

# Environment and Liveability Strategy 2017

## Part A: Strategic Directions

September 2017 edition



# Acknowledgement of Country

Sunshine Coast Regional Council acknowledges the traditional Country of the Kabi Kabi Peoples and the Jinibara Peoples of the coastal plains and hinterlands of the Sunshine Coast and recognise that these have always been places of cultural, spiritual, social and economic significance. We wish to pay respect to their Elders – past, present and emerging – and acknowledge the important role Aboriginal and Torres Strait Islander people continue to play within the Sunshine Coast community.

Council is committed to ongoing communications and consultation with the Traditional Owners and the broader Aboriginal and Torres Strait Islander community of the Sunshine Coast in the implementation of the Strategy.

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[www.sunshinecoast.qld.gov.au](http://www.sunshinecoast.qld.gov.au)

[mail@sunshinecoast.qld.gov.au](mailto:mail@sunshinecoast.qld.gov.au)

T 07 5475 7272 F 07 5475 7277

Locked Bag 72 Sunshine Coast Mail Centre Qld 4560

## Acknowledgements

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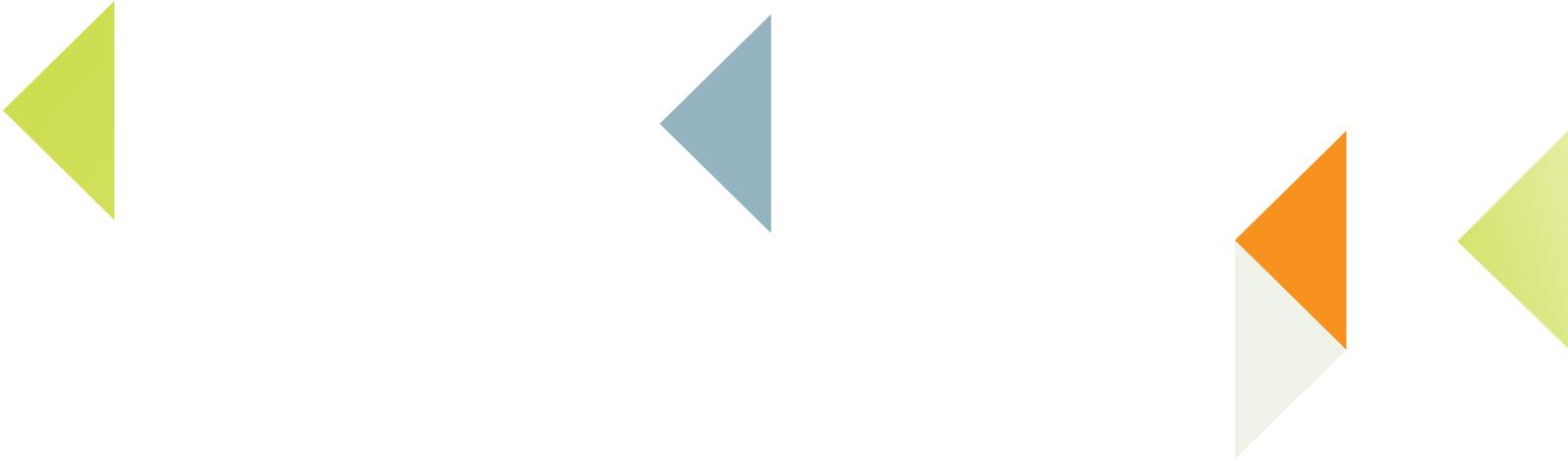
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## Reference document

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## Vision 2041

### The Environment and Liveability Strategy builds a pathway to a healthy environment and liveable Sunshine Coast in 2041.

In 2041, the distinctive natural landscape and character of the Sunshine Coast has been retained and travelling north from Brisbane, the green inter urban break and lush food bowl welcomes you.

The rich biodiversity, pristine waterways and beaches and the majestic Glass House Mountains are defining features. The rivers, creeks, beaches and the ocean are places for safe and healthy experiences to connect with nature and refresh. The plants and animals thrive and have adapted to the changing conditions we are experiencing, retaining a natural and healthy state.

Corridors of green connect the Coast's biodiversity to our neighbourhoods and green fingers connect our neighbourhoods and people. Living in vertical neighbourhoods in our centres and along public transit corridors, cascading down to medium and low density neighbourhoods and towns mixed with pockets of rural residential and rural living, there is housing choice for all. The Sunshine Coast architectural style has matured into a model for sustainable and subtropical design excellence, renowned around the world.

Getting around on the Sunshine Coast is supported by an effective and efficient network of active and contemporary public transport systems linking the hinterland to the coast and supporting key employment, education and tourist hubs.

Neighbourhoods operate in self-contained models with energy and food resources sourced locally, providing access to facilities and services, reducing car travel and increasing cycle and walking opportunities, keeping us active and healthy. Streets are places for people and supporting local enterprises and businesses and creating vibrant spaces and places for community and economic activity.

Affordable living options give everyone a home, and generations live together supporting each other.

Everyone is welcome. It is an age and family friendly and safe place to live.

Opportunities to work from home or close to home improve work life balance and support stronger social connections and collaboration. A strong local economy gives residents employment opportunities based around sustainable industries and technologies.

Vibrant public spaces and places host a wide variety and diverse range of activities – keeping healthy and creative communities alive. Community gardens, street markets and community events demonstrate the commitment of residents to create and buy locally, strengthening the region's liveability and sustainability.

The warmer climate and more frequent extreme weather events have been planned for and community responsiveness and resilience are now part of the local culture. The environment and community are able to absorb change, manage major events and bounce forward to a stronger, resilient state.

Local energy sources are integral to the landscape and landfill stations are now powerful economic hubs for composting, recycling and generating energy. As a leader in sustainability, the greenhouse gas emissions on the Sunshine Coast are the lowest in the southern hemisphere.

International and interstate visitors keep returning to enjoy the strong connection to nature and to experience the relaxed local culture. Major sporting events showcase the region's attributes and regularly host competitors, spectators, families and friends. Local food production, creative industries and nature based activities are key features of the region.

As a region of choice, a good quality of life is enjoyed by all residents.



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# Introduction

## Purpose of the strategy

The Sunshine Coast Environment and Liveability Strategy provides long-term strategic direction to shape the region by guiding growth and delivering the transformational change required to maintain a healthy environment and liveable Sunshine Coast in 2041 for future generations.

The strategy focuses on the preservation and enhancement of the natural **environment** and the **liveability** of the region, enabling a good quality of life for all residents and supporting a strong economy in an accessible and well-connected built environment.

In this rapidly changing world there will be many challenges and opportunities associated with the increasing population, changing climate, economic growth, and emerging technologies for this region to embrace.

This strategy seeks to strengthen the community's **resilience** and deliver balanced economic, social and environmental outcomes that respect the principles of **sustainability**.

Along with the Regional Economic Development Strategy and Social Strategy, this strategy establishes a long-term strategic and integrated platform that enables the region to approach the next 25 years in a positive and confident manner.

The strategy seeks to guide decision-making and actions that will continue to protect and respect the importance of the natural environment as the foundation for the Sunshine Coast way of life.

The strategy is based on three interdependent sections:

- The natural environment
- The environment we create – the built environment
- Living in the environment.

The integration of these three sections within the one strategy ensures we do not plan for the protection of the natural environment in isolation, and highlights the importance of the relationship our built environment and our lifestyle have with these natural assets. This strategy equips Sunshine Coast Council (council) and its partners to effectively manage the challenges that confront the region's environment and liveability.

The strategy recognises that by planning ahead and making sustainable choices at the right time, the Sunshine Coast can look forward to a sustainable future where a balance between the natural and the built environment can be achieved and the liveability of the region can be maintained.

This strategy is a forward looking document that seeks to do things differently and challenge our current approach to growth. The strategy recognises the importance of social and economic development to the future of the region and seeks to strengthen the balance through innovation, creativity and environmental stewardship.

A young girl with blonde hair in a bun, wearing a beige knit scarf, smiles while holding a small green plant in a white cup. She has a blue and green butterfly face painting on her right cheek. The background is a blurred outdoor setting with other people. The page features a large, abstract geometric design on the left side composed of overlapping triangles in shades of green, orange, and white.

## Environment

is the physical and biological surroundings in which plants, animals and people live and interact. It encompasses the natural environment, the built environment we create and how we live in such environments.

## Liveability

is the sum of the factors that add up to a community's quality of life now and in the future, including the built and natural environments, economic prosperity, social stability and wellbeing, equity and access, education, cultural and recreation opportunities.

## Resilience

can be described as the capacity of individuals, communities and systems to survive, adapt and grow no matter what kinds of chronic stresses and acute shocks they experience. It is about being able to 'bounce forward' to turn vulnerabilities into opportunities.

## Sustainability

is a balanced approach that meets the social, economic and environmental needs of the present without compromising the ability of future generations to meet their own needs.

A woman is sitting in a modern library or bookstore, reading a book. She is wearing a black top and light-colored pants. The background shows bookshelves filled with books and a large window looking out onto a green landscape.

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## About the Sunshine Coast

The Sunshine Coast is widely acknowledged as a highly desirable place to live, work and play with abundant natural resources and a unique lifestyle.

Located in South East Queensland (SEQ), 53 kilometres (km) north of Brisbane, the Sunshine Coast Council local government area covers an area of approximately 2,200 square kilometres and is considered a major urban and economic centre and an emerging city-region.

It has a strong reputation as a lifestyle region defined by its subtropical climate, picturesque coastline and beaches, extensive waterways and wetlands, and the hinterland mountain ranges. The natural environment and distinct landscapes are the foundations of the Sunshine Coast way of life.

Across the contrasting landscapes, from hinterland to coastal foreshores, there is a vast diversity of native plants and animals that create the region's highly regarded natural environment and rich biodiversity.

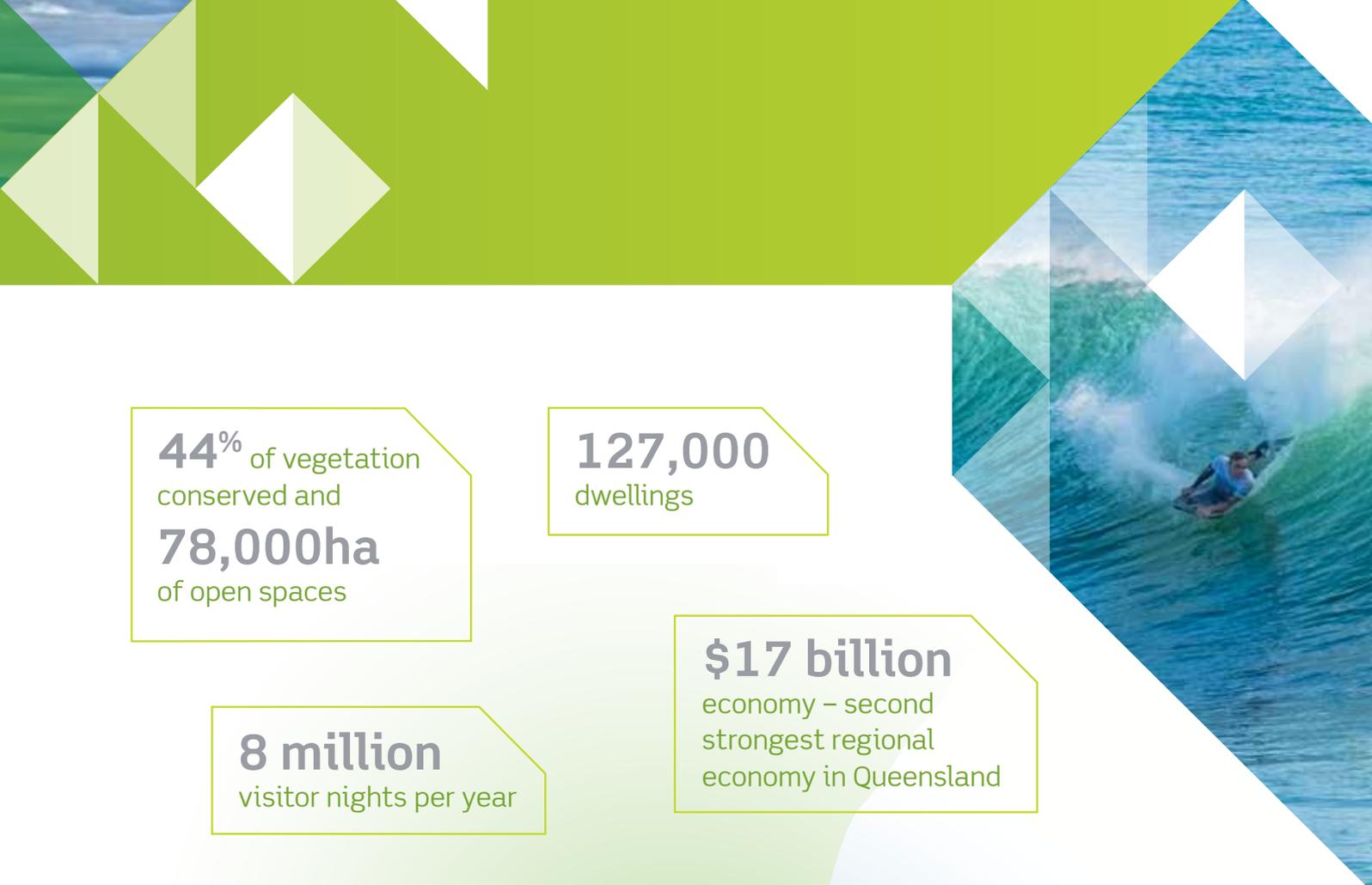
The Sunshine Coast offers a desirable lifestyle and over the past decade around 6,500 people each year have chosen to make the region home. This annual growth in population, which is expected to continue in the foreseeable future, has led to significant urban development and supporting infrastructure.

The majority of residents live within established urban centres along the coast. While all age groups are well represented within the Sunshine Coast's population, the most common age group is those 45 to 49 years and their children. The median age on the Sunshine Coast is approximately 43 years – 6 years older than the state median of 37 years.

Around 30,000 registered businesses contribute to the strong and growing Sunshine Coast economy. Health care and social assistance, construction and retail are the region's major industries providing over 40% of all jobs (close to 50,000 jobs).

Tourism continues to be an important industry, attracting visitors from around the world, as well as day visitors from SEQ, enjoying the natural assets of the region.

These environmental, social and economic characteristics set the context in 2017.



**44%** of vegetation conserved and **78,000ha** of open spaces

**127,000** dwellings

**\$17 billion** economy – second strongest regional economy in Queensland

**8 million** visitor nights per year

**60km** of coastline



Figure 1: Map of the Sunshine Coast



## Planning for Change

The actions and achievements of successive council's in partnership with the community have established a healthy and liveable region, creating a strong platform to respond proactively to change. Whether rapid or progressive, change is a fact of life on the Sunshine Coast as it is across the globe.

As the Sunshine Coast continues to grow and emerge as a city-region, it is well positioned to respond to changes that will present both challenges and opportunities for our future. This change may have the potential to impact on the health of our environment, the lifestyles we lead, and the resilience of our community.

Responding to change can be complex and demands considered and responsive research, policy development, planning and decision-making. To ensure this strategy is relevant and robust, it has considered the region's history and achievements, existing economic, social and environmental strategic directions, and has been developed through the lens of four major drivers of change:

- 1 rapid and continual population growth
- 2 climate change impacts and increased vulnerability
- 3 an evolving and growing economy
- 4 technological innovation.

## The drivers of change

### Population growth

Population growth on the Sunshine Coast has been steady and is forecast to increase over the next 25 years. The region's current population of 303,400 (2016) is predicted to exceed 500,000 by 2041 (*Figure 2*), representing an average increase of approximately 8,000 new residents each year.

People moving to the Sunshine Coast from other parts of Australia account for over 94% of the population growth to date and this trend is expected to continue.

