders and embankments to improve accessibility and protect the road. Council targeted the higher risk locations for these upgrade works along an eight kilometre section of the road.

The works delivered through the 2019 betterment program complement the $1.2 million upgrade it received from the 2013 betterment program to seal a 10-kilometre section.

Council's 2013 project is a shining example of the benefits of the betterment program. Since the works were delivered to seal the road, it has been impacted by eight severe weather events and it has remained undamaged and functional.

Not only does this mean the access to Aurukun by road has remained opened following these events, it has also avoided reconstruction costs in the vicinity of $7 million.

For more information:

www.qra.qld.gov.au/news-case-studies/case-studies/aurukun-access-road-aurukun

Image: Aurukun Access Road works, Courtesy Aurukun Shire Council.

Our climate

Our livelihoods and ways of life are closely linked to the cycles and renewal of our land and seascapes. We understand the ebbs and flows of the weather, climate and seasons, and their influence on our lands and sea.

The climate of Cape York and Torres Strait can range from tropical and warm to harsh and unforgiving, so it is important to be prepared for the worst. Communities along the Cape York Peninsula – in particular, those inland – experience warmer temperatures than other parts of the region, like the Torres Strait.

If it is going to rain in Cape York and Torres Strait, it will be during the wet season between October and March. These downpours can make getting around our region difficult, particularly for those not familiar with our roads. If you are unprepared or get stuck, and isolation can be for long periods and extreme temperatures can be deadly.

Winters in Cape York and Torres Strait are still warm but provide some relief from the hot temperatures we experience over the wet season. It is during these winter months, when the temperature is pleasant, humidity mild and the weather more predictable that tourists explore our region.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Our communities have observed the environment, weather and seasons from generation to generation. Our elders and storytellers have handed down this knowledge through language, stories and cultural ceremony for millennia.

The timing and duration of seasons can vary from year to year, but our elders know the signals and stories in the landscape which tell us that the season is changing. We use this knowledge to time our community celebrations, hunting, fishing and cultural activities around annual cycles of renewal.

As an example of traditional season knowledge, the Masigalgal (the people of Masig Island) recognise four distinct seasons throughout the year – Kuki, Zei, Woerr/Sagerr and Naigai.

Subtle changes in the landscape can signal the arrival of each season. For instance, the flowering of Pulla (Beach Convovulous) signals that Woerr – strong south-easterly winds between March and September – has arrived. We know to expect some small rains at the start of Woerr, which will keep our Kumala (Sweet Potato) growing during the drier months to come.

More information about Indigenous understandings of weather and climate, as well as seasonal calendars, can be found on the Bureau of Meteorology's Indigenous Weather Knowledge website

Image: Masig Weather Calendar, authorised for use by Masigalgal RNTBC.

Temperature

Heat is something we deal with year-round living in our part of Queensland. Around our coasts, the heat can be warm but pleasant – sea breezes offer some relief. While the interior of the Cape can be warmer than the coast.

Our summers are hot, with the maximum temperature around 28°C. But it is not uncommon to experience extreme heat days where the temperature can approach 40°C. Our humidity will usually be between 80 to 85 per cent during the summer months and the wet season. A combination of high temperatures and high humidity can be very uncomfortable for individuals not acclimatised.

Increasing intensity and frequency of heatwaves means we will experience longer periods of higher temperatures.

Rainfall and severe wind

Our region orients activities around dry and wet seasons. Annual average rainfall is 1305 millimetres. The rainfall is highly seasonal, with most rain falling during the wet season (October–March) either as heavy thunderstorms, monsoonal lows or tropical lows.

A monsoon usually develops over northern Australia during the summer season when the land warms at a faster rate than the ocean, resulting in a considerable sea breeze circulation that draws in moisture from the ocean over the lower pressure of the land. A monsoon trough becomes established as humidity rises. True monsoonal flow, with deep low-level westerly winds, exists north of the trough, so when the trough moves south over a location, this area becomes affected by monsoonal conditions.

Tropical lows are another form of weather phenomena which occur in our region. Under the right conditions, these can form into cyclones. Both tropical lows and monsoonal lows can lead to flooding, coastal hazards and wind damage.

Severe wind events are a regular occurrence for us each storm season. They occur concurrently with the rainfall of tropical lows, cyclones, and monsoonal troughs.

Image: Sunset on Thursday Island. Credit: Shutterstock.

Historic cyclone events

April 1982 – Severe Tropical Cyclone (STC) Dominic

STC Dominic developed off the coast of Weipa and tracked southeastward towards Cape Keerweer. Winds were estimated to have reached 185 kilometres per hour at Pormpuraaw. Some damage was sustained to buildings and powerlines. At Aurukun, damage was assessed as $200,000.

February 1992 – Tropical Cyclone (TC) Mark

TC Mark formed within a monsoon trough in the Top End. It tracked across the Gulf of Carpentaria and made landfall south of Weipa as a category 1 system.

The Weipa township sustained widespread minor damage with falling trees largely responsible for damage to houses and power lines. Wave action caused an estimated $3.5 million damage to the Kaolin loading facility at Weipa port.

April 2014 – STC Ita

Crossing the coastline near Cape Flattery as a category 4 system, STC Ita tracked south past Cooktown. Passing 20 kilometres west of Cooktown as a category 2 cyclone. Approximately 200 buildings received mostly minor damage with 16 buildings receiving severe damage or destruction. Ita continued southward down the coastline as a category 1 system.

March 2018 – STC Nora

STC Nora made landfall along the west coast of Cape York, between Cape Keerweer and Pormpuraaw, late on Saturday, 24 March 2018, as a category 3 strength system. The cyclone damaged some houses and brought down numerous power lines and trees in Pormpuraaw.

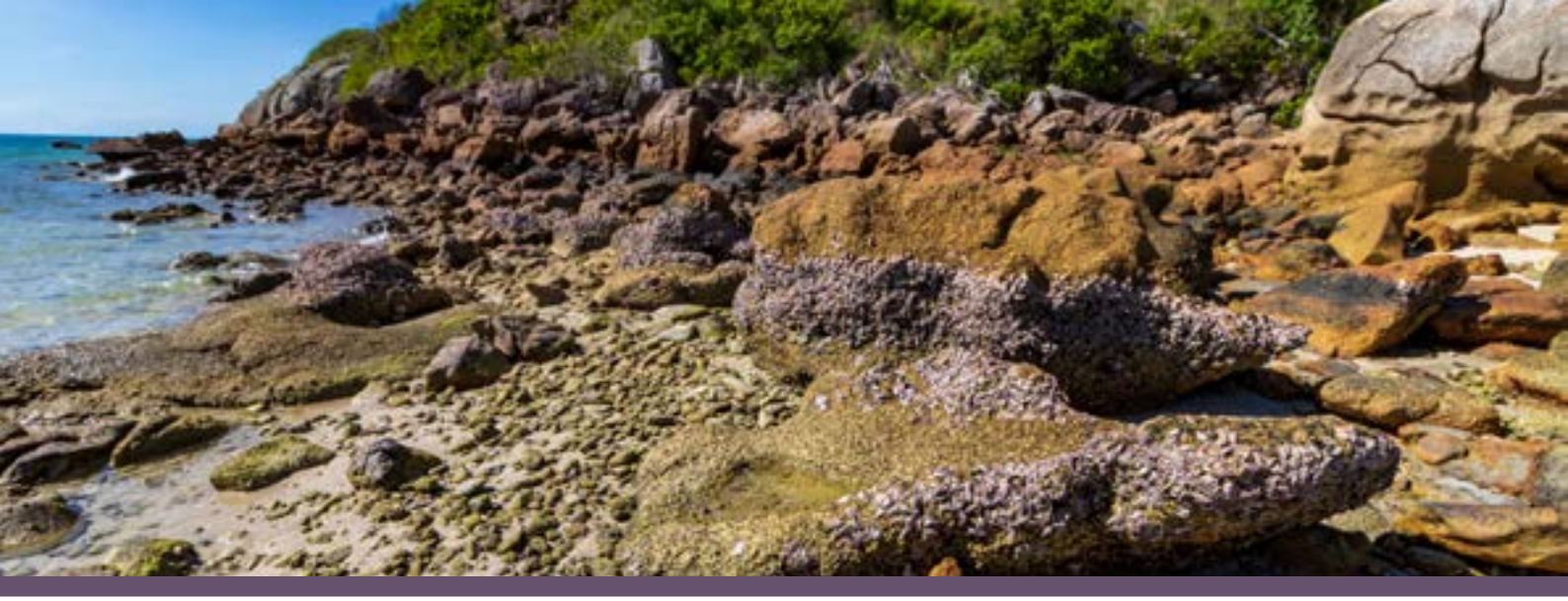
March 2019 – STC Trevor

Originating in the Solomon Sea, STC Trevor intensified to a category 3 before crossing the coast just south of Lockhart River. The township was impacted by destructive winds up to 137 kilometres per hour. Trevor damaged buildings and felled trees at Lockhart River and cut road access in Cook Shire as it continued across the Cape York Peninsula as a category 1 system. It emerged into the Gulf of Carpentaria south of Weipa.