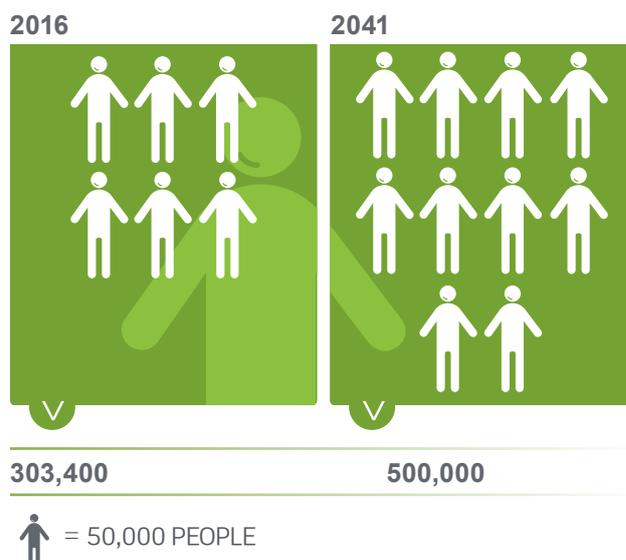


Figure 2: Overall population change between 2016 and 2041

Increases are likely to occur across all age groups, with the two largest cohorts being those over 65 years, and to a lesser extent, residents aged 35 to 44 years (including corresponding children below 15 years of age). It is forecast that the Sunshine Coast will maintain an older than Queensland average age cohort even with the anticipated increases over the next 25 years.

Around 90,000 additional dwellings are likely to be needed to house these new residents, or approximately 3,600 new dwellings per year. To facilitate this growth within the Sunshine Coast's defined urban footprint, it is expected people will live in more compact urban forms and within a diversity of neighbourhoods. This will change the shape of the built form in some areas of the Sunshine Coast.

Approximately 55% of the growth is forecast to occur in the emerging areas of Kawana, Caloundra South, Sippy Downs, Palmview and Beerwah East, with the balance spread throughout the defined urban footprint.



In addition to the 90,000 dwellings required for residential growth, an expanding tourism industry will require accommodation to be provided. To support this growth, additional infrastructure, such as an integrated multi-modal transport network, responsive services, efficient and secure utilities and new local employment opportunities are required.

### Challenges and opportunities

Careful planning and delivery around population growth is important, as it has the potential to adversely impact our natural environment and liveability. If managed well, increased population also provides opportunities to improve the shape of our urban form, increase access to services and facilities and create more vibrant and diverse communities.

### Climate change

The global climate is changing<sup>1</sup>, with analysis by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) indicating that sea levels around Australia are already rising at an average rate of 3.1mm per year. The mean surface air temperature of the Sunshine Coast has increased by almost 1°C between 1910 and 2013.

Modelling<sup>2</sup> shows that over time, the Sunshine Coast will be exposed to:

- increases in average temperatures and in the number of days per year in excess of 35°C
- more extreme rainfall events
- changes in the frequency and magnitude of extreme events including cyclones, storms, droughts, heat waves and flooding
- rising sea level
- becoming drier with total annual rainfall and soil moisture likely to decrease.

Refer *Figure 3*.

<sup>1</sup> The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report produced in 2014

<sup>2</sup> Clarke J., Wilson L., & Heady, C. (2016). Future Climate of the Sunshine Coast, Queensland. CSIRO, Australia

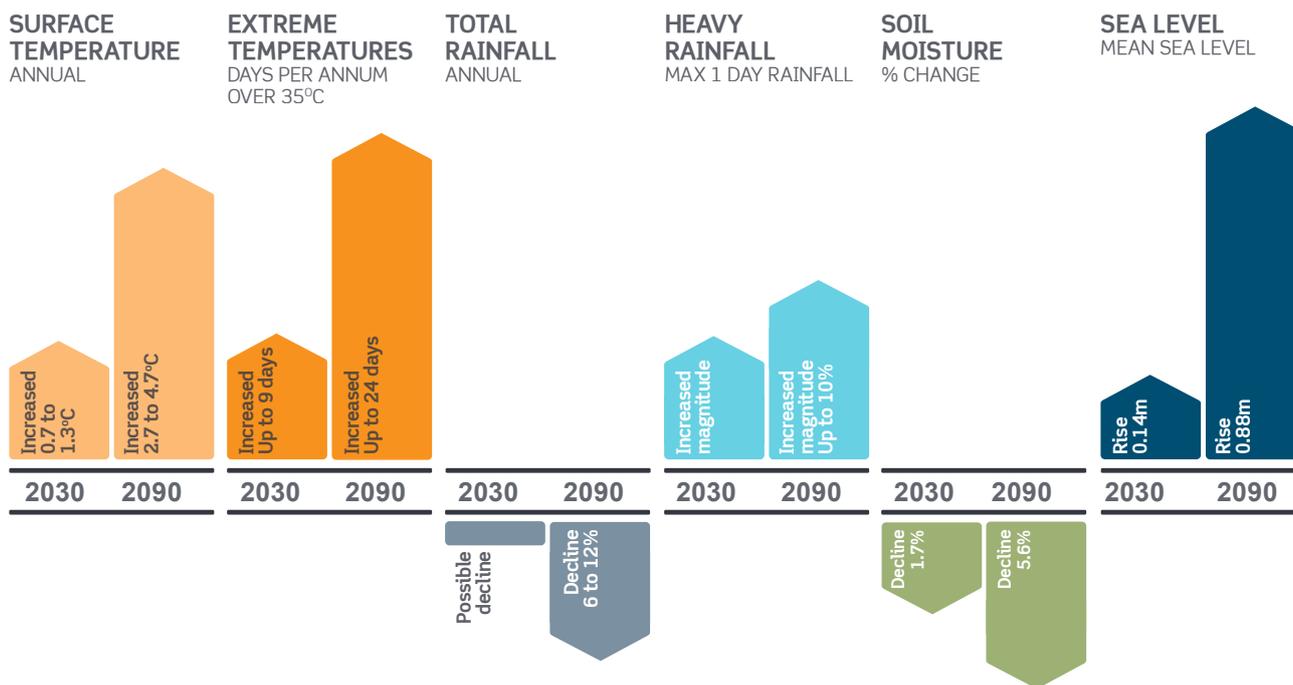


Figure 3: Future climate projections for the Sunshine Coast

These forecast changes are expected to have an impact on both the natural environment and liveability of the Sunshine Coast.

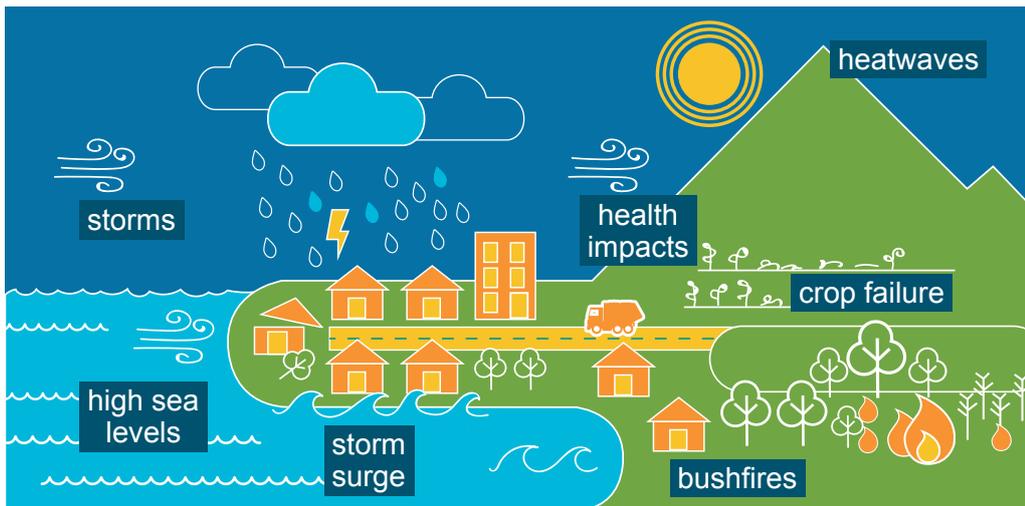
In response, our biodiversity, habitats and ecosystems are expected to change. Studies indicate that for highly vulnerable locations across the state the potential exists for less than 10% of current native species to remain in that location by 2070<sup>3</sup>. Locally, species may disappear, become extinct, move to more habitable locations both within and outside the region, and new species may migrate into the region. Biodiversity monitoring indicates that some local rainforests are already being replaced by eucalypt-dominated vegetation communities.

Water quality and natural values are likely to be impacted, affecting the amenity and recreational values of our waterways, wetlands, estuaries and coasts.

Our built environment and communities will also be exposed to the likely impacts of climate change. A greater number of extreme events may result in increased damage to buildings and infrastructure; emerging diseases, heat waves and extreme temperatures may affect public health; and community resilience may be affected by higher repair and maintenance costs, as well as changes to the insurability of homes and assets.

Refer *Figure 4*.

<sup>3</sup> Williams et. al.(2012) Queensland's biodiversity under climate change: impacts and adaptation – synthesis report



Source: Adapted from NCCARF CoastAdapt infographic<sup>4</sup>  
 Figure 4: Extreme events and likely impacts of climate change

These impacts will compound as more people, homes and built assets are exposed to predicted hazards.

Emissions are recognised as driving climate change. As a community, the Sunshine Coast generates greenhouse gas emissions directly through the consumption of electricity and fuels, the landfilling of our wastes and the clearing of vegetation. Indirectly, emissions are generated through the services we utilise and the production, storage and transportation of the goods we use and consume, including foods.

Our region's greenhouse emissions are steadily increasing, fuelled by population growth and economic development. As an organisation, council's own greenhouse emissions are forecast to grow as a result of additional community and industry demand for council services. Consumer choices will make a significant contribution to this total as nearly 80% of these emissions are generated by landfilling of community waste.

### Challenges and opportunities

To address the predicted impacts of climate change in a progressive and responsive way that encourages the involvement of the whole community, at the same time balancing the needs of a growing economy and emerging industry and business sector. Climate change can also be a catalyst for driving new ideas, creative solutions and business opportunities.

<sup>4</sup> Source: NCCARF <https://coastadapt.com.au/sites/default/files/infographics/15-117-NCCARFINFOGRAPHICS-2-UPLOADED-WEB%2827Feb%29.pdf>



## Economic growth

The regional economy was valued at approximately \$17 billion in 2016. It is primarily based on service industries, tourism, retail and construction. The region has been recognised as having the second highest performing regional economy in Queensland with the highest level of business confidence, and in 2016 was identified by Infrastructure Australia as one of five cities that – along with the state capitals – will be a focal point for future national productivity.

By 2033 the Sunshine Coast economy is forecast to double, based on a greater diversity of business types. Industries forecast to expand include:

- health and wellbeing
- education and research
- knowledge industries and professional services
- agribusiness
- aviation and aerospace
- clean technologies
- tourism, sport and leisure.

As a result, at least 100,000 jobs are forecast to be created on the Sunshine Coast by 2041. This forecast trend of economic growth and diversification is expected to have a range of impacts and opportunities.

The number and diversity of buildings needed to facilitate and accommodate this growth may increase, while an expanding workforce employed across a range of occupations will require additional residential housing, driving the demand for housing diversity and affordability.

Additional infrastructure for transport, facilities, tourism and utilities (eg water and electricity) will also be required, along with improved services (eg internet and smart technology) to support new and expanding businesses.

Focusing future economic development within the Enterprise Corridor, which stretches along the coastal strip from the Sunshine Coast Airport to Caloundra South (Aura), to take advantage of existing utilities and infrastructure will bring specific challenges of balancing competing land uses in a coastal zone increasingly subject to climatic risks.

This increased demand for land along the coastal strip to accommodate the growth of residential, commercial and industrial buildings, along with a growing demand for access to our natural assets, including the beaches and waterways, will also put additional pressure on our open space network, natural environment and access to services and facilities that underpin our lifestyle.

## Challenges and opportunities

Careful planning and delivery around economic growth are required to ensure that the healthy environment that underpins our liveability is protected and enhanced, enabling a prosperous region built on a diverse local and global economy and our natural advantage.

## Technological innovation

A new and potentially more dynamic driver of change is emerging in the form of technological innovation.

Technology has become a critical catalyst for change, providing the capacity for innovative solutions to many of our challenges and creating new opportunities for economic growth and social change.

Technological innovation is often characterised by doing more with less and has the potential to fundamentally change the way in which we consume energy, create goods and services, diagnose and treat disease and spend our leisure time.

Current examples of transformational change driven by technology include:

- a reducing reliance on fossil fuels and a move to renewable energy sources and storage
- increased connectivity, both locally and globally
- design and construction of more sustainable buildings and homes and a reduction in waste generation
- localised regeneration of plants and species.

## Challenges and opportunities

Technological innovation has the capacity to generate change at a far greater rate than more traditional drivers and the task is to acknowledge, respond to and, where appropriate, adopt emerging trends.

## Why we need to act now

This strategy is based on a focused and collective approach and provides the long-term strategic thinking and immediate action to:

- limit the loss of our natural environment – ensuring the biodiversity, waterways and coastal environments, as the foundation of our community, our lifestyles and our economy, are secured and protected
- respond to population growth in different and better ways – putting the building blocks in place to reshape the future by adopting a more efficient and effective urban form
- actively prepare for growth and meet the needs and expectations of future communities – securing and retaining land for environmental purposes, open space, and social infrastructure
- build resilience to the forecast adverse impacts of climate change – taking steps to adapt to and mitigate the expected effects, enabling new and emerging technologies to be implemented and benefits realised.

In 2015 the children of the Sunshine Coast at the 'Kids in Action' Conference confirmed that it is time for action. Refer *Box 1*.

This statement outlines the concern and passion we, the children and youth of the Sunshine Coast, have for the environment in which we live. Our statement communicates the heartfelt thoughts and ideas of 240 kids from 24 schools on the Sunshine Coast about what we value and appreciate most about living here. We create this statement and pass it to you, our elected representatives. We charge you with the duty to care, protect and hold in trust for us, our precious environment. We entreat you to listen to and hear our voices, for we are the future and if we can learn to respect and be responsible as future custodians – so can you. We therefore trust you to preserve and protect this Earth, a precious resource, because:

- it is our home-it sustains us;
- we will need it now and later in life; and
- we want to pass it safely on to our children when we are older.

Box 1: Kids in Action statement extract





## What the community told us

The community was invited to comment on the draft Environment and Liveability Strategy and its proposed strategic directions in May and June 2017. The majority of respondents strongly supported the overall aims of the draft strategy. Comments identified specific issues in regard to managing continued population growth, retaining the positive aspects of the Sunshine Coast lifestyle, and ensuring infrastructure keeps pace with growth and change.

Comments also related to the challenge of implementing and achieving the desired aspirations articulated in the strategy when confronted with the reality of balancing the pressures of development while retaining the Sunshine Coast lifestyle. The top five themes were:

### Retaining the distinct character:

People are passionate about 'their' Sunshine Coast, and want to see the distinct qualities of our 'community of communities' and village feel retained and the natural areas preserved. Recognising the contribution made by the first Australians and the importance of our shared history and connection with the land are also important.

### Protecting natural assets:

There is recognition that the protection, management and enhancement of our environment (plants, animals and ecosystems) and distinct landscape are fundamental to the future of the region, as is the need for protection against the loss of native vegetation and habitat to ensure the biodiversity values of our neighbourhoods are enhanced and understood. Continuing the tradition of the coast's strong stewardship for our natural environment is strongly supported.

### Finding the balance:

Submitters recognise the need to find the 'sweet spot' that manages the competing needs and desires of individuals, communities, businesses and industries. It is recognised that transitioning to a more compact urban form is necessary to protect the natural assets. Retention of the character, scale and lifestyle we have now are also important – creating vibrant places for people and ensuring housing options for everyone. There is a strong recognition that supporting infrastructure (especially transport) is critical to accommodate population growth and ensure our liveability.

### Being sustainable:

Integrating 'good sustainability practices' into all we do to manage both present and future impacts and understanding the link between (and achieving) sustainability and affordability are important. Residents are embracing renewable energy and understand the importance of moving to more sustainable practices. Supporting this behavioural change is considered an important role for council. Reducing litter and consumptive practices are identified as concerns. The need to be prepared for and understanding the risks associated with climate change are identified as needing more attention and the community expressed an interest in being more actively involved.



### Community involvement:

It is important to the community to be involved in future decisions, seeking to be engaged regularly by council on major issues as change occurs. Maintaining the integrity of the Planning Scheme is also considered very important. Recognising that the community are the custodians of the Coast's natural environment and liveability is also important to them.

Overall there is also a need to better understand the relationship with other council strategic documents, such as the Regional Economic Development Strategy, Social Strategy and Planning Scheme.



## Policy and Planning Context

The strategic directions outlined in this strategy have been informed and guided by applicable international, Commonwealth and state legislation and policies.

At a regional level, planning for SEQ aims to accommodate future growth sustainably and in a way that responds to change positively, enhancing the social, economic and environmental systems that support the liveability of the region.

This strategy provides the foundation for delivering critical advice and to advocate to the state through the adopted policy positions of council which are supported by the Sunshine Coast community. Policy directions and many aspects of this strategy are consistent with the state government's regional planning - *South East Queensland Regional Plan 2017*.

### Relationship to existing local strategic directions

This Environment and Liveability Strategy, along with the Regional Economic Development Strategy and the Social Strategy, form the three long-term strategic policy positions of the council and work together to inform corporate and operational planning and delivery. Refer to *Figure 5*.

The **Regional Economic Development Strategy** sets a pathway to transition to a new economy that respects and nurtures the region's values and authenticity and looks beyond its horizons to establish the region in the global economy. With a focus on high value industries, investment in talent and skills and a collaborative approach. There are strong synergies with the Environment and Liveability Strategy, which seeks to support a transition to a smarter, innovative and more sustainable region while protecting the environment and liveability.

The **Social Strategy** provides long-term social direction that builds on the region's positive social attributes, building a strong community by supporting an engaged, resilient and inclusive community that embraces diversity. The Environment and Liveability Strategy provides a foundation for the natural and built environment to support the social directions articulated in the Social Strategy.

In addition, there are two key infrastructure strategies that are considered fundamental to achieving a healthy environment and liveable Sunshine Coast. These are:

The **Sustainable Transport Strategy**, which represents council's policy position on transport and is intended to be implemented with support from state and Commonwealth governments. This strategy recognises that it is necessary to deliver a more sustainable transport network to protect our natural areas and retain the distinctive lifestyle of the region through changing travel patterns and modes. It strongly supports a shift to public and active transport and an integration of transport and land use planning and delivery aligned with the principles of self-containment.

The timely delivery of an effective and efficient transport network underpin the strategic directions of the Environment and Liveability Strategy.

The **Waste Management Strategy** recognises the importance of managing waste and sets a strategic approach to waste management over the next decade. The Environment and Liveability Strategy proposes a longer term outlook to 2041, transitioning our waste into a valuable community resource with economic, social and environmental benefits.



The **Sunshine Coast Council Corporate Plan** sets the vision, goals and strategic pathways and priorities for a five year period and directly informs the operations of council.

The corporate plan's vision "Australia's most sustainable region – healthy, smart, creative" reflects the balance in our economic, social and environment objectives.

The plan outlines five goals the organisation will pursue to achieve the vision. The Environment and Liveability Strategy comprehensively addresses the third goal – A Healthy Environment – delivering outcomes through the strategy's five strategic pathways which aim to maintain and enhance the region's natural assets, liveability and environmental credentials.

The **Sunshine Coast Council Planning Scheme** is an important tool for the implementation of council's long-term policy directions and delivers the on-ground outcomes through the development process. The scheme is a living document which can be amended through a statutory plan making process. Any changes to the planning scheme require public notification and community involvement.

The Environment and Liveability Strategy may inform amendments to the planning scheme and will also inform the drafting of a new planning scheme which will occur within the next decade. This strategy does not replace or seek to circumvent the planning scheme. The strategy can also be referenced for strategic direction where the planning scheme is silent on a matter and used where the planning scheme does not apply.



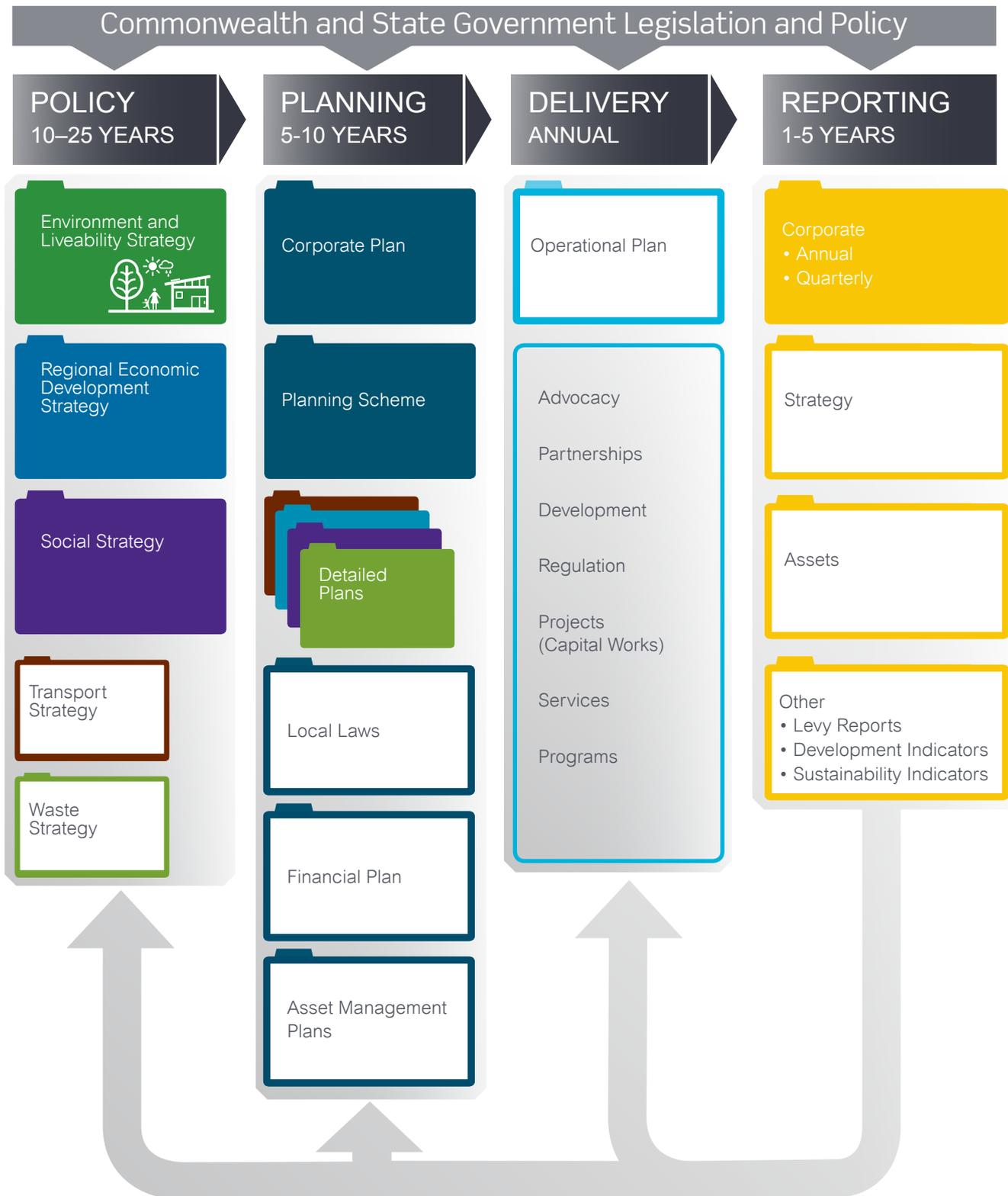


Figure 5: Policy and planning framework

## Building on previous strategic directions

This Environment and Liveability Strategy replaces six key long-term strategies adopted by council in 2010/11, which sought to shape growth on the Sunshine Coast. The strategies included:

- Biodiversity Strategy 2010-2020
- Waterways and Coastal Management Strategy 2011-2021
- Open Space Strategy 2011
- Social Infrastructure Strategy 2011
- Affordable Living Strategy 2010-2020
- Climate Change and Peak Oil Strategy 2010-2020.

This strategy builds on these strong foundations, while addressing identified gaps, enhancing integration and positioning the existing organisational business in a fresh context. In addition, a suite of comprehensive background documents, trend analysis and data assessment have informed the preparation of this strategy.





## The Structure of the Strategy

The strategy is structured in three parts which are summarised below and shown in *Figure 6*.

### Part A – Strategic Directions

Part A sets clear and integrated strategic directions necessary for a healthy environment and liveable Sunshine Coast in 2041. It contains background information, a vision, guiding principles and three interdependent sections which include a suite of themes to shape and support growth over the next 25 years.



#### THE NATURAL ENVIRONMENT

#### The Natural Environment

focuses on the need to preserve and enhance our natural environment, while supporting opportunities for the community to benefit sustainably from the associated products and ecosystem services.

**Themes:**

Landscape and Character | Biodiversity | Waterways and Wetlands | Coastal



#### THE ENVIRONMENT WE CREATE

#### The Environment We Create

focuses on the built environment and in particular growth management, liveability and the sustainable design of our neighbourhoods, dwellings and open spaces.

**Themes:**

Open Space | Flooding and Stormwater | Neighbourhoods and Housing | Social Infrastructure | Sustainable Design



#### LIVING IN THE ENVIRONMENT

#### Living in the Environment

focuses on the tools that will equip us to live within the natural and built environments to build resilience and liveability through sustainable, adaptable and affordable living practices.

**Themes:**

Energy and Resources | Sustainable Living | Adaptation and Resilience

Each theme contains:

- **Outcome 2041:** the desired future state we seek to maintain and/or realise within the next 25 years.
- **Description:** information about each theme and why the theme is important.
- **Snapshot:** 'fast facts' about the state or condition of the theme in 2016/17.
- **Planning for change:** the key impacts likely to occur in the absence of intervention or proactive management.
- **Council's role:** the various roles and responsibilities council has in relation to each theme.
- **Policy positions:** council's position to influence the activity of the organisation and its partners and provide the foundation for delivering critical advice internally and advocacy externally.
- **Target:** a target to track progress in achieving Outcome 2041.

Part A also introduces and summarises the proposed **Transformational Actions** to be delivered through the five strategic pathways, and how progress of the strategy will be tracked.

## Part B – Five-Year Implementation Plan

Part B is the implementation plan that outlines how the strategy will be progressed and a focus on council's contribution to the strategic directions in the first five years. It is intended that the plan will be updated annually to retain its relevance and maintain a current five-year implementation horizon.

Part B identifies a governance framework for delivery, a range of key council services central to the delivery of the strategy, and 26 Transformational Actions delivered through five strategic pathways to actively respond to the drivers of change. Each action identifies specific tasks, timing, and indicative costing to inform implementation.

Importantly, Part B expands on how it is intended to track progress and report on the strategy's implementation and performance.

## Part C – Network Plan

Part C provides planning direction and technical detail to assist with the implementation and delivery of on-ground outcomes for applicable themes articulated in Part A. It will ensure that investments are undertaken in an effective and sustainable manner.

This part consists of:

- **Desired Standards of Service** – the technical standards and specifications to inform the planning, development and management of council owned and controlled assets/infrastructure and networks for which there is a management obligation.
- **Network Blueprints** – the maps and descriptions to guide the geographical planning for the land and facilities we currently have and what is required to service the future needs.



# Environment and Liveability Strategy

PART A

## Strategic Directions

Introduction / Sunshine Coast Context / Planning for Change / Policy Context

### VISION AND GUIDING PRINCIPLES

#### THE NATURAL ENVIRONMENT



##### THEMES AND POLICY POSITIONS

- Landscape and Character
- Biodiversity
- Waterways and Wetlands
- Coastal

#### THE ENVIRONMENT WE CREATE



- Open Space
- Flooding and Stormwater
- Neighbourhoods and Housing
- Social Infrastructure
- Sustainable Design

#### LIVING IN THE ENVIRONMENT



- Energy and Resources
- Sustainable Living
- Adaptation and Resilience

### STRATEGIC PATHWAYS AND TRANSFORMATIONAL ACTIONS

PART B

#### Five-Year Implementation Plan

Governance framework, key council services, transformational actions and tracking progress

PART C

#### Network Plan

Biodiversity / Waterways and Wetlands / Coastal / Open Space / Social Infrastructure

Figure 6: Structure of the Environment and Liveability Strategy



## How the strategy will be used

The strategy will influence the business activity of council and its partners. It highlights the importance of environmental quality, clever planning and design, and sustainable living to regional prosperity, affordability and liveability. It will be used to:

### Inform planning:

- provision of strategic internal and external advice
- drafting, review and amendments of planning schemes and local laws
- preparation of organisational policies, standards and guidelines
- prioritisation of future land requirements for activities such as the delivery of infrastructure.

### Guide decision-making:

- a point of reference and strategic directions for issues that fall within the strategy's scope
- inform investment and land use planning decisions
- inform infrastructure negotiations to determine land and asset contributions and delivery.

### Drive implementation:

- provision of a range of strategic actions and operational activities that provide required infrastructure and services
- direct council resources to achieve strategic direction
- attract external investment, skills and technologies
- development of complementary integrated and detailed plans.

### Engage stakeholders:

- advocate policy positions with key government, business and community stakeholders
- establish and maintain the necessary government, industry and community partnerships
- build community awareness, capacity and custodianship through education and involvement
- promote council's commitment to environment and liveability outcomes.





## Guiding principles

As we aspire to deliver a healthy environment and sustainable way of living, it is important to have a strong set of guiding principles to keep us on course to meet our vision and support outcomes over the next 25 years.

The following guiding principles set an intent for how council and its partners will deliver the strategic outcomes. These principles are to be referenced and applied through all phases of planning and delivery of the strategy. They will inform our behaviours, the decisions we will make and the way those decisions will be implemented.



### Lead

Leading by example, we engage our community, we listen, we make the difficult decisions and inspire, and enable community empowerment.



### Balance

Balancing the environmental, social, and economic needs of today, without compromising the ability to meet the needs of future generations.



### Connect

Connecting, partnering and integrating, we draw on the collective skills, knowledge and strength of our region.



### Embrace

Embracing change, we boldly respond to the challenges ahead, actively seeking new ideas and opportunities.



### Adapt

Adapting to change, we make proactive, evidence-based and responsive decisions in a timely manner, informed by changing environmental conditions and community needs.



### Create

Creating productive partnerships and alliances, we explore and trial innovative approaches and new technologies.



Shopping To Do List  
mango  
p. pineapple  
avocado  
carrots  
cucumber  
cavort  
papaya





## The Natural Environment

The natural environment is made up of physical and biological elements including soil, water, air, plants and animals and the interactions between them. It is self-sustaining and has intrinsic value and unique local characteristics that require protection.

On the Sunshine Coast the natural environment is a living network of landforms and catchments, wetlands, waterways, terrestrial ecosystems, coastal foreshores and marine waters. It includes the smallest lichen on Mount Coolum through to the tallest eucalypt in the hinterland; the humble brush turkey to the striking Richmond birdwing butterfly; the rarely seen water mouse to the towering Glass House Mountains, and the internationally recognised Pumicestone Passage.

The network is built on a canvas of landforms such as mountains, valleys, plains and the coastline. These divide the landscape into catchments, which direct rainfall runoff from high areas to the sea. Landforms and catchments have strongly influenced the pattern of ecosystems and human settlements across the Sunshine Coast.