Over the Gulf, the cyclone intensified and crossed Northern Territory coastline and looped back into western Queensland several days later as a tropical low.

For a full list of cyclones and disasters in the Cape York and Torres Strait region where local governments have been activated for disaster recovery and funding assistance since 2011 visit:

www.qra.qld.gov.au/activations



Coastal hazards

The region cares for thousands of kilometres of coastline and island communities. The threat of coastal hazards is front of mind. While the identified coastal hazards of coastal erosion and sea level rise are longer term morphological change to the landscape, the weather systems can result in periodic inundation from storm surge and permanent inundation due to sea level rise.

Many communities are vulnerable to all three coastal hazards, especially acute in the Torres Strait. Coastal hazard risk will continue to worsen through expected sea level rise of 0.8m to 2100.

Fire weather

Bush and grass fire is endemic to the landscapes of the region, often ignited by lightning strike. Good fire also supports a healthy landscape, with many of the region's ecosystems dependent on a level of fire frequency.

Aside from fuel loads, our weather and climate play a significant role in the intensity to which fire may occur, and how easily fuels may burn. This is all a part of the of the natural cycle of much of our landscape. High fuel loads arise from the high rainfall of the season, which bring vegetation growth.

Fire weather is determined by aspects of temperature, low relative humidity, high wind and drought factor. These aspects are considered as part of a framework known as the Forest Fire Danger Index (FFDI) as well as the Grass Fire Danger Index (GFDI). Based on data analysis performed by the BoM, from 1950 to 2018, annual accumulated FFDI has increased in the Cape York Peninsula by 21%.

Changes to fire frequency are uncertain, as this is dependent on the spatial variability of future rainfall. However, when fires do occur, its behaviour is likely to be more extreme. Fire weather conditions will both increase in intensity and become more frequent, heightening the risk of bushfire and grassfire across the region.

Future climate trends

Based on the future climate projections, the region is expected to experience the following changes to climate conditions in the future:

- higher temperatures
- hotter and more frequent hot days
- more intense downpours
- increased exposure to coastal hazards including storm surge and sea level rise
- warmer and more acidic seas
- less frequent but more intense tropical cyclones
- longer periods spent in extreme drought.

These changes will likely impact the region through a strengthening in cyclone intensity when they do occur, increasing severe storms, increasing flooding over large areas of the catchments and adding disruptions to transport networks, and weed invasion across the region.

Copies
Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait
Further copies are available upon request to:
Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3008 7200
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Image: Lizard Island. Credit: Shutterstock.

Our challenges and opportunities

Environment

Our region is large, with many environmental aspects to protect, vast distances, and dispersed and limited resources to fully manage Country. For example, we are not able to combat wildfires. Large areas of vegetation and important habitat are threatened before burning out or rain falls. The origins of fires include arson, lightning, environmental or grazing land management, fuel load reduction burns, and careless visitors. Expanses of fire scarred country contribute to biodiversity loss, erosion and resulting water quality issues.

Invasive weeds and resulting loss of native plants is the prevalent form of land degradation. These include aquatic weeds such as Hymenachne and Salvinia which smother native aquatic plants and deplete oxygen levels in water bodies. Weeds such as Rubbervine and Sicklepod invade riparian areas and waterways. Others such as Lion's tail compete with and smother native plants. Pest weeds and grasses are of particular concern for their flammable nature and high biomass such as grader and gamba grasses.

Pest animals, especially pigs, destroy valuable wetlands and contribute to run off and water quality deterioration. Communities share many domesticated animals which have free reign in townships including high horse and dog populations. Singapore ant outbreaks are especially damaging chewing through electrical equipment causing burn outs and appliance failure, which are hard to replace in isolated communities.

Other and human-induced environmental challenges and risks include:

- unlawful ballast release in the Gulf
- biodiversity loss through wildlife trade
- biosecurity threats through proximity to international waters
- impacts to culturally sensitive and environmentally fragile areas from high visitor numbers, recreational fishers and isolated coastline e.g. disturbance to nesting areas and waste dumping
- release of by-catch as waste, ghost nets and ocean waste washing up on shore and impacting sea life.

Our wet season and water volumes can cause high volumes of debris, blocked creeks and waterways and damage to infrastructure adjacent or crossing waterways.

Communities with extended damp and humid conditions can trigger public health issues. Many of our communities do not have an environmental health officer. Education on domestic animals, vector control, waste and vermin are essential for healthy community. Awareness can be increased with the right support.

The Land and Sea Ranger program is extensive. There is significant opportunity in this program to engage youth, capacity build and simultaneously protect our Country.

Image: Pajinka (the tip of Cape York). Credit: Shutterstock.

Towns and infrastructure

Our communities generally have critical infrastructure networks in water, sewerage internal roads and drainage however many of our networks are ageing. Airports and strips are often owned by local government, along with most other public-oriented services including fuel depots, aged care, waste facilities, community and social buildings, some housing and accommodation to name a few.

Our challenge is having appropriate expertise in remote locations to maintain, troubleshoot, operate and plan for the future systems and networks with confidence and experience. Building and asset management systems requires significant expertise and initial effort.

Housing is in short supply and challenges for expansion include limited land availability which we work through with supporting agencies and landholders. In providing new housing stock, there is an opportunity to give greater consideration to our tropical climate. Fit-for-purpose climate-responsive housing would provide comfortable living conditions in our warming region. Further, older housing predates cyclone ratings and a more comprehensive approach to auditing and maintenance of community housing would provide benefits of scale and resilience.

Energy is often locally generated and diesel transport is expensive and large stockpiles are required for the wet season. Households cannot always afford mechanised cooling solutions and the choice for installation is made by the dwelling owner, rather than the tenant. There are significant opportunities for renewable and solar energy options.

In times of isolation, we rely even more heavily on connections to the outside through digital platforms. The region suffers from digital inequalities and lack of mobile telecommunications, which becomes a key safety issue during the disaster season.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:
Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Roads and transport

Most of our roads on the Cape are unsealed, although this is improving all the time. There are thousands of kilometres of unsealed networks and shoulders which are a source of considerable sediment and run off during heavy rain. This in turn impacts water quality in our creeks and rivers and especially the catchments flowing to the Great Barrier Reef.

The unsealed nature of the roads means that travelers can get stuck because they are regularly, and for long periods, cut by rising waters on creek and river crossings. Roads also get severely damaged by traffic when wet. Our main arterial road - the Peninsular Development Road from Lakeland to Weipa continues to receive upgrades towards improved resilience.

One of our greatest challenges for road maintenance and construction is access to materials for road base.

Food and consumables, spare parts and equipment comes by regular barge freight delivery to most communities. When our roads are closed for many months of the year, we rely heavily upon sea freight transport as our supply chain. The barge freight schedule and air services are also exposed to weather conditions in the summer months.

The island communities of the Torres Strait are serviced by barge for freight, so port facilities such as barge ramps and jetties are the key points of access. Scheduled and charter passenger air services operate to many island communities although at significant cost due to remoteness.

Image: Road train, Peninsula Development Road. Courtesy QRA.