Waterways and wetlands are physical features within catchments that convey or hold water, typically in lower areas of the landscape such as valleys and plains. They function as water reservoirs and are often ecological hotspots, encompassing diverse habitats and wildlife. They include fringing riparian areas that are dependent on the water they provide and support their ecological health.

Terrestrial ecosystems are vegetated or partly vegetated habitats outside of waterways and wetlands, including their resident plant and animal populations. They are sustained by rainfall and the water and nutrients retained in their soils. They include large, vegetated core habitat areas, as well as smaller connecting habitat areas.

The coastline buffers the land and sea environments from one another and supports its own unique habitats – coastal foreshores and their intertidal areas, beaches, dunes and rocky headlands, and near-shore marine waters and ecosystems.

The natural environment and its processes provide essential services for our community. Wetlands filter pollutants from our water. Trees and plants absorb carbon and provide us with clean air. Bacteria and fungi break down organic material and fertilise the soils we need to grow food.

Our natural environment and landscapes are central to our lifestyle, providing appealing vistas and abundant opportunities for recreation on land or in the water. They also support our tourism, retail and agricultural livelihoods, contributing significantly to the local economy.

A healthy environment is vital to our everyday lives and contributes to our quality of life. Our natural environment is our bountiful heritage, our inspiring home and our responsibility to preserve for the future.

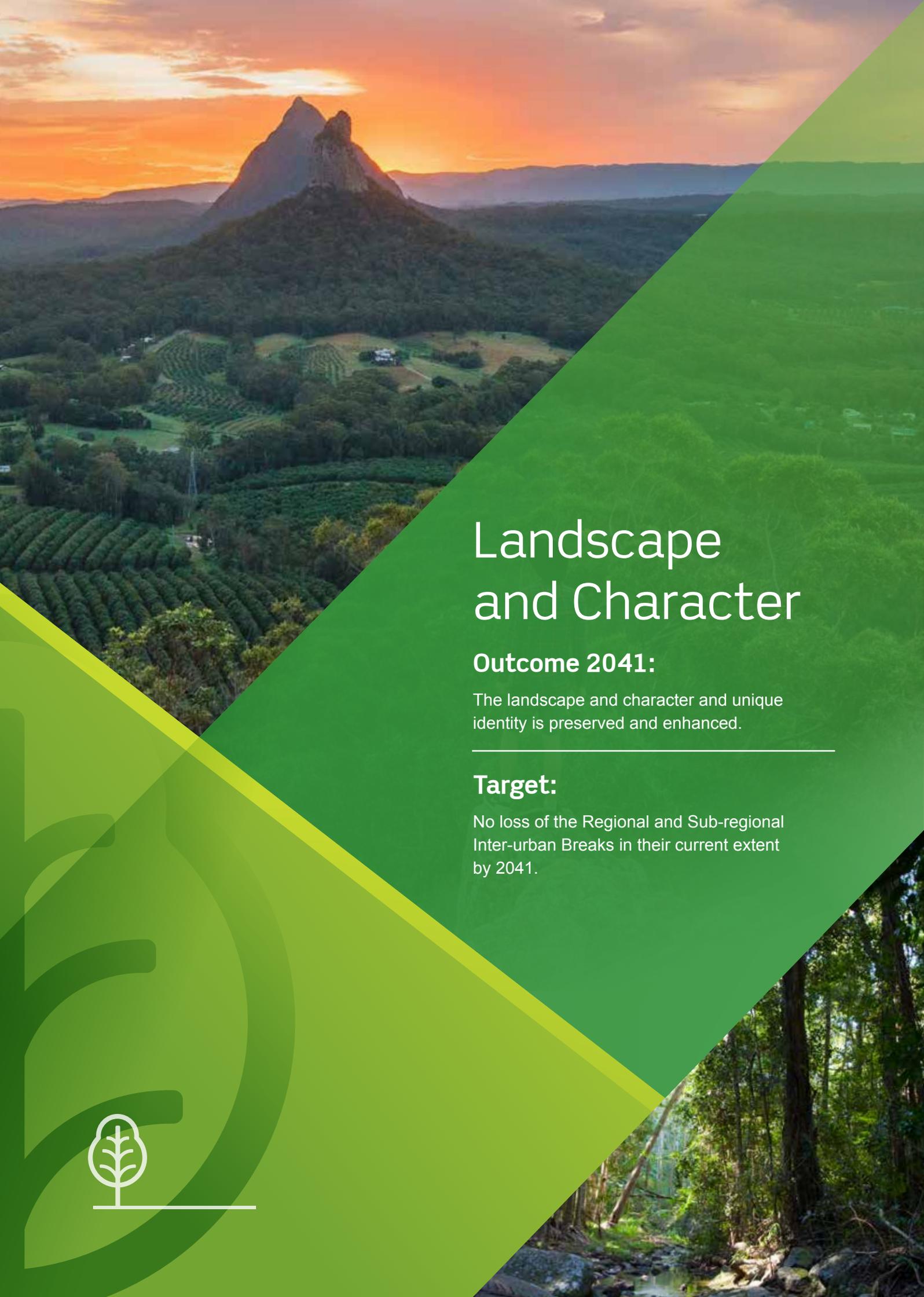


Maintaining a healthy natural environment – the Sunshine Coast’s “natural advantage” – is critical to support our economy and community.

Council’s strategic directions for the natural environment are to preserve and enhance the green and blue infrastructure and associated ecological values, while benefiting sustainably from the products and services it provides. These strategic directions are progressed under four themes:

- **Landscape and Character** – preserving and promoting natural and built environments, the vistas and scenic corridors which are important to the region’s character and identity.
- **Biodiversity** – preserving and enhancing native plants and animals and their habitats to remain healthy, resilient and valued by all the community.
- **Waterways and Wetlands** – preserving and enhancing aquatic habitats and wildlife across river catchments and facilitating sustainable recreational use.
- **Coastal** – preserving a healthy coastal environment, responding to coastal hazards, facilitating recreational uses and maintaining our coastal lifestyle.

Each theme is further explained in this section.



# Landscape and Character

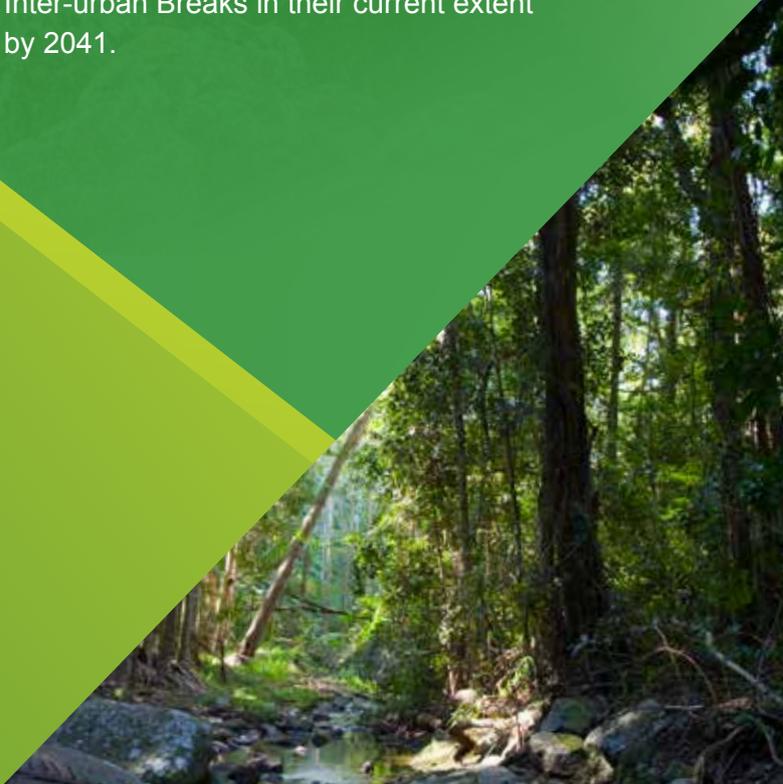
## **Outcome 2041:**

The landscape and character and unique identity is preserved and enhanced.

---

## **Target:**

No loss of the Regional and Sub-regional Inter-urban Breaks in their current extent by 2041.



# The landscape and character of the Sunshine Coast can be described as how we value both the natural and built environments and their associated geological, ecological and cultural histories.

The natural environment is a living network of landforms and catchments, wetlands, waterways, terrestrial ecosystems, coastal foreshores and marine waters. The built environment refers to the built form – the structures and places that we create in our rural and urban settings.

Our natural history and our stories strengthen our connection to the land and environment. Every person and community has a different experience with the natural and built environments, and it is these connections that create a sense of place and local identity.

The landscape and character of the Sunshine Coast is the essence of our region and helps to define our identity and culture.

The natural and built elements have their own intrinsic ecological, social and economic value. In combination they create our local and iconic views and vistas, scenic corridors, open space environments and the character of our region.

The Sunshine Coast consists of a diversity of places, each with their distinctive identity. The conservation, agricultural and recreational lands – the green frame, that separate our neighbourhoods, towns and centres contribute significantly to our ‘community of communities’.

The landscape values of the Sunshine Coast can be broadly grouped into four zones which are summarised below and presented in *Figure 7*:

- **Coast:** the region is known for its beautiful beaches, bays, coastal headlands, islands and communities near the sea. Our coast is a national and international drawcard for tourism.
- **Coastal plain:** extending from the coast to the foothills of the Blackall Range and Peachester escarpment, this low-lying area supports extensive waterways and wetlands with unique plant and animal populations, prominent volcanic landforms and expanses of farming, forestry, other rural activities and urban living.

- **Foothills:** this area starts where the coastal plain rises up to the Blackall Range and Peachester escarpment, and is home to numerous railway corridor towns, tall open eucalypt forests and riparian rainforests.
- **Hinterland:** features towering eucalypts, lush rainforests and spectacular views over surrounding landscapes. The hinterland comprises distinctive landmarks, towns and essential elements that add to the character of the Sunshine Coast.

A key feature of the landscape is the **Regional Inter-urban Break**, which is a mosaic of rural, forestry, environmental and recreational areas in the south of the Sunshine Coast. It contains the nationally recognised Glass House Mountains, the internationally significant Pumicestone Passage and defines the region from the Brisbane–Caboolture urban growth front.



Figure 7: Map and profile of landscape zones

## Planning for change

The drivers of change will have varying levels of impacts on landscape and character and will continue to present challenges for the future.

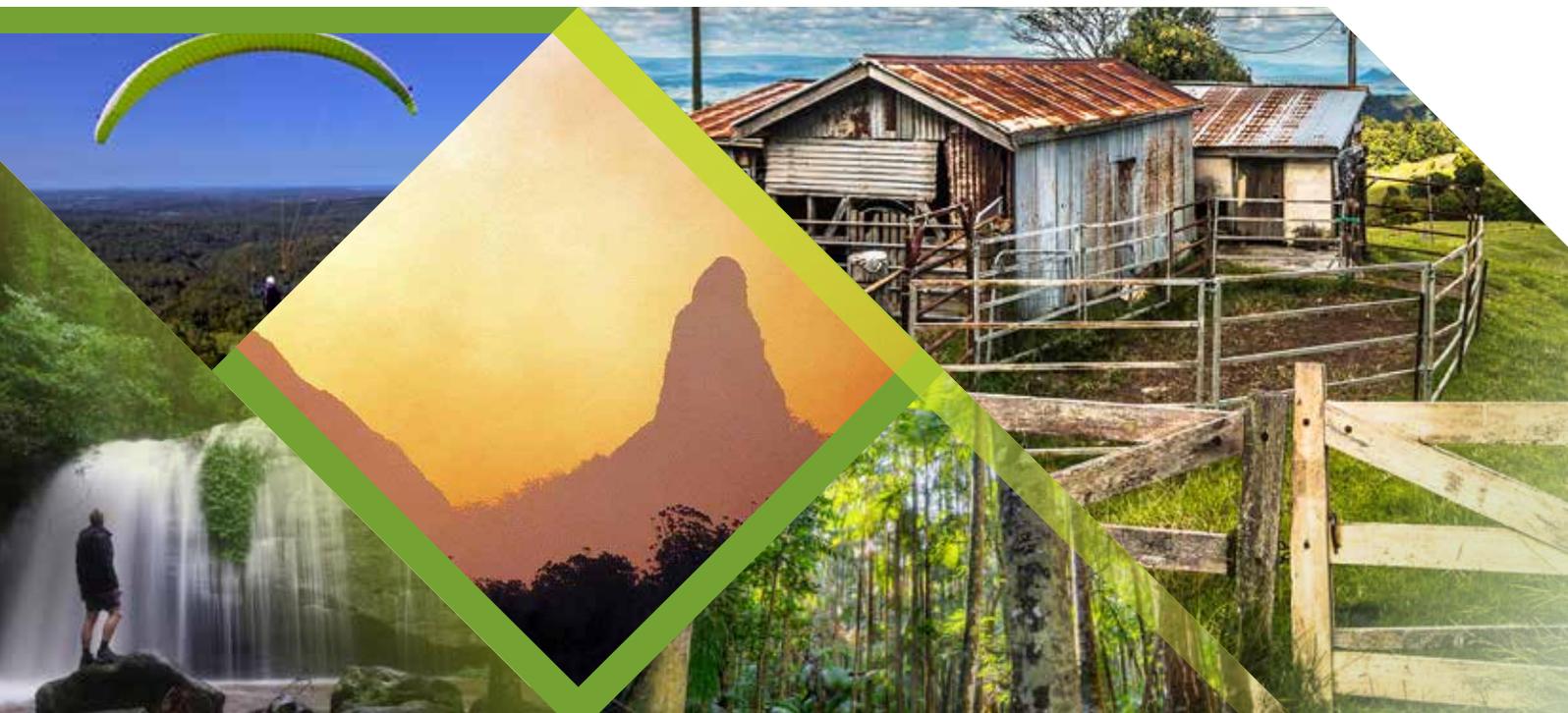
Key impacts may include:

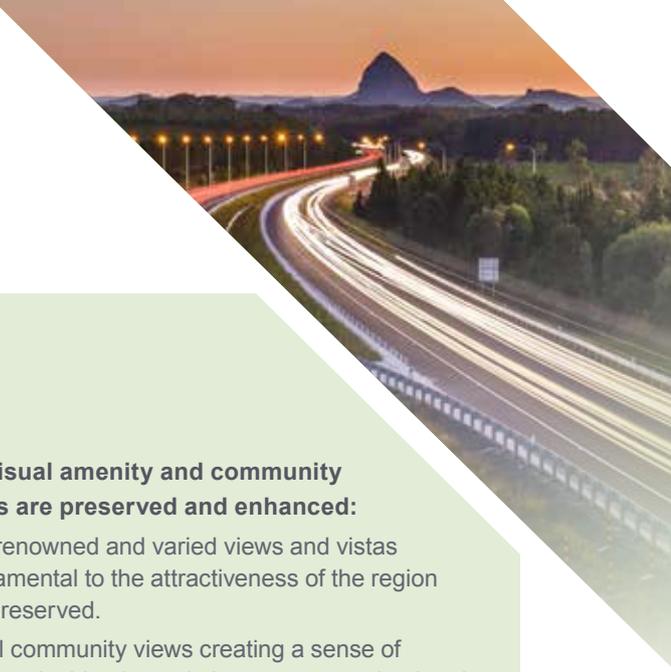
- loss of landscape and amenity values due to an increased visual prominence of the built environment and infrastructure
- changes to the extent of low-lying coastal and open space landscapes
- changes to the character of natural and rural areas and communities due to increased use by residents and visitors
- loss of Regional and Sub-regional Inter-urban Breaks.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

Council has a key role in setting the strategic direction which shapes the character and protects the landscape of the Sunshine Coast. It is council's role to protect and enhance outcomes on the ground through planning regulations, delivering responsible infrastructure, advocating to federal and state governments and working collaboratively with local industries and community to influence the region's landscape and character.