Economy

With the specific exception of Cook Shire and Weipa Town Authority, the communities of the Cape are mostly structured with complex land tenure arrangements to navigate prior to capital investment. Notwithstanding that there are many opportunities for locally based businesses in personal services, agriculture, art and tourism, remote working, recycling and health and administration.

The region has significant tourism opportunity. In 2021 the Cape was host to about 80,000 self-drive visitors to Pajinka, or more than four times the permanent population. Impacts from visitation include road maintenance, waste and unlawful dumping, stress on supply of fuel and food and damage to culturally and environmentally sensitive areas.

Tourists are increasingly looking for experiential tourism and encounters with traditional owners. Many communities have exceptional art galleries and globally renowned local artists which provide home-grown economic benefit such as the Aurukun carved dogs and the Pormpuraaw ghost net art. Charters present opportunities for the high-end tourism market from fishing in the Gulf to art collectors or and exotic bird watching from Kutini Payamu National Park at Lockhart River.

Waibene Island (CYPAL) is a key base for public administration, health and education servicing the northern peninsula and about 30 island settlements across the Torres Strait. Commercial fishing such as lobster operates in the islands with the potential as a marine serving hub, on the international shipping lane.

The Cook Shire economy is principally agriculture led by grazing but with opportunity in commercial fishing and other port associated ventures. Weipa is a bustling service centre halfway up the Peninsula with an economy built on mining but now stretching to a range of essential services and a regional hub.

People and communities

Despite the strong connection to place, the people of the Cape, Torres Strait and Gulf islands must move around a lot, particularly to Cairns, for various reasons including access to education, health (including childbirth), major shopping needs, events and family activities, aged care and relief from isolation. More localised services and communications which help relieve the need to travel will strengthen our people.

Isolation is part of life which means that our communities are independent and self-sufficient. We cater for everyone's needs as best we can in youth, aged care, recreational activities, sport, social cohesion. Our men's and women's groups play a big role in this.

A primary challenge for us is to increase our skills and capacity which is integral to enhancing resilience across all five lines of resilience.

Maintaining strong and consistent leadership to enable deeper understanding and solution development of our challenges is paramount. Stability in our staff, stability in funding, stability in programs and agency support will greatly assist in reducing the underlying stresses in our communities.

We strive to maintain our culture and language. Protection, enrichment and showcasing our culture through language in schools, our existing museums and collections, places of significance and opportunities to display culture will help strengthen social fabric.

Image: Portrait of Torres Strait Islander man. Credit: Shutterstock.

Climate influences

Our climatic challenges include projections of higher temperatures, hotter and more frequent hot days and nights, harsher fire weather, more intense downpours, less frequent but more intense tropical cyclones, rising sea level, more frequent sea-level extremes and warmer and more acidic seas. Changes to drought are less clear, but reduced rainfall in the region may give rise to more instances of drought than currently occur.

The quantity of cyclones each year is projected to decrease, but their general intensity is forecast to increase, which presents potential changes to the cyclone risk exposure of the region.

Severe storms and flooding may lead to increased disruptions to water, sewerage, storm water, transport and communications infrastructure. Wind damage will exacerbate these impacts closer to the coast. The cost of insurance may increase as a result.

Low-lying communities may face extensive inundation under the projected sea-level rise. Extreme inundation and erosion events could become more frequent, resulting in high clean-up and maintenance costs. Some communities in the Torres Strait are already regularly impacted by inundation. Further sea-level rise may lead to consideration of relocation from traditional homelands.

A rise in mean temperatures brings with it an increase in the number of hot days experienced, giving the effect of an extended summer. One number of hot days (over 35°C) and very hot days (over 40°C) are projected to increase. Bringing with them new risks.

Temperature rises will have impacts on our people - the elderly, children and the ability to work and connect with Country. The need to cope and adapt to the heat will bring with it increased use of refrigerated cooling and other adaptation strategies. Mechanical cooling places increased demands on our energy networks and fuel consumption for power generation in isolated months. More importantly the ability for low-income households to pay for this energy.

Despite our best efforts, some people will experience heat stress or heat stroke, placing increased demands on community hospital and health services. Heat also increases the risk of mechanical failure for business, especially in energy overloads, road surfaces, rubber and plastic components failure of plant and equipment. This is particularly challenging when maintenance experts and spare parts are sometimes hundreds of kilometres away and freight lines are already constrained.

In our landscapes, heatwaves will also impact our flora and fauna, placing a particular strain on our native animals and world-class environmental areas. In our seascape, marine heatwaves may result in mass bleaching of the Great Barrier Reef. Significantly impacting the ecology and biodiversity of the reef itself, and surrounding ecosystems.

Longer and more frequent droughts, associated with fewer recovery periods, will decrease agricultural production and cause major ecosystem changes. Irrigation will need to increase for our crops or alternative varieties developed requiring less water for growth. Communities drawing fresh water from our river systems may also see increased sediment and impacts to pumping systems.

Fire hazard will grow as fire weather conditions become more frequent and intense, making bushfires and grassfires in the region more difficult to contain and suppress. Fire presents human, economic and environmental risks. Increased bushfire risk may threaten valued valued environmental and cultural sites.

These types of changes in natural systems may have implications for the health of Country and wildlife, including their intrinsic and Indigenous cultural values. These changes may also impact tourism-dependent businesses which are centered on environmental sightseeing, outdoor and camping-based travel activities and experiences.

Our changing climate compounds existing difficulties and inequalities isolated communities face. The emotional and psychological toll of disasters can linger for months and years, affecting whole families and the wellbeing of communities. In some circumstances, some people may never truly recover.

Cumulatively, these changes challenge the baseline of resilience. To avoid unwarranted stresses and reduce the impact of shocks, maintaining and maximizing collaborative, grassroots approaches will be paramount. The opportunities for resilience stem connection and collaboration in ways that harnesses local knowledge and expertise.

Copies
Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait
Further copies are available upon request to:
Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3724 7208
info@qra.qld.gov.au
www.qra.qld.gov.au

Image: Seisia foreshore. Courtesy QRA.

Our exposure and risks

A critical element in understanding risk are the elements of exposure and vulnerability which exist at both a micro and macro scale. For example, specific bridge or culvert assets may be exposed or vulnerable to natural hazards however, the resupply network these bridges and culverts support may then also be vulnerable. From a resilience perspective, it is necessary to consider risk consequences across a broad spectrum from asset-based analysis through to strategic and systems-based analysis.

The following section provides a high-level overview of the nature of hazard exposure across the Cape, Torres Strait Islands and Gulf region. The following observations are drawn in large part from the 'process one' analysis of each hazard using the QERMF approach across each local government area.

Cyclone and severe storm

Tropical cyclones are caused by low pressure systems which form over warm seas, the right environmental conditions, a tropical cyclone can exist for many days at a time, producing heavy rainfall, large storm tides and sustained and gale force winds.

The Queensland State Natural Hazard Risk Assessment identifies tropical cyclones as the highest natural hazard risk priority for Queensland, followed by severe weather as the seconded highest. Cyclone activity relevant to the Cape York and Torres Strait region can include systems from the Pacific Ocean in the east or from the Gulf of Carpentaria in the west.

Across Cape York and Torres Strait, each local government area has historically experienced a one per cent annual-exceedance probability of gust wind speeds which equate to category three tropical cyclones. Under projected future scenarios, these gust wind speeds are expected to increase slightly, while remaining category three strength.

Buildings constructed prior to the 1980s (including housing and council assets) are at increased risk during a cyclone or severe wind event due to the construction methods and materials used, compared to more recently constructed buildings. While data is limited to establish an average, there are some communities which do have a high number of pre-1980s building, including Aurukun and Cook Shire. In small communities where Council is looked upon to lead, it is essential that Council assets have structural integrity to maintain functionality.

Major cyclones can also be a primary source contributing to the development of heatwaves. Emerging evidence suggests a link between major cyclones in Queensland and subsequent significant heatwave events, resulting in further impacts upon already vulnerable communities. Understanding this link is important, as cyclone-impacted areas may have suffered extensive infrastructure damage and loss of power; therefore, eliminating the ability to use 'cool places' which are mechanically ventilated, to seek respite from the heat, and to maintain fresh food supplies.