## Landscape and Character policy positions

### **1.1 The distinctive and diverse landscape is preserved to maintain the beauty of the area:**

- a The landscape is retained and continues to underpin the character of the Sunshine Coast.
- b The urban form is contained within the defined urban footprint.
- c The natural landscape remains intact, undiminished and protected from development that is incompatible with its values.
- d Prominent natural landscape features are protected and celebrated.

### **1.2 The landscape, character and heritage values retain the unique identity of the area:**

- a The natural, cultural, spiritual and heritage values of the landscape are recognised and preserved.
- b The Sunshine Coast's character, heritage and identity are strengthened to remain distinctive.
- c The local character and identity of neighbourhoods, towns and rural communities are recognised and reflected in our future.
- d Connections of Aboriginal Traditional Owners to the landscape and their role as traditional custodians is recognised and respected.

### **1.3 The visual amenity and community view lines are preserved and enhanced:**

- a The renowned and varied views and vistas fundamental to the attractiveness of the region are preserved.
- b Local community views creating a sense of community identity and place are recognised and respected.
- c The Regional Inter-urban Break and Sub-regional Inter-urban Breaks are maintained and enhanced.
- d Emerging urban form complements the landscape and character of the Sunshine Coast.



# Biodiversity

## **Outcome 2041:**

Our native plants, animals and habitats are healthy, resilient and valued by the community.

---

## **Target:**

Maintain the 2016 extent of native vegetation (no net loss) by 2041.



## Biodiversity is the variety of all life — plants, animals and microorganisms, their genes and the ecosystems they inhabit.

The Sunshine Coast is recognised for its rich biodiversity which is supported in natural areas that include terrestrial bushland, the coast, waterways and wetlands. It is also supported in both the rural and urban landscapes.

The Sunshine Coast's subtropical location and climate and varied landform supports a diverse range of plants and animals, from tropical through to temperate and marine through to lowland and upland species. Under relevant legislation, 153 locally recorded plant and animal species are classified as rare or threatened, such as, the Buderim holly and swamp stringybark.

Aboriginal peoples have been stewards of the Sunshine Coast's natural environment for thousands of years and have maintained a deep cultural, spiritual and social relationship with biodiversity. Today's community continue to strongly value and appreciate the region's plants and animals, which is demonstrated by having one of the most active community conservation networks in the state.

The wellbeing of all Sunshine Coast residents is intimately linked to and dependent upon the region's biodiversity and its preservation. Healthy ecosystems help us sustain a range of ecosystem services including productive soils, clean air and water.

The building blocks of our biodiversity are our habitat areas. They include vegetation, resources such as water, soil and air, plants and animals and the interactions between all these elements. At the landscape scale, biodiversity can be understood as the spatial network of different habitat areas, their connectivity and their quality or functionality. In this landscape, our urban areas play an important role in enhancing biodiversity and contribute to the character and liveability of the built environment and our connection to nature.

Some of the Sunshine Coast's habitat areas are managed within the conservation estate, which represents a collection of lands where biodiversity is conserved through protected and voluntary conservation areas. The protected areas include national parks, conservation parks, nature refuges, council environment reserves and covenants, while the voluntary conservation areas include private lands managed through the Land for Wildlife Program. Habitats within the conservation estate are managed to reduce the impacts from invasive species, urbanisation and habitat loss and fragmentation. Expansion of the conservation estate is crucial to the ongoing protection of the region's biodiversity.

The conservation estate provides the window into local biodiversity. In these areas, residents and visitors can experience and connect to the natural environment while walking, riding, picnicking by a waterway or enjoying an iconic vista. For example, our renowned conservation areas such as the Glass House Mountains, Pumicestone Passage, Conondale Range and Maroochy-wallum corridor draw visitors to the region, providing opportunities to support local businesses and the economy.



**44%** of native vegetation is in the conservation estate

**72%** of native vegetation is in large core habitat areas

## Planning for change

The drivers of change will have varying levels of impacts on biodiversity and will continue to present challenges for the future.

Key impacts may include:

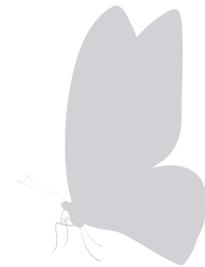
- further habitat loss and fragmentation
- changes in the extent/distribution of plant and animal populations
- loss of ecological resilience
- changes in habitat functionality and species behaviour
- increase in invasive plants and animals
- increased demand for community access and use of conservation areas for tourism and recreation.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

Preserving and conserving the biodiversity of the Sunshine Coast is the responsibility of the entire community. Council's role is to work collaboratively with all stakeholders, advocating for the ongoing protection, building and strengthening stewardship and implementing legislative planning and regulatory powers to preserve these natural assets.

In addition council has a role in the management of environment reserves to both protect and enhance the ecological values and provide opportunities in keeping with the natural setting for public access and enjoyment.



**2,600** plant species  
and **850** animal species

**76** plants and **66** animals  
are listed as rare and threatened

**75** different regional ecosystems



## Biodiversity policy positions

### 2.1 Natural ecosystems and the native plants and animals they support are preserved:

- a Habitat areas are ecologically functional and well connected.
- b Ecological functionality of habitat areas is maintained under changing environmental conditions.
- c Viable populations of native plants and animals are maintained.
- d Vegetation community diversity is maintained.
- e Core and connecting habitat areas are protected.
- f Habitat extent and condition (composition, structure and function) is maintained.
- g Remnant vegetation is protected.

### 2.2 Priority habitat areas are protected, enhanced, connected and responsive to changing environmental conditions:

- a An expanded conservation estate increases protection and connectivity.
- b Rehabilitated and restored strategic corridors enable fauna movement, gene flow and species and habitat migration.
- c Animal movement between priority habitat areas is maintained or facilitated.
- d Strategic management of invasive plants and animals reduces impacts on native bushland and wildlife.
- e Habitat extent, composition, structure and function are improved.
- f Biodiversity conservation incorporates the predicted impacts from climate change and natural hazards.
- g Strong partnerships and collaboration deliver biodiversity conservation outcomes.
- h The conservation estate is protected from fragmentation and encroachment.

### 2.3 Biodiversity is valued, respected and used sustainably to support our lifestyle, livelihoods and sense of place:

- a Biodiversity values and ecosystem services are appreciated by the community to ensure ongoing support for preservation.
- b Cultural heritage associated with biodiversity is preserved and promoted.
- c Recreational activities and supporting infrastructure in or near conservation areas minimise impacts on biodiversity values.
- d Commercial activities complement the biodiversity values and contribute to the economy.
- e Industries are appropriately located and implement best practice to minimise impacts on biodiversity.
- f Offsets are required for unavoidable clearance of native vegetation.

Refer to Part C for technical detail and planning directions specific to the Biodiversity theme.

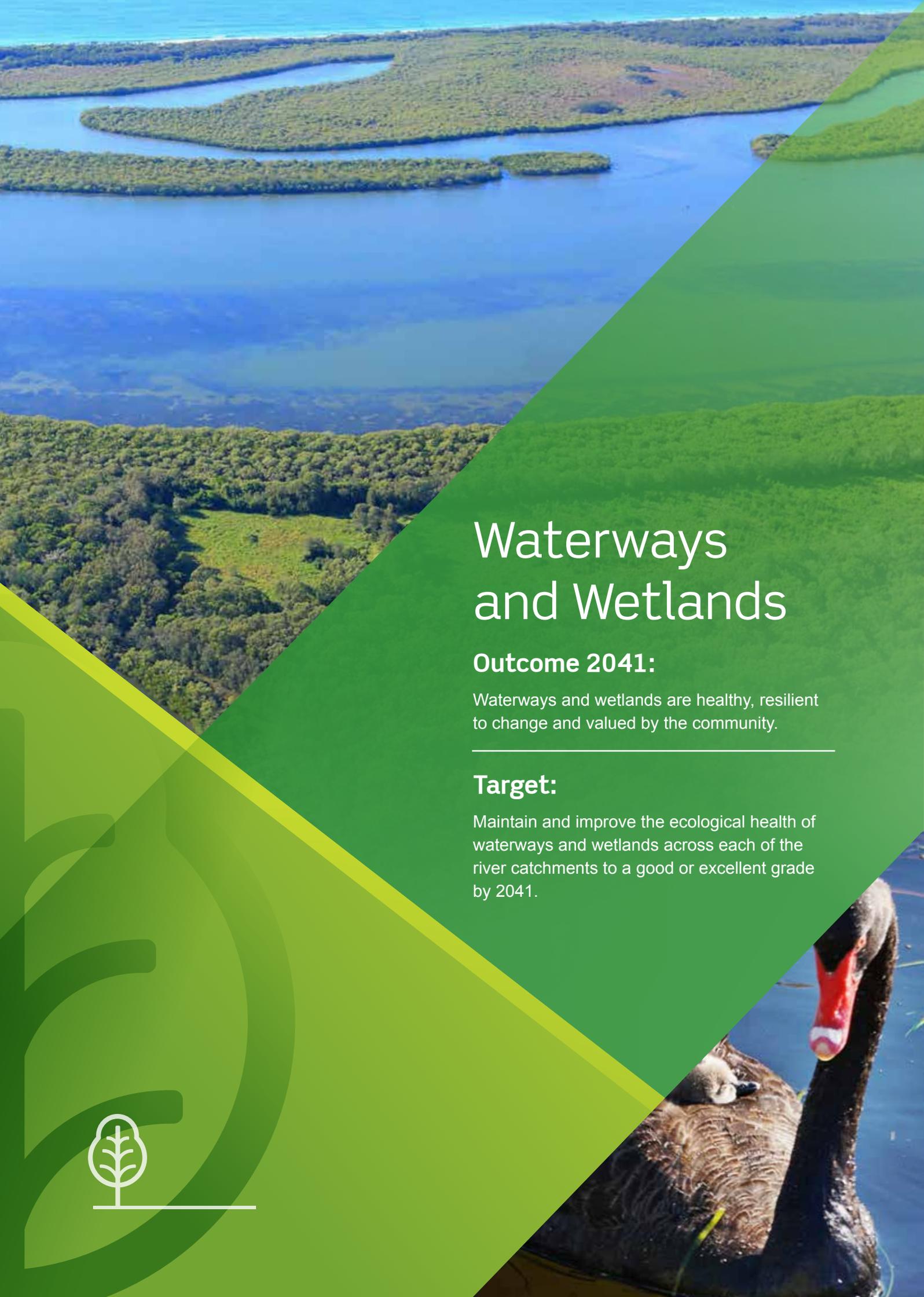


**54%** of council area has native vegetation

**49** regional ecosystems are adequately represented in protected areas

**14** endangered regional ecosystems

**75%** of native vegetation is remnant and **25%** is non-remnant



# Waterways and Wetlands

## Outcome 2041:

Waterways and wetlands are healthy, resilient to change and valued by the community.

---

## Target:

Maintain and improve the ecological health of waterways and wetlands across each of the river catchments to a good or excellent grade by 2041.





## Waterways and wetlands are the living arteries of our natural environment that convey or hold water in the landscape.

They form networks within river catchments bounded by landforms such as hills and ranges. Most are naturally-occurring but they also include modified and constructed channels, lakes or other bodies of water, including canals.

**Waterways** are the pathways that runoff follows from high areas down through a catchment. They can transition from upland gullies to flowing streams and also pass through wetland areas.

**Wetlands** are local freshwater or tidal areas where water spreads out or sits in the landscape. They include vegetated wetlands, open waterbodies and groundwater aquifers.

**Constructed waterbodies** are human-made or highly modified bodies of water. They can result from land reclamation activities associated with urban developments or the rehabilitation of resource extraction pits (eg after sand or gravel mining), or are constructed as landscape features.

Riparian areas are important components of waterways and wetlands. They are wet fringing zones that have different physical and ecological characteristics to adjoining terrestrial habitats. Riparian areas filter out pollutants in runoff from surrounding land uses. Vegetation in riparian areas also reduces bank slumping and erosion and provides shading, temperature regulation, debris for in-stream habitats and organic matter for aquatic food-webs.

Waterways and wetlands support a wide range of habitats, including freshwater pools, riffles and riparian areas, paperbark, sedge and wallum wetlands and estuarine seagrass meadows, mangroves and saltmarsh. These habitats are home to diverse and specialised wildlife, including fish, crustaceans and shellfish, water birds, frogs, turtles and aquatic mammals. They also provide refuges and movement corridors for terrestrial wildlife.

For thousands of years the Sunshine Coast's waterways and wetlands have been integral to the livelihoods, customs and spiritual beliefs of Aboriginal peoples. Waterways have also been a focal point for explorers and settlers, critical for drinking water, food and transport. As a result, most of our local urban settlements were founded and grew alongside them.

In the present day, waterways and wetlands continue to enrich local lifestyles. They provide unique opportunities for recreational activities such as swimming, boating and fishing, and along their foreshores, for walking, cycling and social gatherings. They support the wellbeing of individuals and provide a sense of place and identity for communities. Waterways and wetlands also provide a natural advantage for the local economy by supporting important local industries such as water-based recreation and tourism, agriculture and commercial fisheries. Constructed waterbodies are managed to balance their designed purpose and risk mitigation, while maximising community benefits.



**Iconic local aquatic animals:** Mary River cod, Mary River turtle, Maleny crayfish, Australian lungfish, black swan

**5 major river catchments**

**4 catchments with a "Good" waterway health grade\***

\*based on 2016 Healthy Waterways Report Card

## Planning for change

The drivers of change will have varying levels of impacts on waterways and wetlands and will continue to present challenges for the future.

Key impacts may include:

- poorer water quality, damage to aquatic and riparian habitats and hydrological modifications
- changes in the extent/distribution of aquatic plant and animal populations
- changes in aquatic habitat functionality and species behaviour
- increase in invasive aquatic plants and animals
- increased demand and potential conflict for community access and use of waterways for tourism and recreation activities.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.



**Pumicestone Passage:**  
an internationally significant wetland

## Council's role

Council, the state government, natural resource managers and the community all contribute to the management of our waterways and wetlands. Council plays a key role contributing to improved outcomes through setting strategic direction, implementing planning and regulatory powers and on-ground programs. Through advocacy and partnerships council also supports the activities of other stakeholders that complement the delivery of the waterway and wetland outcome.



**8** plants and **23** animals are listed as rare and threatened aquatic species

**390ha** of freshwater wetlands



## Waterways and Wetlands policy positions

### 3.1 Natural waterways and wetlands are preserved and enhanced to support healthy and diverse aquatic habitats and species:

- a The preservation and enhancement of diverse in-stream and wetland habitats and floodplain function sustain aquatic biodiversity.
- b Native vegetation in waterway and wetland riparian areas is protected and restored.
- c Water quality, hydrological processes, groundwater and floodplain function are maintained or improved.
- d Aquatic and riparian invasive plants and animals are managed strategically to reduce impacts on native species and habitats.
- e Viable populations of priority aquatic species are conserved or restored.
- f The management of waterways and wetlands incorporates the predicted impacts from climate change and natural hazards.
- g Natural waterways and wetlands are not diverted or modified.

### 3.2 Constructed waterbodies are minimised and managed efficiently to provide social and economic outcomes and preserve environmental values:

- a New constructed waterbodies are avoided unless an overriding need in the public interest is demonstrated.
- b Constructed waterbodies are designed, constructed and funded to minimise public risk and maintenance burdens for their full asset life cycle.
- c Constructed waterbodies are managed for their designed purpose.
- d Constructed waterbodies meet conditioned water quality objectives.
- e Water quality, hydrology and ecological processes are maintained to prevent impacts within waterbodies and on receiving waters.