Severe storms are associated with gale force winds, heavy rainfall and lightning strikes. Infrastructure is exposed across the region to high winds for isolated assets such as mobile phone towers, power lines, and communications or transmitters. Thick vegetation in the region contributes to the risk of debris damage.

Severe storms are associated with low-pressure systems. These intense systems and their associated cold fronts can generate strong winds and heavy rain over large areas, causing local flash flooding and riverine flooding. These events can also produce damaging hail. Severe thunderstorms generate damaging wind gusts of 90 kilometres per hour or more, with peak wind gusts exceeding 160 kilometres per hour in the most damaging storms.

Image: Lockhart River access road. Courtesy TCICA.

Figure 8 below shows the expected windspeed change from the current baseline over time in metres per second and the corresponding cyclone rating scale. The graph shows that the communities on the west Cape and Gulf are not expected to see significant change in windspeed and in fact Kowanyama and Pormpuraaw can expect a reduction from a Category 1 event to Tropical Lows.

The impact to the Torres Strait Islands escalating on average from a Category 1 event to a Category 2.

The communities of the east coast have a higher baseline exposure with windspeed already generating a Category 2 and 3 event in Lockhart River and Cook respectively. While windspeeds will increase communities will remain in the same event category. This evidence supports the intensification forecast for severe storms.

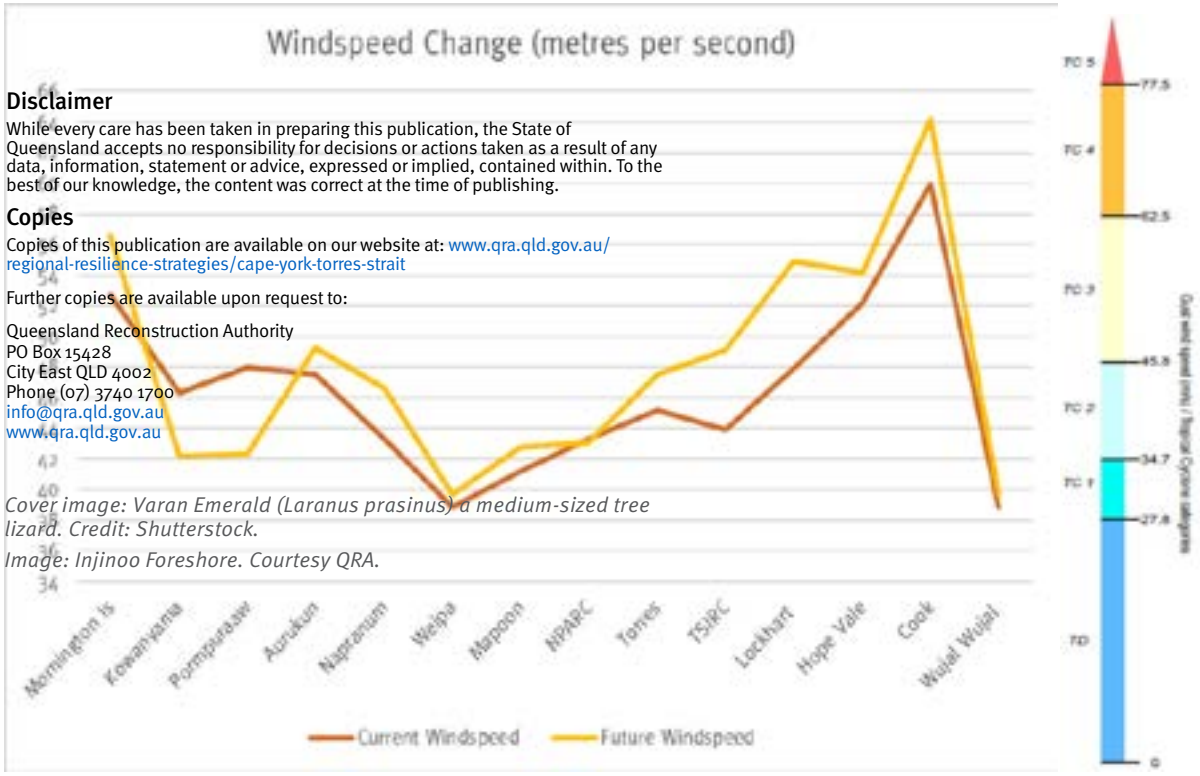
Figure 8: Wind Speed Change Over time – all Councils.

Coastal hazards

Coastal erosion results in the loss of land or removal of beach and dunes due to waves, water flows or permanent inundation. Caused by cyclones and severe storms, the temporary inundation of land by sea water due to abnormally high sea levels is storm-tide inundation. Parts of the region are particularly vulnerable to storm tide inundation, like the low-lying islands of the Torres Strait, as well as many indigenous cultural heritage sites. On a longer-scale, sea level rise will result in the permanent loss of land. Each of these coastal hazards pose significant risks to coastal communities, infrastructure and environmental areas in our region.

Many islands of the Torres Strait Island region experience coastal erosion and storm tide inundation with increasing frequency due to sea level rise. Tropical cyclones and other severe wind events place an even greater risk of coastal hazards occurring to these communities.

To support this increased awareness of coastal risk and to set adaptation pathways, Councils in the region are developing coastal hazard adaptation strategies under the QCoast 2100 program administered by the Local Government Association of Queensland.



Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Image: Moonkan Creek, Pormpuraaw. Courtesy QRA.

Bushfire and grassfire hazard

Bushfires are a natural process. We have a responsibility to manage our own land and in doing so, reducing the risk of bushfire. Fires on our land may be deliberate burning for cultural purposes, for weed control, pasture management or pig hunting, or uncontrolled, caused by lightning strikes, arson, or careless human activity.

Some fires are an important part of the natural cycle of the landscape. While others may directly impact our landscape's biodiversity and lead to erosion and subsequent water quality issues.

The primary drivers of bushfire behaviour are fuel, topography and weather. The topography of the landscape significantly influences bushfire behaviour, particularly where the landscape includes a slope greater than ten per cent.

This means that bushfire risk is common across the region with variations in characteristics depending on the fuel load, remoteness and access, source and property risk. Large areas of the region are state parks and forests, and resources do not stretch to combating remote fires which are often inaccessible and ignited by lightning strikes.

Bush and grassfires are the primary hazard in the Cook Shire, driven by the vast savannah woodlands. The predominant exposure is infrastructure assets, including roads, airports and helipads, and energy infrastructure.

Heat and dryness are two of the biggest drivers of the weather-related components of bushfire risk. The drier and hotter the weather, the less bushfires require, from a thermodynamic perspective, to spread faster and become increasingly dangerous.

Critical assets, such as energy infrastructure, fuel tanks, mobile phone towers, internet exchanges, airports and community and social assets, were identified as exposed across many local government areas in the region. On the Cape, road and transport infrastructure is heavily exposed. The access road to Lockhart River from the Peninsula Development Road is unsealed and exposed to bushfire hazard. However, the township does have an all-weather landing strip which enables access and resupply.

In the Torres Strait, jetties and wharfs are exposed. Much of Mapoon's residential area and transport infrastructure is exposed to bushfire hazard – both the unsealed airstrip and the township's local roads.

Fire activity also brings with it smoke inhalation and health risks for those already experiencing respiratory issues.

Heat and heatwave hazard

Most people have an adequate capacity to cope with many of the heatwaves experienced in Queensland, as they are low intensity heatwaves. However, less frequent, higher intensity severe heatwaves can be challenging and an additional stress for the most vulnerable in the communities: the very young, the senior citizens, pregnant individuals, those with pre-existing health conditions and the inability to run cooling systems in their homes.

Even more rare are extreme heatwaves, but these can have significant multi-sector impacts, impacting power and transport infrastructure, as well as any individuals who do not take precautions to keep cool.

Poor housing quality and limited access to 'cool spaces' are risks which increase heat illness potential. Particularly when faced with both increasing hot days and hot nights, where there is limited relief from ambient temperatures. Having access to appropriate cool spaces is critical.

Heatwaves are also Australia's most costly natural hazard in terms of human impact, with severe and extreme heatwaves being attributed to more than half of all natural disaster related deaths. The risk of heat illness from a heatwave increases with age, socio-economic disadvantage, geographical remoteness and the presence of physical or mental disabilities, among other factors.

These are important considerations in a region which has high levels of socio-economic disadvantage – an indicator of factors which can compound heat illness. Compounding factors include poor housing design for climatic conditions, high energy costs and low incomes, limited resources to adapt and most notably, pre-existing health conditions. In a region with a large number of Aboriginal and Torres Strait Islander residents – who as a population experience higher rates of disease, like cardio-vascular and kidney diseases and diabetes, each of which can exacerbate heat illnesses – this is an important consideration. The region currently sees an average of around 43 heatwave days per year, although this figure doubles for Torres Strait Island LGA and Torres Shire – 80 and 92 heatwave days per year, respectively. Under future climate conditions, the number of heatwave days per year in 2090 fluctuates across local government areas but is projected to increase across all.

This increase is sharpest in Weipa Town, Lockhart River and Mapoon, the latter of which is projected to rise between 55 and 91 heatwave days per year, depending on the climate model scenario. Considering both current and projected heatwave days per year, Mapoon, Torres Strait Island Regional and Torres Shire may experience around 136 heatwave days each year.

Image: Hope Vale welcome sign. Courtesy QRA.

Figure 9: Baseline of historical heatwave days for each community the projected increase in number of days in a low scenarios and for the high scenario to 2090. While the Torres Strait has a significant number of heatwave days, it is evident that the baseline is also much higher.

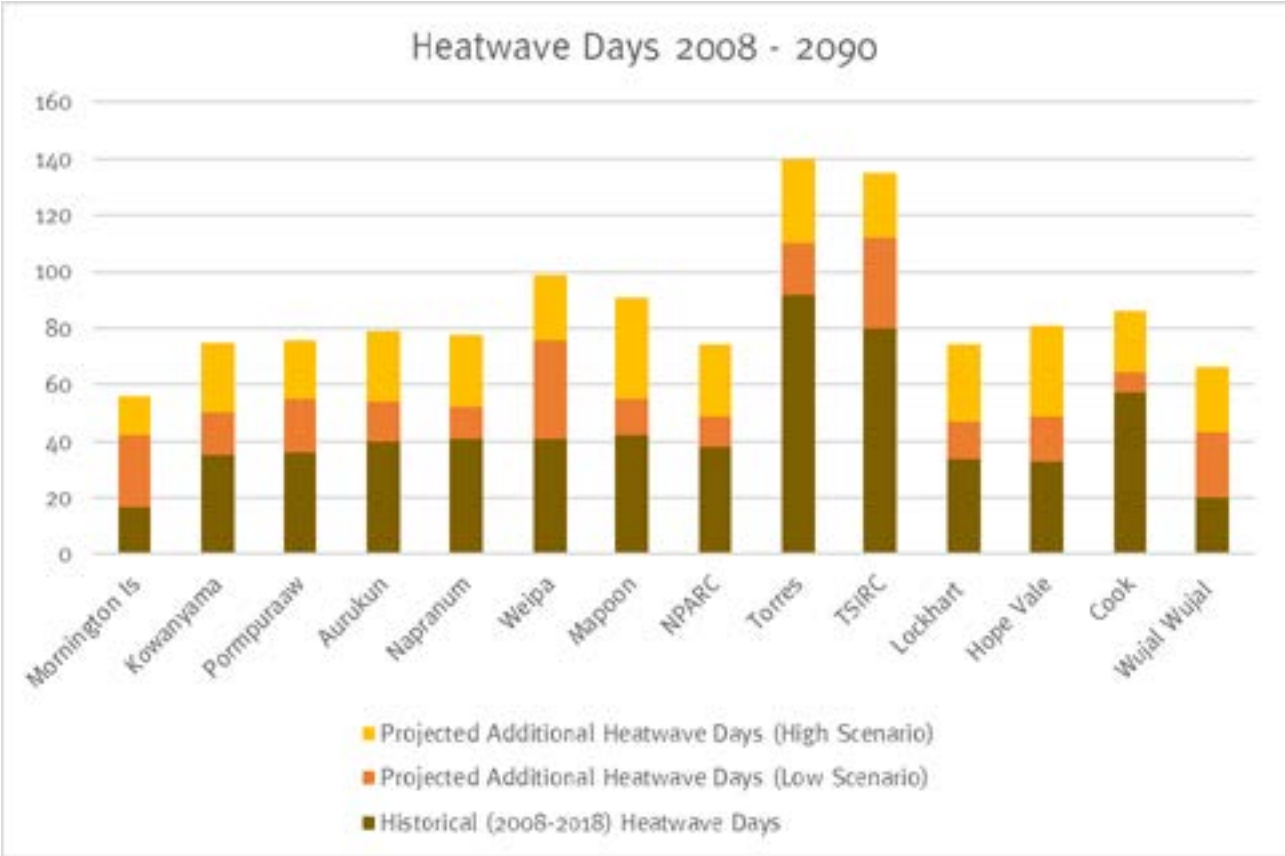
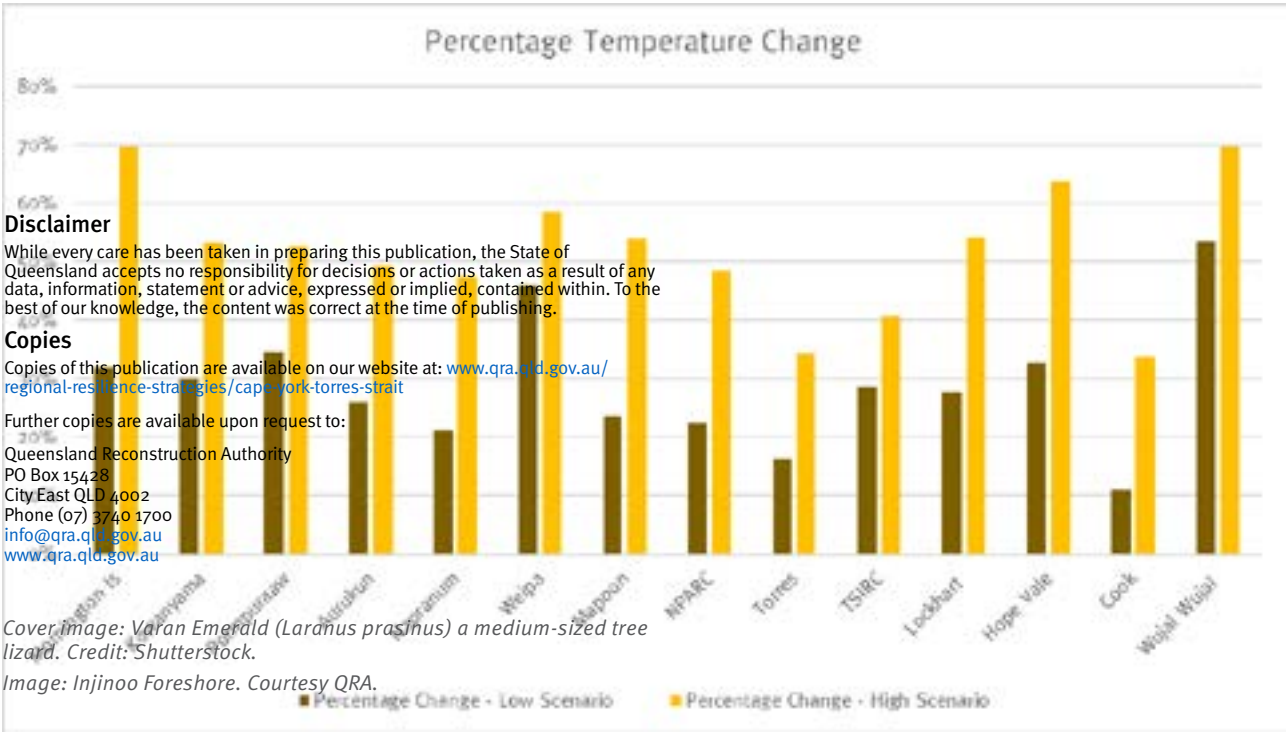


Figure 10: Temperature change by percentage from historical for low and high scenarios.



Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Therefore, converting the likely change from a number of day to a percentage it can be seen in Figure 9 that Weipa and Wujal Wujal will experience the greatest change (approximately 50%) in number of heatwave days over the low scenario whereas the Torres Strait are in the lower percentages of change over time, despite the number of total days.

Image: Bloomfield Falls, Wujal Wujal. Courtesy TCICA.

Flood hazard

The geography of Cape York limits the direct impact of flood for many of our communities. In the east, many of our communities are situated on hills and ranges, while in the west, the land is so flat and deltas so wide, that our landscape is able to manage and store this water.

While we don't necessarily face flood damage, floods do disrupt our road networks. This leaves townships, properties and communities isolated in every part of the Cape for many months of the wet season. Our roads are often closed or many months and we risk access to fresh food, emergency assistance. We rely upon air services and sea freight in the wet season which are expensive and limited.

Known flood hazards are acute for the small township of Wujal Wujal, located on the banks of the Bloomfield River. Heavy rainfall and flooding can quickly leave the community isolated. Flooding is a regular occurrence as the township is built right upon the banks of the Bloomfield River and its flood plain.

Kowanyama community is also at risk from Magnificent Creek. There are a number of community assets, including the health service and an aged care facility which are exposed to flood hazard under a 0.2% AEP event. In Pormpuraaw, local roads are the only asset for access and resupply in Pormpuraaw and are heavily exposed to both bushfire and flood (0.2% AEP).

Pandemic and biosecurity

The region's extensive coastline, proximity to international boundaries, numerous islands, isolation, vast uninhabited areas and access difficulties also mean that the region is vulnerable to biosecurity issues.

The elders and traditional owners are anxious about the exposure of traditional lands and especially native fauna to the potential for exploitation. This extends to the likelihood of ballast release in pristine waters and the extent of by-catch released, especially in the Gulf, from commercial fishing. These are valuable and intrinsically linked to the lines of resilience.

Recent experiences in the pandemic have raised heightened awareness of the impacts of continued isolation in the context of service provision and the exposure of isolated communities should unfavourable conditions destabilise the baseline. The ability for small communities to deal with consequences are limited at best which necessitates a bespoke approach to these types of hazards to ensure safe communities.

Earthquake hazard

The Cape York and Torres Strait region is located within two Seismic Hazard Source Zones. The majority of the region sits within Source Zone 34, which encompasses much of the Cape, Torres and north-west and central-west Queensland. Source Zone 28 includes Hope Vale and Wujal Wujal Aboriginal Shires and eastern Cook Shire.

The Queensland State Earthquake Risk Assessment identifies Source Zone 34 as being exposed to an 88.95 per cent probability of 5.35 magnitude earthquake occurring over the next 100 years.

The risk assessment identifies key aspects of exposure for earthquake in Queensland include water supply and sewerage systems, which is both a function of their underground connectivity, construction and in some cases, the age of the assets. Damage to this infrastructure can yield significant cascading effects in terms of availability of water, sanitation and public health and disease.

Coastal areas may also be exposed to more risk, as they are located on softer soils.

Fuel and gas storages are at risk from earthquake, both those located underground as well as those above ground but without baffling.

Energy, telecommunications and information technology disruption and damage may also occur, and service restoration may be a function of several things including the level of damage, availability of response personnel and equipment and broader priorities depending upon the scale of impact. Impact to building stock and housing is also possible.

Image: Cullen Point boat ramp, Mapoon. Courtesy QRA.

Our pathways to resilience

This Strategy has been formulated through regional engagement and collaboration with the local governments and stakeholders within the region. The strategy is calibrated by drawing upon a spectrum of existing resilience efforts across the region, including existing studies, reports, plans and strategies. It also draws upon the strategic observations from the initial assessment of exposure and vulnerability undertaken across the region.

This enables the consideration of both locally identified community needs and risk informed strategic vulnerabilities, which when considered together, can be used to bolster resilience initiatives across the region.

For the Cape York and Torres Strait region the pathways address the trends, stresses, and shocks particular to the region. There is an acknowledgement of a pathway to maturity on the resilience journey in that larger scale resilience actions focused on stresses and trends are not achievable with high degrees of success until the short-term shocks are addressed. This creates a prioritisation of need and a focus of resources over the short, medium and long term.

Short term disaster management resources needs have been identified in conjunction with leadership during the engagement as a baseline of resilience. The achievement of a baseline will bring every community up to a common standard in disaster management resources, infrastructure preparedness and continuity and a common information platform in the new regional Disaster Dashboard.

The baseline can be achieved through current funding mechanisms, capacity building in current frameworks and facilitated support, and deployment of tools such as the successful Disaster Forum and the Baseline Checklist developed for the region as part of this project.

The medium-term issues are generally focused around enabling infrastructure and ensuring the capability is present to step up to the longer-term approach. Transformational actions (such as the Opportunities Plan) require commitment and local champions to continue to drive progress at various scales.

Figure 11: A Three-step Resilience Maturity Approach.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

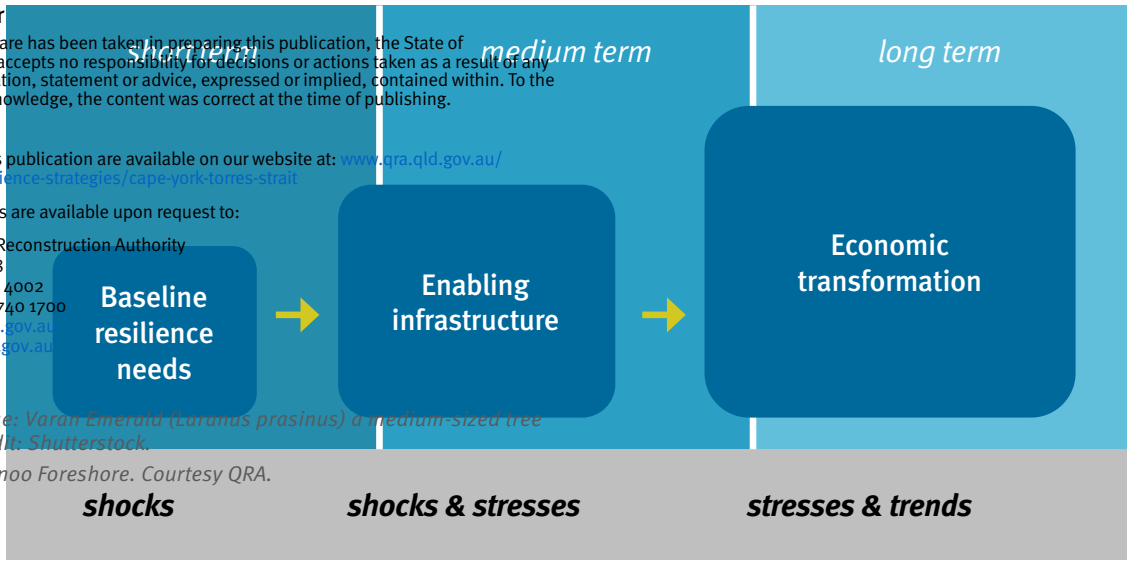


Image: Mornington Island. Credit: Shutterstock.

Strategic pathways to champion resilience

The concept of resilience action can be considered in the context of three opportunities:

'Doing same' – some parts of the system may be able to continue successful functioning even with disruption. However, other parts of the system will not endure major disruptions and to 'go back to normal' after disasters is reinforcing existing vulnerabilities.

'Doing better' – some parts of the system may be amenable to incremental changes and adjustments, allowing for improved decisions and actions based on updating knowledge.

'Doing differently' – large parts of the system will not be able to withstand increasing frequency or magnitude of disruption and will require a step change to deliver on goals and things that are valued. System structural changes can be achieved by addressing root causes and re-prioritising.

For the Cape York and Torres Strait region the doing same, doing different and doing better model encompasses the following examples:

- maintaining a baseline of resilience in disaster response capability and council assets
- continue working towards building a resilient TCICA region underpinned by a united an collaborative approach.
- maintaining culture and language such as strong 'puuya' (see Lockhart River Vision) which exemplifies community vision
- improving wet season access through betterment projects
- improving access to affordable nutritious food and developing and autonomy in food production
- improve digital connectivity to the region
- improving capacity building and sharing skills and knowledge at all opportunities through closer regional and local partnerships collaborations
- improving governance through leadership stability
- greater advocacy for stability in services and funding
- greater advocacy for bespoke regional solutions.