### 3.3 Waterways and wetlands are valued, respected and used sustainably to support our lifestyle, livelihoods and sense of place:

- a Waterway and wetland values and ecosystem services are widely appreciated by the community to ensure ongoing support for their preservation.
- b Cultural heritage associated with waterways and wetlands is preserved and promoted.
- c Recreational activities and supporting infrastructure in, on or near waterways and wetlands minimise impacts on ecological health.
- d Commercial activities in, on or near waterways and wetlands complement their values and contribute to the economy.
- e Urban and rural industries are appropriately located, implement best practice environmental management and maintain or improve waterway and wetland health.
- f Impacts on private lands and infrastructure from natural processes such as erosion are the responsibility of landowners.
- g Mitigation works to protect land and infrastructure do not impact on adjacent or downstream land, infrastructure and waterway health.

Refer to Part C for technical detail and planning directions specific to the Waterways and Wetlands theme.

30 public boat ramps

34 pontoons or jetties

12,000km waterway network, including 3,700km of creeks and rivers



80ha of public constructed waterbodies and 300ha of canals



# Coastal

## **Outcome 2041:**

Our coastal areas are healthy, resilient to climate change impacts and support sustainable use.

---

## **Target:**

Maintain and improve the health of our coast to good or excellent grade by 2041.





The coast is the tidal foreshore and adjacent areas that include the built and natural environments. Defining natural features incorporate the coastal plains, dunes, open beaches, rocky shores, estuaries, and near-shore marine waters, reefs and coastal lagoons.

The natural features of the coast support varying habitats and include sand dunes, beaches, high ecological value waters, the Ramsar-listed Pumicestone Passage, and the Mount Coolum, Mooloolah River and Bribie Island National Parks. The coast supports numerous iconic species, including dolphins, whales, migratory birds, the vulnerable dugong and green turtle, and the endangered loggerhead turtle.

The coast has supported the cultural values and the provision of resources to Aboriginal people for tens of thousands of years. Additionally, there are numerous sites of historical significance post-European settlement along the coastline.

Our coastal environments contribute significantly to our identity and lifestyles. Locals and tourists continue to admire the coastal landscapes and access the coastal environment to enjoy activities such as swimming, surfing, fishing, snorkelling, and recreating along the coastal pathways. The coast is critical for the tourism industry, which is a significant part of the regional economy.

Use and enjoyment of the coast is maximised when ecosystems are healthy and supported by appropriately located, designed and serviced coastal parklands, paths, beach accesses and other supporting facilities.

Coastal foreshores are dynamic and can change location and form over time in response to waves, ocean currents, sand deposition and coastal erosion. Weather and tides generate currents, waves and water level variations. In turn, these drive long-shore movement of sand from south to north and alternating erosion and accretion of the foreshore. Some processes create coastal hazards such as erosion and inundation that threaten buildings, assets and communities.

The natural values of the coast can be adversely affected by land use activities and associated issues, such as invasive plants and animals, littering, stormwater and wastewater discharges. Natural areas are typically able to better accommodate the effects of coastal processes and serve to buffer developed lands and infrastructure from coastal hazards.

Most of the Sunshine Coast's significantly modified coastal foreshores are highly used and have significant built assets located directly next to the foreshore. These assets are typically protected by seawalls, revetment walls or groynes and the adjacent beaches are often reliant on periodic sand re-nourishment.

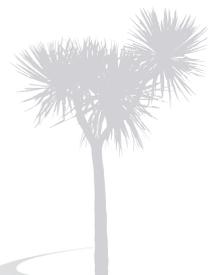
**51km** of coastal pathways

**60km** of open shoreline:

- 53km of open beaches
- 7km of rocky shores

**75%** of foreshores support moderate to high recreational use

**70km** of lower estuary foreshores



## Planning for change

The drivers of change will have varying levels of impacts on coastal areas and will continue to present challenges for the future.

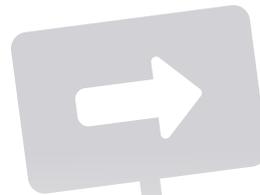
Key impacts may include:

- changes to coastal ecosystem dynamics and plant and animal species distributions
- increased impacts on natural environments and built environments from coastal hazards
- poorer water quality, increased vegetation clearing and hydrological modifications due to increasing population growth and climate change
- increased demand and potential conflict for community access and use for tourism and recreation activities.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

Council plays a key role in the planning and management of our beaches, dunes, coastal environment reserves and shoreline protection structures through a combination of regulatory and legislative powers, as an infrastructure planner and provider and as an advocate to other levels of government and private landowners. Collaborative partnerships and information sharing with the community are valued components of council's approach to coastal management.



Access supported  
with **248** beach accesses

more than **8km**  
of constructed erosion  
protection works



## Coastal policy positions

### 4.1 The natural values and function of coastal environments are preserved:

- a Natural coastal processes are preserved.
- b Coastal landforms, habitats and vegetation communities are protected and enhanced.
- c Native coastal fauna populations are maintained and enhanced.
- d Water quality is maintained and enhanced to support ecosystems and associated coastal values.

### 4.2 A healthy coast and near-shore marine environment is preserved to sustain our valued coastal lifestyle and economy:

- a Coastal recreational, social and economic activities have minimal impact on coastal values and natural processes.
- b Coastal access is provided through formal access points.
- c Coastal cultural heritage values are preserved and appreciated.
- d Coastal vegetation is not damaged or removed except where required for approved coastal dependent development and the construction and maintenance of community recreational and access infrastructure.

### 4.3 Coastal hazard risks are known and avoided or otherwise adequately addressed, forming part of long-term adaptation planning:

- a New permanent development is located outside of the Coastal Erosion Prone Area unless it is deemed coastal dependent development / community infrastructure.
- b Coastal dependent development / community infrastructure is resilient to coastal hazards.
- c Impacts on coastal values and processes from coastal dependent development / community infrastructure are avoided or minimised and mitigated.
- d Coastal protection works are designed, managed and renewed to be fit for purpose and minimise risk for full asset life cycle.
- e Planning and development in the Coastal Hazard Area provide for resilient communities and infrastructure.
- f Disaster management planning for emerging and existing communities incorporates coastal hazard considerations.
- g Coastal hazards information is made available in a form that is easily understood.
- h Protection or management of private coastal assets is not the responsibility of council.

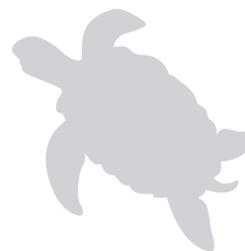
Refer to Part C for technical detail and planning directions specific to the Coastal theme.



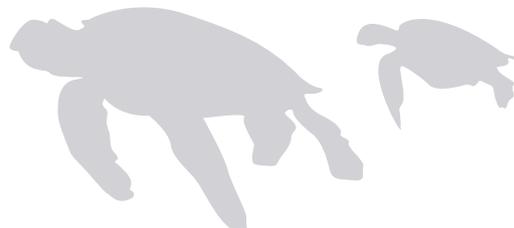
**4** coastal lagoons

**63%** of the coast is natural or near-natural

**70km** of lower estuary foreshores



**Iconic species:**  
marine turtles, dugong,  
migratory birds, whales





## The Environment We Create

Framed within the region's unique natural environment are the places, parks, structures and distinct urban landscapes – the built environment. The environment we create allows us to move around, live in healthy and comfortable homes and neighbourhoods, travel to work and play in interesting and diverse places.

The quality, design and landscape of our neighbourhoods, towns and centres has a significant impact on our daily lives. Sustainable and good urban design makes a valuable contribution to our economy, our natural and built environment and the liveability of our communities.

While the abundant natural environment provides the backdrop to our identity, it is the built environment, along with stories of our past and present, the people that live here and our ability to respond to change, that creates the character and strong sense of place and liveability on the Sunshine Coast.

Integration of the built environment with the natural environment is a distinguishing characteristic of the region, emphasising our natural advantage and green credentials. It is the built form that we can shape and transform to ensure the region retains its distinctive characteristics and adapts and responds to change to create a more sustainable future.

Our region's built elements have a significant impact on the natural environment. Major transport corridors divide the Sunshine Coast from east to west. Buildings have redefined the coastline and neighbourhoods. Rural living has changed the landscape in which we live. The continual pressure of urban expansion to house an increasing population and visitors is one of the biggest

challenges for the ongoing protection of our natural environment both within and adjoining urban areas.

The built environment of the Sunshine Coast has been shaped by our history, with early colonisation based around the harvesting of natural assets, development of farmlands and major transport routes.

These early settlement patterns have been built upon strengthening the hinterland towns and villages and by the urbanisation of the coastal strip for lifestyle and tourism opportunities, creating the Sunshine Coast we know today – a community of communities.

Currently 70% of our residents live along the coastline putting significant pressure on the built and natural environment in this narrow strip and challenging our ability to maintain the relaxed lifestyle, protect assets from coastal hazards and retain the connection with the natural environment that is so highly valued.

It is anticipated that the future growth will predominately be located in the coastal area with an emphasis on infill development transitioning to a more consolidated urban form supported by appropriate infrastructure, such as a light rail system, facilities and services. Creating a new way of living and minimising impacts on our natural environment.

Future development will be modelled on the principles of self-containment and sustainability encouraging walking, cycling and access to employment, transport, open space and services.



With over 90,000 new dwellings to be delivered in the next 25 years, the shape and form of housing and the supporting infrastructure (transport, utilities, waste, employment nodes, open space, and social infrastructure) are major challenges and opportunities for this region.

The Sunshine Coast continues to be challenged by the growing popularity of the region, the changing economic drivers and uncertain and changing climatic events. Understanding how the built environment should respond and adapt to these many pressures is critical to our future.

Council's strategic directions are to ensure that the region's built environment and landscape, in conjunction with its natural environment, delivers residents and visitors a healthy and liveable environment, now and into the future.

These strategic directions are progressed under five themes:

- **Open Space** – creating a diverse network of reserves, parks, sports grounds and trails that provide green spaces to conserve, recreate and reflect, contributing to landscape and character and our healthy lifestyle.
- **Flooding and Stormwater** – managing flood risk and protecting people and the natural and built environments through proactive planning and a quality urban stormwater network.
- **Neighbourhoods and Housing** – developing neighbourhoods and housing that promote and provide a diversity of affordable and sustainable living options for all our community supported by appropriate infrastructure and services.
- **Social Infrastructure** – creating a network of facilities and services that encourage community participation, nurture physical and mental health, and build community resilience.
- **Sustainable Design** – facilitating urban and architectural design that is responsive to the changing environment and minimises the impacts of our living footprint.

Each theme is further explained in this section.



# Open Space

## Outcome 2041:

A diverse and green network of open space contributes to our healthy lifestyle.

---

## Target:

Maintain the rate of 5ha per 1,000 residents and ensure an equitable distribution of publicly accessible open space by 2041.





Open space is the network of land and water that supports recreation and sport, trails and paths, nature conservation and visual relief from the urban environment. These open spaces complement and contrast with the built environment.

Our open space network is highly valued by the community and contributes to the Sunshine Coast's unique character, relaxed and healthy lifestyle and rich biodiversity. It gives a sense of ownership and belonging to local communities and neighbourhoods, making them desirable places to live. It provides spaces for enhancing landscape and character values, supporting biodiversity and ecological services, and active and passive sport, recreation and cultural activities. It provides the 'green frame' of our urban areas, edging our rivers, beaches and foreshores lining our streets and identifying our communities. It also makes the Sunshine Coast an attractive place to visit and supports tourism, events and economic growth.

Open space is owned and managed by council, the state government and numerous other public and private land managers. It is the council owned and managed open spaces that are the focus of this strategy. Open spaces managed by other landowners (eg national parks and forestry reserves) significantly contribute to the Sunshine Coast open space network. Policies within this strategy can be used to guide partnerships and collaborative management efforts with other open space providers.

Securing and developing open space is a high priority of council. A range of mechanisms are utilised to ensure appropriate and functional open space is publicly accessible.

The Sunshine Coast's open space areas have been grouped into categories based on their primary use, to assist with their planning, development and management. Most have multiple uses and contribute to other categories in a secondary role.

- **Recreation**  
recreation parks, amenity reserves, linear parks, and trails. Spaces used for informal social, recreational and cultural activities which connect people and provide visual relief from the built form.
- **Landscape**  
landscape corridors and streetscapes. Vegetated areas / living infrastructure build on the natural character and amenity of neighbourhoods which provide key linkages.
- **Sport**  
facilities for playing formal sports, including fields, courts and supporting infrastructure. This use includes specific purpose sports that have limited multi-use due to the nature of the sport.
- **Environmental and coastal**  
these areas support the preservation and enhancement of biodiversity and coastal protection. They can provide opportunities for people to interact with the natural environment where appropriate.
- **Other**  
areas that contribute to open space functions, eg education facilities, caravan parks, waterways, riparian corridors, and drainage reserves. This category also includes open space not controlled by council eg national parks, state forests, state managed sports and recreation facilities, SEQ Water areas and lands managed by Unitywater.



**8,800ha**  
of open space  
managed by council



**1,000ha**  
for recreation use

**334**  
playgrounds

## Planning for change

The drivers of change will have varying levels of impacts on open space and will continue to present challenges for the future.

Key impacts may include:

- increased pressure on natural and developed open spaces in and around urban areas
- impacts on high use open spaces along the coast and adjacent to waterways as a result of sea level rise and flooding events
- loss of or damage to culturally significant landmarks, vegetation and grass surfaces as more severe weather events occur
- increasing need to provide cooler, vegetated areas to balance increasing temperatures
- increasing demand to support emerging tourism and sporting event sectors
- reduced physical activity resulting in an increase of chronic diseases.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

Council has a key role in the planning, land management and infrastructure delivery of a publicly accessible open space network for recreation, sport, amenity and conservation purposes. Council is responsible for the setting of strategic directions, developing policy, implementing planning and regulatory powers to expand and maintain a quality network.

Council plays a role in supporting community, volunteer and sporting / organisations involvement in the valuable management of the open space network.

Council also works collaboratively with other open space land managers developing strong partnerships to gain public access to open spaces which further contribute to the diversity of a regional network.

**6,000ha**  
for environmental  
and coastal purposes

**40%** of visitors  
use parks frequently



## Open Space policy positions

### 5.1 An integrated and connected open space network is provided that is responsive to a changing environment and respects community needs:

- a Future generations experience similar or improved provision and standards.
- b Open space is protected for its appropriate function including openness.
- c Open space is flexible and adaptable to allow for diverse recreational, sporting and cultural experiences.
- d The network reflects and enhances the local landscape and character.
- e The network plays a role in mitigating the impacts of climate change.
- f The community's recreation use and commercial activities are complementary and integrated.
- g Effective and efficient design and location ensures an affordable, resilient and high quality open space network.

### 5.2 The open space network ensures equitable access to a range of experiences to encourage active and healthy lifestyles and supports community wellbeing:

- a Functional, safe and well-connected spaces and places are provided.
- b Innovation, sustainability, activation and creativity are driving factors.
- c Access to recreation parks in urban areas supports self-contained and active communities and encourages social inclusion.
- d People are connected to nature and outdoor experiences.
- e Sport and active recreation spaces are provided to encourage participation and involvement.

### 5.3 Open space provides the green frame around and within our built form to connect us to the environment and create a strong sense of identity within a community of communities:

- a Open spaces are protected from urban expansion, over embellishment and utility encroachment.
- b Open space connects and frames urban and rural communities, strengthening character and identity.
- c Urban forests and gardens in our parks and streets support and enhance social, economic and environmental values.
- d Ecological and open space values continue to build upon our natural advantage.
- e Environmental values are balanced with recreation opportunities in keeping with the natural setting.
- f Cultural, heritage and historical values within our public open spaces are enhanced and preserved.

Refer to Part C for technical detail and planning directions specific to the Open Space theme.