Image: Ant hill near Injinoo. Courtesy QRA.

Regional strategic pathways

The strategic pathways identified below form a 'blueprint' for coordinated resilience action for the Cape York and Torres Strait region. Action and efforts at the local level are calibrated to work toward the achievement of regional goals.

Each strategic pathway is mapped to its corresponding QSDR objective, referenced by coloured triangles.

	Resilient society	Resilient towns and infrastructure	Resilient transport	Resilient economy	Resilient environment
Doing same	Maintaining social connectedness despite distance and isolation including celebrating language and culture (2)	Understanding our resilience baseline and ensuring adequate disaster management resources (1)	Maintaining strong connections with betterment projects and working together for improved wet season access (4)	Continuing successful promotion and operation of our renown artwork industry (4)	Continue successful partnerships with Land and Sea Rangers, NRM bodies, national parks and traditional owners. (2)
	Ensuring youth are retained and given opportunity to grow and elders can age in place in every community (2)	Maintaining our assets, stores, supplies, supply chains supporting infrastructure to cater for extended isolation in disaster season (3)	Maintain physical connection to our places and people through enhanced transport options (3)	Supporting community to grow and prosper through training and partnerships (3)	Enhance waste management solutions (3)
Doing better	Capacity building at every step, including stability in leadership, sharing knowledge and resources (2)	Striving for reliable and consistent services and networks: from health to energy, water and telecommunications for growth and stability. (4)	Developing pathways for improvement to air networks for economic and disaster resilience (4)	Finding opportunities to for income streams and employment (3)	Contribute to regional desire for carbon neutrality (3)
Doing different	Creating lasting opportunity for empowerment (2)	Addressing housing overcrowding, supply and other development shortages (4)	Exploring alternatives for access to markets (4)	Exploring opportunities for tourism 'on our terms' (4)	Foster new collaborative partnerships in the environmental management sector (4)

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Delivering over time

The strategic pathways above provide the broad themes that address the region's identified resilience needs. Staging and focusing the right effort at the right time is also critical to advancing resilience in a sustainable way.

Being able to describe what is needed when, is a key aspect of coordinating whole of government and collective responses to locally identified needs.

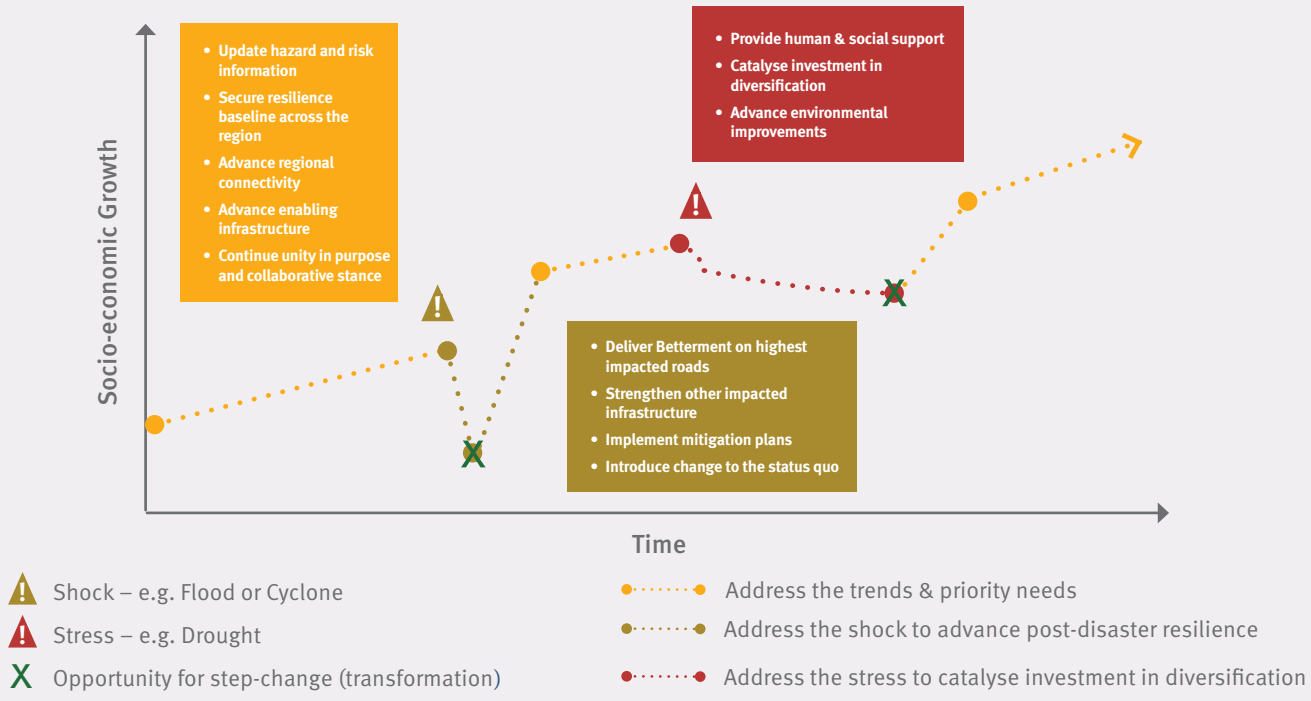
The diagram below provides a conceptual roadmap to understand key actions and investment priorities for the region, and when they might be applied, having regard to funding mechanisms and broader delivery programs of investment. It anticipates that stresses and shocks will continue to happen into the future – but it provides the 'trigger points' for key interventions at the relevant points (before, during, and after an event) that are needed to help sustain socio-economic growth into the future.

This can be used as a mechanism to understand key recovery and resilience priorities ahead of time, so that when an event occurs, all stakeholders are already aware of the key needs of the region, which enables post disaster efforts to be better coordinated and streamlined.

The phased approach, demonstrated by the figure 12 below, acknowledges that resilience is a journey and is punctuated by events that change our circumstances. Sometimes, it is easier to achieve changes to the status quo after an event, when the consequences are in clear memory. As challenging as events are, they also present opportunities for change so that today's lessons can be retained and put to work for future benefit. In other periods, under 'blue sky' conditions, other opportunities exist to build hazard and risk information datasets, undertake monitoring and plan for uncertain times.

Importantly, this approach means that efforts, projects and activities need not be all done at once. Individual local government circumstances will dictate what is needed and when certain actions are best carried out depending on local priorities and needs at any given time.

Figure 12. Improving our prosperity through resilience (adapted from Joseph Fiksel). Adapted for the region.



Action planning

A local action plan for to each local government in the region supports the implementation of this Strategy. The action plan identifies a suite of potential projects, that if implemented, would contribute to improving resilience to natural hazards at both the local and regional level. It is calibrated to provide direction on how to pivot actions as events occur and circumstances change.

Each local government will be primary driver for implementing the local action plan, however it is acknowledged that not every action identified is the responsibility of the local government, with some actions requiring involvement by state agencies, regional governance, local stakeholder groups, charities, NRM bodies and community groups. Where this is the case, councils can work with stakeholders to share these actions and projects.

Copies

Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait

Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Image: Moonkan Creek, Pormpuraaw. Courtesy QRA.

Case study: A baseline resilience checklist

The outcomes from the Disaster Forum 2019 and the intensive engagement prompted and reinforced the need for common and collective approaches and enhanced understanding towards better disaster resilience.

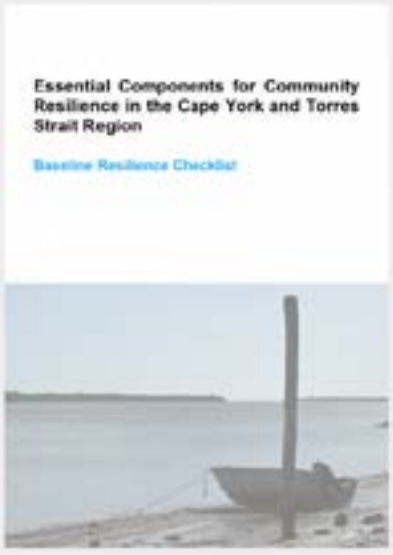
The idea of a first step toward greater preparedness and disaster management resources through a baseline came in discussion with Mapoon leadership team.

The engagement discovered that there was a gap in awareness of essential disaster management resources and a regional overview of baseline need.

Accompanying this Strategy is a "***Baseline Resilience Checklist"*** which identifies gaps and assist local government to achieve a local and regional picture of tangible need to endure events safely.

The Checklist has three sections: governance tasks, community support tasks and community infrastructure tasks. The user can work methodically through the themes checking off whether the community has structure, programs and critical infrastructure in place for natural disasters.

The checklist includes queries such as, "Are governance programs in place to trigger annual generator maintenance or fire break clearing?" This should in turn identify critical infrastructure requiring back up power and lead to a funding connection.



Isolation to Connection: Separate but Together

Implementation

Working together to implement the Strategy

This strategy will be implemented as a partnership across the thirteen local governments of the Torres and Cape Indigenous Councils Alliance (TCICA) and the Torres Strait Island Regional Council, with appropriate support from other coordinating bodies and entities including District Disaster Management Groups (DDMGs), local disaster management committees, recovery and resilience officers, state government agencies, and not-for-profits.

This approach 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.

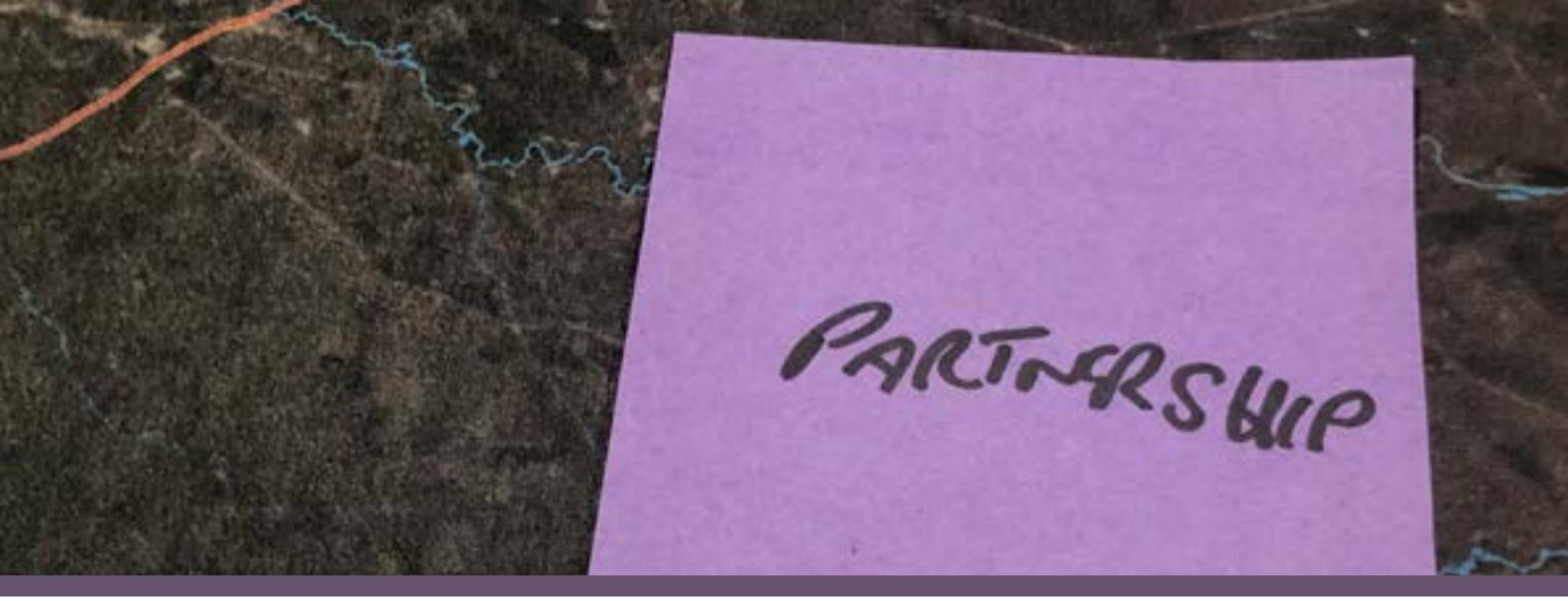
Enduring governance and funding arrangements

This Strategy provides an opportunity and supports how local governments, and stakeholders work together to achieve common resilience outcomes for the Cape York and Torres Strait region. It seeks to inform strategic and coordinated approaches to climate-related disaster resilience activities to align funding and action.

Under this model, the Strategy acts as the regional blueprint for coordinated and sustained action. An agreed governance arrangement will support the implementation of the strategy and an enduring commitment to championing resilience into the future. Stakeholder-identified key requirements for the successful implementation of this strategy are:

- a collective approach to resilience building
- sustaining governance arrangements, funding, and resource capability for implementation of resilience actions over time
- a clear understanding of how resilience arrangements interplay with Queensland Disaster Management Arrangements
- greater collaboration between government and nongovernment organisations to optimise resilience service delivery and efficiency
- clarification of the proposed resilience implementation arrangements at state, regional and local levels so that local actions can be programmed and delivered accordingly.

Image: Cairns TCICA Big Map Workshop. Courtesy QRA.



This model is underpinned by a role for everyone in delivery including local leadership, regional coordination and state support.

Local leadership

Local governments are encouraged to continue momentum towards a baseline resilience and to transition community and climate-related disaster resilience to front-of-mind in local government functions. This could be achieved by solidifying arrangements for dedicated disaster management resources with an ongoing resilience focus over the calendar year.

Regional coordination

A realisation that small populations and vast distances necessitate a collaborative and regional approach to solutions that may benefit all or some with common issues.

Regional coordination through TCICA and TSIRC with a strong link to other existing related governance arrangements such as the relevant DDMGs and strong relationships, funding and collaboration with the Department of Seniors, Disability Services, Aboriginal and Torres Strait Island Partnerships (DSDATSIP), can highlight opportunities for greater success through regional governance support, joint funding and resource sharing towards resilience solutions

This region has a strong network of dedicated regional strategic state and federal level partners who can assist the advocacy, coordination, facilitation, and implementation of a range of regional and local resilience initiatives. In addition the recently funded regional resilience coordinator role has enabled much greater common understanding of disaster management and resilience issues across the Cape, Island and lower gulf communities with a clear scope of work for continuation.

In addition, the resilience lens on existing bodies of work will encourage local councils to seek out synergies with likeminded authorities, or where there is spatial proximity or complementary skill sets in the region.

Resilience activities for which a regional or collective view has direct funding, scoping, implementation, and capacity benefits may include:

- shared expertise to scope common and complex issues such as asset management strategies or water and sewer network control systems
- regional co-ordination, discussion and connection on matters benefitting across the region such as disaster management training and resources, land and sea management, digital connectivity and renewable energy
- a collective voice on resilience matters beyond a regional scope such as communications and biosecurity and aviation.

The Cape York and Torres Strait region is uniquely suited to collective voice and collaborative solutions.

State support

As a locally-led and regionally coordinated strategy, the role of the State is one of provision of enabling measures such as administration of grant funding programs, delivery of core governmental functions that interface with resilience building, and facilitation/coordination of support that can assist implementation.

Copies
Copies of this publication are available on our website at: www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait
Further copies are available upon request to:

Queensland Reconstruction Authority
PO Box 15428
City East QLD 4002
Phone (07) 3740 1700
info@qra.qld.gov.au
www.qra.qld.gov.au

Cover image: Varan Emerald (Laranus prasinus) a medium-sized tree lizard. Credit: Shutterstock.

Image: Injinoo Foreshore. Courtesy QRA.

Image back page: Napranum Beach. Courtesy: TCICA.

Image: Cairns TCICA Big Map Workshop. Courtesy QRA.

www.qra.qld.gov.au/regional-resilience-strategies/cape-york-torres-strait