**1,200ha**  
for specific  
purpose sports

**1,800ha**  
of sports grounds

**81,900ha**  
of open space

Over **460**  
recreation parks





# Flooding and Stormwater

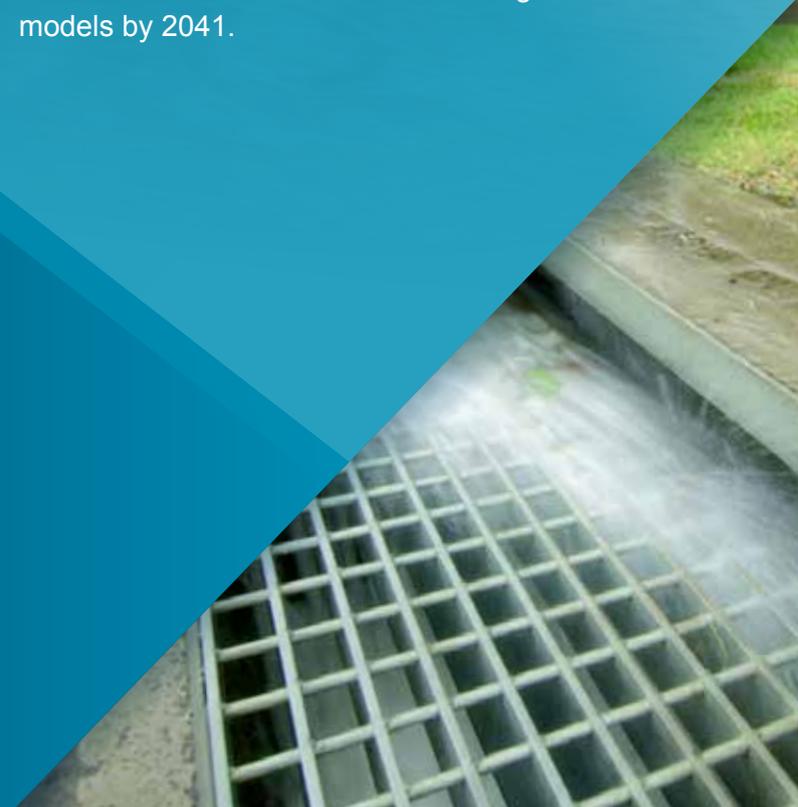
## Outcome 2041:

Flood risk is managed for community wellbeing, facilitated by an integrated stormwater network that contributes to waterway health.

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## Target:

All urban areas have local area drainage models by 2041.





## Flooding and stormwater management are issues at the interface of the natural and built environments.

Flooding results from intense or sustained rainfall, storm tides or a combination of both, temporarily inundating or flowing across land that is normally dry. This will be exacerbated by permanent sea level rise and increased rainfall intensity due to a changing climate.

Rainfall-based flood waters are typically fresh and laden with sediment and other pollutants. Storm tides result from a temporary increase in sea level and their floodwaters are mostly marine and salty. They are generally caused by severe coastal weather systems such as tropical cyclones or east coast lows.

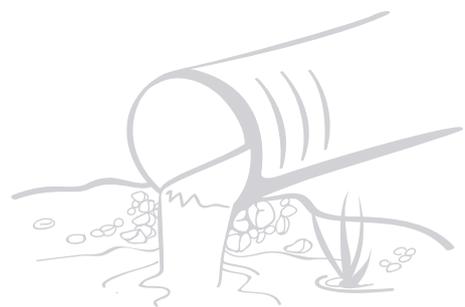
Flooding can be a risk to property and life. Its effects on the built environment and society range from nuisance to tragic and catastrophic. It is therefore critical that flood risk is managed and mitigated. Protecting flood storage, against the cumulative impacts of filling in the floodplain, and conveyance, to ensure the waterways flow effectively, is essential to the management of flood risk.

Stormwater is runoff from rainfall that flows overland and through an urban stormwater network. The urban stormwater network is critical for the movement of runoff through the built urban environment. Urban stormwater is commonly directed through underground pipes but can also travel as surface flows in open drains, culverts, roadways, natural channels and overland flow paths. It can be temporarily detained in storage structures such as dams or detention basins before being released to natural receiving waters.

During high rainfall events, runoff volumes can exceed the capacity of the underground pipe system. In these conditions, more stormwater is conveyed over the surface, which results in short-term flooding across roads and other surface flow paths, such as parks and sports grounds.

As stormwater runoff is conveyed through the urban environment it becomes polluted with litter, road and industrial sourced oils, chemicals and heavy metals, as well as sediment from areas of bare earth. Water quality usually gets worse when stormwater is stored, leading to low oxygen levels, algal blooms and other nuisance conditions. To protect the public and the environment, stormwater runoff needs to be intercepted and treated to remove pollutants, including litter, before being discharged or reused.

On the Sunshine Coast, stormwater is treated through a mix of engineered structures such as gross pollutant traps and more natural features such as wetlands and bio-retention basins. Stormwater treatment and flow-detention structures are commonly co-located with parks, sportsgrounds and other areas at the boundary between natural and built environments.



**47,376** stormwater pits

**1,122km**  
of stormwater pipes with  
diameter larger than 300mm

## Planning for change

The drivers of change will have varying levels of impacts on flooding and stormwater and will continue to present challenges for the future.

Key impacts may include:

- increases in the rainfall intensity of storms and the frequency of cyclones and permanent sea level rise will lead to increases in the magnitude, frequency and consequences of flooding
- increased impervious areas will lead to more stormwater runoff and pollutant loads, challenging the capacity of the existing network
- increasing demand for, and yield of, developable land increasing the pressures of locating stormwater infrastructure to avoid conflicts with other networks
- land identified for economic development will often be flood constrained.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

Council, in collaboration with the state government, manages flood risk through planning and development controls, disaster management activities, community education and advocating the need to be prepared for extreme weather events. Provision of local flood knowledge is a vital role of council in informing these activities.

In addition council has a key role as an infrastructure provider and custodian, planning, delivering and managing a stormwater network to manage the quantity and quality of stormwater runoff across the region.





# Flooding and Stormwater policy positions

## 6.1 Flood risk is managed for the wellbeing and resilience of our communities:

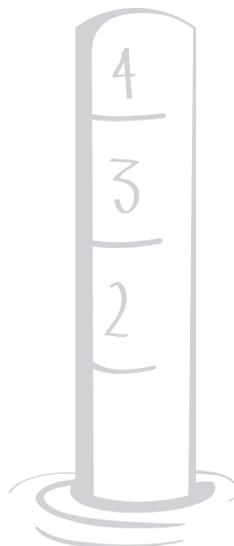
- a Development will be provided with acceptable flood risk and will not burden emergency services.
- b Flood immunity or resilience (from rainfall induced flooding) of existing communities is improved through the exploration of effective flood mitigation or resilience measures where practical.
- c Disaster management activities cater for our communities before, during and after events.
- d Flood risk information is made available in a form that is easily understood.
- e Insurance affordability is promoted through the provision of information to community and industry.

## 6.2 Flooding and stormwater assets are effective and responsive to a changing environment:

- a Infrastructure is designed to be effective until the end of its design life.
- b Infrastructure that is a burden or liability for council is avoided.
- c Accurate and current models, mapping and other corporate datasets inform the understanding of flood risk and stormwater network effectiveness.
- d Performance and condition of assets is monitored to ensure effectiveness.
- e Land for stormwater management is appropriately allocated located and designated for its purpose.

## 6.3 Flooding and stormwater management protects the natural and built environment:

- a Flood plains are protected for their intrinsic environmental, social and economic values.
- b Development in the flood storage preservation area is avoided unless an overriding need in the public interest is demonstrated with acceptable associated impacts and minimal alteration to the floodplain.
- c Development ensures that areas of community isolation are not created.
- d Stormwater quality treatment is provided to protect receiving waters and the health of our community.
- e Stormwater treatment is complementary and integrated within the public realm, using natural processes to the greatest extent possible.
- f Flood conveyance pathways are protected or enhanced.
- g Natural waterways are not diverted.



**5** regional catchments with current flood mapping

**56** rainfall flood warning gauges

**73km** of box culverts

**148km** of open drains

**1,269** water quality treatment devices



# Neighbourhoods and Housing

## **Outcome 2041:**

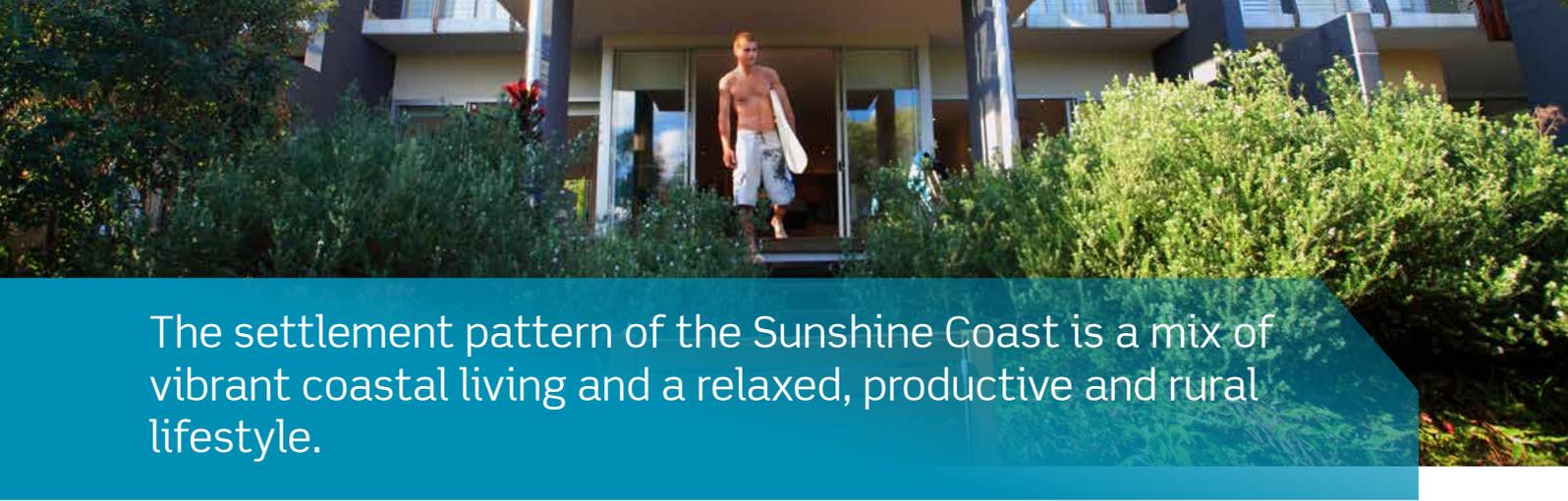
A diversity of neighbourhoods and housing provides sustainable and affordable living options for everyone.

---

## **Target:**

Increase the diversity of affordable living options by 2041.





## The settlement pattern of the Sunshine Coast is a mix of vibrant coastal living and a relaxed, productive and rural lifestyle.

This mix reflects well-defined urban areas, distinctive townships, rural-residential, farming areas and tourist accommodation. These settlement areas contain the neighbourhoods and housing where we live, spend our leisure time, and ideally, where we work.

The built form of our urban and rural housing is an important part of who we are, the lifestyle we lead, how we live in the neighbourhood and our wellbeing. The Sunshine Coast typically consists of low-density neighbourhoods where access to services and employment requires a high reliance on private vehicle usage, including access to the public transport network. The majority of our population resides along the coastal strip with key employment nodes in centres, industrial estates and employment hubs such as hospitals, centres and the university.

The hinterland towns and surrounding areas provide a more rural lifestyle with the larger service towns of Nambour and Beerwah supporting a network of towns and villages such as Yandina, Eumundi, Maleny, Kenilworth and Beerburrum. These towns and villages support a thriving rural community and play a key role in defining the built character of the Sunshine Coast.

New communities are developing in coastal areas such as Pelican Waters, Caloundra South, Sippy Downs, Palmview, Mountain Creek, Little Mountain and Peregrin Springs. These neighbourhoods are generally of a more compact urban form featuring primarily separate dwellings on smaller sized lots.

There is a significant shortfall in housing diversity on the Sunshine Coast. Importantly, the mix of housing is not matching the household types seeking accommodation nor our needs as the population ages.

Major challenges for the Sunshine Coast are the need to provide around 90,000 new dwellings and supporting infrastructure, and the need for greater diversity of housing choice in terms of size, style and tenure.

In addition to the lack of diversity, housing stress and affordability also continues to be a challenge. The housing stress is felt mostly by low to moderate earners (25%) with higher than the state average median house price and lower than state average incomes. This stress is compounded with increasing household running costs, including cost of travel to access employment and services. With low levels of social housing, limited rental availability and competing demands for tourist accommodation, housing affordability is a critical issue for the Sunshine Coast.

For our future health, resilience and economy, an availability of sustainable and affordable living options supported by timely infrastructure to meet the diverse needs of all the community, are essential. Where we locate and how we accommodate future generations enabling a diversity of housing including options for ageing in place, is fundamental to the region's liveability.



**127,000** dwellings

Housing stress affects

**1** in **3** households

Over **8 million** visitor nights per year

**73%** of dwellings are separate houses

**2.3%** of dwellings are for social housing

**3** out of **5** households contain only 1 or 2 people

## Planning for change

The drivers of change will have varying levels of impacts on neighbourhoods and housing and will continue to present challenges for the future.

Key impacts may include:

- reduced access to backyards and private green space
- increased pressure on maintaining the urban footprint
- increasing cost of housing (both purchase and rental) in comparison to income levels
- more frequent risk of isolation and reduced access to services
- concentration of population along the more vulnerable floodplains and coastal areas
- increased demand for high levels of safety and security, and access to 24/7 services.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.



The urban footprint constitutes **17.7%** of the Sunshine Coast area

## Council's role

Council has the ability to influence settlement patterns, neighbourhood layouts, housing form and major infrastructure delivery including transportation networks, through advocacy and collaboration with federal and state governments and the private sector. At a local level setting policy direction, strategic planning and utilising our legislative planning role through the planning scheme are critical roles council plays in this theme.

The private sector is a major contributor to the delivery of neighbourhoods and housing and associated infrastructure and it is also important that council works in a strong advocacy and facilitation role with the private sector to achieve desired outcomes. The delivery of adequate community and social housing is the role of state and federal governments.



Median house price of **\$510,000** is higher than State median of **\$475,000**

**1** principal and **6** major activity centres service the Sunshine Coast



# Neighbourhoods and Housing policy positions

## 7.1 Good design and urban form supports compact and self-contained neighbourhoods to improve the use of existing infrastructure and minimise the use of resources:

- a Urban growth is consolidated around activity and employment centres and along major transport corridor nodes and is supported by timely and effective transport and infrastructure services.
- b Neighbourhoods and centres are designed and built at human scale and support community safety and resilience.
- c Vibrant spaces, places and streets support living in compact and inclusive neighbourhoods.
- d An integrated and safe network of pedestrian, cycle and public transport networks supports self-contained neighbourhoods.
- e Sustainable design is a fundamental element to neighbourhoods, housing and supporting infrastructure.

## 7.2 Choice within a variety of neighbourhoods provides opportunity to meet the changing needs of the community:

- a Neighbourhoods contain a mix of dwelling size, scale and types to suit a range of household types, sizes, ages and lifestyles, including tourism needs.
- b An increased supply of appropriate dwellings is encouraged to meet the needs of smaller households.
- c Flexible, innovative and contemporary housing options and designs are embraced to meet changing needs.
- d Adaptable and universal housing with access to community spaces and services facilitate inclusive communities.
- e Neighbourhoods provide opportunities for social, cultural and economic participation.
- f Neighbourhoods reflect the local character and identity.

## 7.3 Access to affordable living options for all household types and income levels contribute to our liveability:

- a Neighbourhoods are well-designed to be sustainable and safe, encouraging walkability and social interaction.
- b Housing meets the needs of low and moderate income households in terms of design, ongoing costs and access to services.
- c An adequate supply of social and community housing is maintained and expanded to meet needs.
- d Affordable housing in close proximity to services and facilities is protected and enhanced.
- e Innovative housing options are supported to deliver affordable and sustainable living.

Figure 8: Concept self-contained neighbourhood

An urban residential area with a compact and diverse urban form that facilitates walk and cycle access to local services and facilities including integrated public transport options based on a hierarchy of activity centres.



- Mixed use activity centre
- Medium rise apartments
- Low rise apartments
- Dwelling houses and small lots
- Community purpose
- Open spaces
- Environment reserve
- Public transport route
- Walkable and active transport links
- Walkable catchment

**Hierarchy of walkable catchments**  
 Principal Activity Centres 1000m  
 Major Regional Activity Centres 800m  
 District Activity Centres 600m  
 Local Centres 500m.

Source: Modified from Next Generation Planning, p81.



# Social Infrastructure

## Outcome 2041:

A network of social infrastructure encourages community participation and underpins liveability.

---

## Target:

The principal and each major activity centre host a suite of social infrastructure including a community venue, library, aquatic centre and indoor sport and recreation facility to meet community need by 2041.





Social infrastructure refers to a range of facilities delivered and operated to support the community. It includes significant infrastructure such as schools, universities, hospitals and emergency service facilities.

Social infrastructure refers to a range of facilities delivered and operated to support the community. It includes significant infrastructure such as schools, universities, hospitals and emergency service facilities. It includes health and safety facilities such as cemeteries, public amenities and lifeguard services. It also includes places where the community can meet, enjoy indoor sport and recreational activities, engage in creativity and the arts and develop and access information, services and programs.

Social infrastructure is essential for creating communities that are connected, empowered and able to adapt and respond to change. It brings people together creating a sense of place and supports individuals, families and communities to grow and thrive. Investment in social infrastructure promotes and supports community and business interactions, tourism and major events. It is important for the wellbeing, sustainability and economic development of our communities.

The Sunshine Coast's diverse social infrastructure network is provided by all levels of government and community, as well as not-for-profit and private organisations. Within the overall network, council has key responsibilities for:

- **community use facilities**
  - spaces for people to meet, recreate and develop
  - including community venues, libraries and cultural facilities
- **sport and recreation facilities**
  - aquatic facilities, indoor sport and recreation facilities and showgrounds/major outdoor events spaces
- **facilities that support community health and safety**, including lifeguard facilities, cemeteries and public amenities.

Population growth and changing needs is increasing the pressure on existing facilities and creating a demand for new facilities in emerging communities. Careful planning is needed to balance investment between operational needs of the existing network and the needs of emerging communities.

Land available for new social infrastructure is limited and has to be used efficiently to cater for community needs. A forward looking approach, sustainable and climate responsive design, co-location, incorporation of smart technology and collaboration and partnerships will be essential to ensure an ongoing, high-performing social infrastructure network.

Over the next 25 years, key priorities for council are to secure appropriate land and to facilitate a sustainable and coordinated delivery of a diverse network with enhanced community access and involvement. In partnership with the community and not-for-profit organisations such as schools, council will advocate, facilitate and deliver a social infrastructure network that is responsive to changing demands.



**21** patrolled beaches

**21** cultural facilities

**2** showgrounds

## Planning for change

The drivers of change will have varying levels of impacts on social infrastructure and will continue to present challenges for the future.

Key impacts may include:

- greater expectations relating to the diversity, functions and quality of infrastructure and services
- higher construction standards and increasing operational costs
- need for more community emergency shelters located close to population centres
- increasing demand for high quality regional infrastructure to cater for events
- increasing demand and provision of smart technology to support community participation.

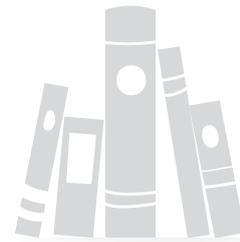
To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

Council plays a key role in setting strategic direction, developing and delivering infrastructure to enable access to social infrastructure for existing and future generations.

In addition council has a role to work with other providers actively seeking opportunities for partnerships and shared arrangements to develop and expand the diversity and quality of facilities available to the community. Council also supports community and volunteer organisations in the valuable management of the social infrastructure network.

Council has a responsibility with the state government to ensure an adequate and functional network of emergency evacuation centres and state emergency services.



**8** libraries with **1.5** million visitors per year

**41ha** of cemeteries





# Social Infrastructure policy positions

## 8.1 The social infrastructure network is equitable and accessible to meet the needs of existing and future communities:

- a Places and spaces cater for a wide and diverse range of activities to support community wellbeing.
- b Land and resources are used efficiently and balance the needs of existing and emerging communities.
- c Land to support the network is appropriately located and is retained for community purposes for future generations.
- d Social infrastructure is multipurpose, flexible and adaptable to changing needs.
- e The network is resilient, viable and utilises smart technology and principles of sustainable design.

## 8.2 Strong partnerships and collaboration deliver an integrated and complementary network:

- a Local history and cultural heritage values are conserved and enhanced.
- b Economic development and investment opportunities are leveraged to achieve viable community outcomes.
- c Co-location with compatible uses and the sharing of spaces and resources increases activity and reduces cost.
- d Access to a diverse range of facilities to meet community needs is complemented through partnerships.

## 8.3 Social infrastructure facilitates inclusive communities and strengthens cultural heritage, local character and identity:

- a Social infrastructure is inclusive, welcoming and affordable.
- b Infrastructure contributes to the health, safety and resilience of our communities.
- c Community spaces provide a focal point for community participation and activation, contributing to a sense of place and vibrancy.
- d Local history, character and identity is reflected and celebrated through the network.

Refer to Part C for technical detail and planning directions specific to the Social Infrastructure theme.

Over **100** community venues

Over **117ha** of social infrastructure land

**14** swimming pools with over 1 million visits per year

**2** indoor sport and recreation facilities





# Sustainable Design

## Outcome 2041:

A well-designed built environment that minimises environmental impacts, improves liveability and supports community resilience.

---

## Target:

Increase the number of developments which are verified as achieving a minimum Green Star Rating of 5 and/or NABERS rating of 5, or equivalent nationally recognised sustainability rating, by 2041.





## Sustainable design is a holistic approach that takes into consideration climatic, ecological, social and economic needs and is key to supporting healthy, affordable, and functional buildings and neighbourhoods while minimising impacts on the natural environment.

It maximises resource efficiency and increases resilience to a changing climate. In addition, sustainable design creates opportunities to create greater community connections, improve productivity, and health and wellbeing outcomes. Done well, it can also be an effective mechanism to enhance the natural environment by providing biodiversity outcomes and cooling refuges within an urban setting.

At the broader scale, sustainable design supports self-containment and reduced emissions by placing priority on walkability and safe pedestrian access and connecting to public transport options.

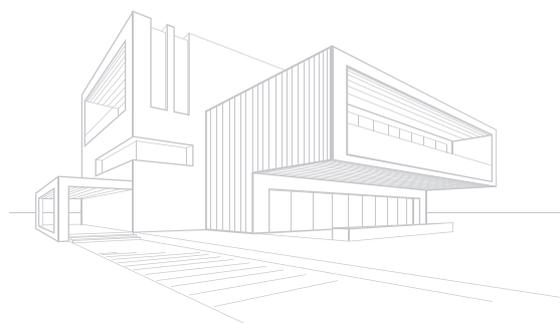
The Sunshine Coast's subtropical climate, characterised by stable year-round temperatures with warm, humid, and often wet summers and mild dry winters, provides an opportunity to achieve simple and cost effective sustainability outcomes. The key features of sustainable design include:

- passive and resilient design in keeping with climate and local character
- sustainable building materials
- renewable energy generation; energy and water efficiency
- indoor environmental quality – airflow, daylight, views
- waste management – avoiding, reusing and recycling during construction, operation and disposal
- designing for need, form, function and adaptive reuse
- multifunctional living infrastructure, eg green walls, that create connections to nature
- integrated and connected infrastructure systems eg transport, streets and spaces.

Sustainable design features are encouraged at all scales and applies to residential, commercial, social infrastructure, sport and recreation facilities, and transport and service infrastructure. Sustainable design applies to new construction and is encouraged in the retrofitting of existing buildings.

As innovation in design, building materials, construction methods and smart technologies improve, it is anticipated that the benefits of sustainable design will increase and the cost of design measures will decrease. Benefits to our environment, economy and community include:

- a new generation of buildings with greater levels of self-sufficiency
- a practical and cost-effective way to reduce energy and resource usage, reduce greenhouse gas emissions and potentially reduce future climate risks
- lower operating costs for homes, commercial buildings and precincts
- opportunity for adapting buildings and infrastructure so they can be reused for other purposes
- improved productivity and wellbeing of occupants
- positive interactions between human activities and the natural environment.



**10** Sunshine Coast developments have Green Star accreditation of four stars or better

## Planning for change

The drivers of change will have varying levels of impacts on sustainable design and will continue to present challenges for the future.

Key impacts may include:

- a rapid increase in demand for residential and commercial buildings could reduce the uptake of sustainable design elements
- potential reduction in building values and an increase in repair and insurance costs for buildings, particularly those in coastal hazard zones and bushfire and flood prone areas
- potential increase in operational and living costs due to buildings that do not have sustainable design features incorporated
- reduced thermal comfort in buildings due to more frequent and prolonged heat waves.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

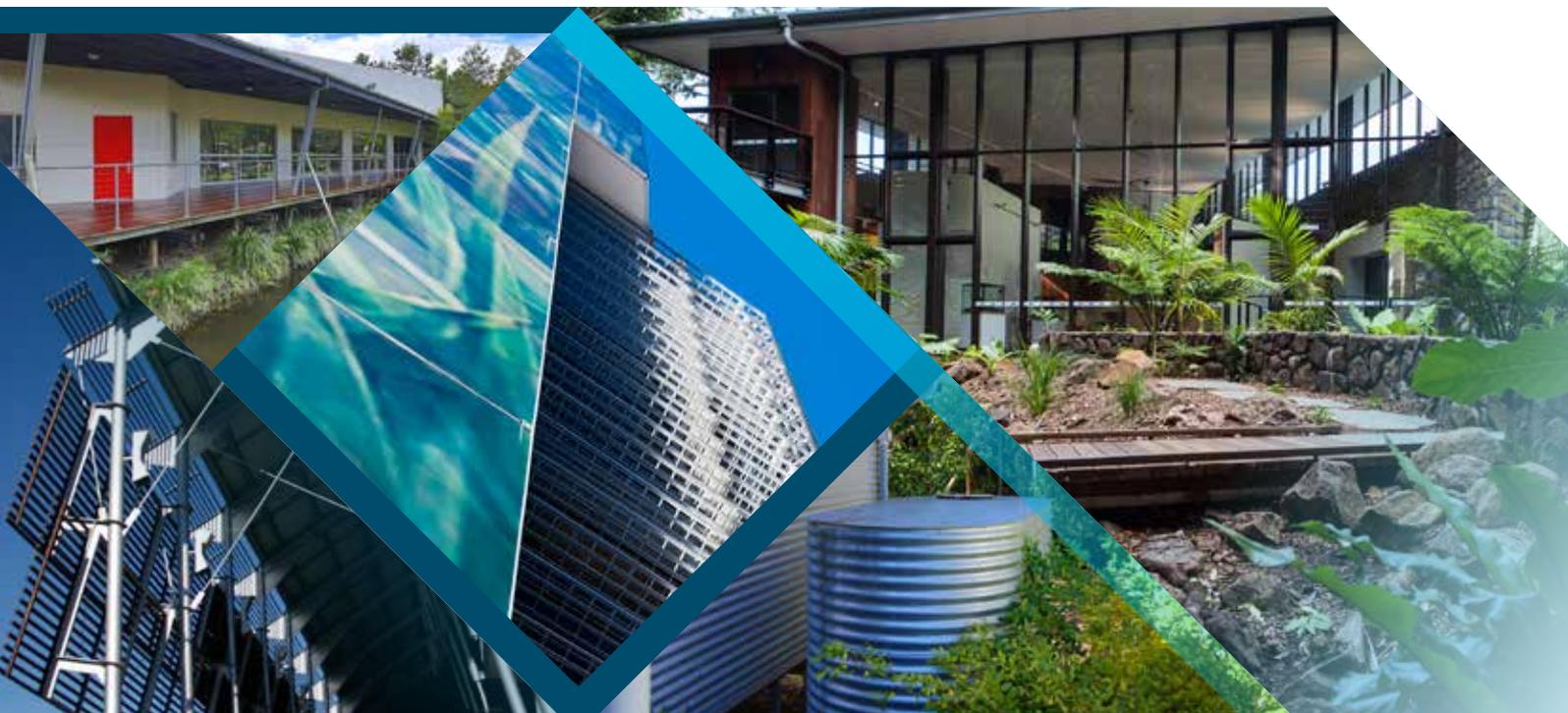
Council has a key role through advocacy, planning, collaboration and education with government, industry and community to influence and promote innovation in sustainable design outcomes within the built environment of the region.

As a key provider of civic, administrative, public realm and social infrastructure, council has an opportunity to lead by example in designing a sustainable built form, and demonstrating the benefits and opportunities of designing for a sustainable future.



**66%** of urban Local Planning Areas covered by vegetation or shade

**70%** of people live within the coastal strip



## Sustainable Design policy positions

### 9.1 The built environment is designed to be low carbon, resilient, well connected, have minimal environmental impact and enhance liveability and local character:

- a Buildings, structures and landscapes are responsive to subtropical climate and local character.
- b Design, construction and management are resource and cost effective, site responsive and maximise self-sufficiency.
- c Carbon emissions are reduced through design, construction and operation.
- d Innovative design, technology and alternative materials are incorporated to improve the built environment.
- e Designs are adaptive and responsive to changing lifestyles and community needs, natural hazards and climate change.
- f Design contributes to the health and wellbeing of individuals, households and communities.
- g A sustainable built environment is delivered through partnerships and collaboration with community and industry.

### 9.2 Living infrastructure is integrated with the built form to create liveable neighbourhoods, support urban biodiversity and create great urban places:

- a Connectivity and functionality of the natural and built environments is enhanced through living infrastructure and green corridors.
- b Buildings and houses are designed to relate and interact with streets to create attractive places that encourage social interaction and pedestrian use.
- c Street corridors are adequate in width and designed to host pathways, infrastructure and shady trees which create safe walkable streets.
- d Public and private open space and living infrastructure contributes to the character and amenity of neighbourhoods and community wellbeing.



**137,000**  
buildings on the Sunshine Coast

**Urban Design  
Advisory Panel**  
established in 2009

Most buildings are not designed  
for **subtropical living**  
or a changing climate



## Living in the Environment

As outlined in previous sections of this strategy, the region's desirable lifestyle and distinctive natural environment will continue to attract more residents and visitors over the next 25 years.

With an estimated resident population of 500,000 by 2041 requiring over 90,000 new dwellings and infrastructure, increasing tourist numbers and a changing economic base, our natural environment will be under significant pressure to continue to provide essential ecosystem services to support the lifestyle and livelihoods of our community.

The way we live in the environment may need to change as we transition to a more sustainable way of life. How we anticipate, respond and adapt to these significant changes will determine our success as a resilient region.

Like the rest of the globe, the Sunshine Coast is in an unprecedented time of rapid change. The way we interact and live in the world is fundamentally changing, influenced by a number of big-picture forces such as climate change, global connections, demographic change, housing affordability and the explosion of new technologies. In addition, better access to data and information, use of Smart City Technologies and the rise of the 'sharing economy' are challenging traditional models of business delivery, opening up new opportunities for direct public investment and benefit, such as communal ownership in energy generation and distribution.

We are also at a critical time in our response to climate change. Like any complex issue, climate change is multi-faceted and interconnected occurring across a range of systems (eg ecological, economic and social). Impacts already being experienced will be magnified by the increase in population and economic growth, which in turn will drive an upsurge in greenhouse gas emissions, largely as a result of increased resource consumption

Our ability to effectively respond to, and reduce the impacts of climate change will be hampered if we continue with business as usual approaches to the way we live. How we develop and locate our neighbourhoods, businesses and infrastructure, design our buildings, transport ourselves, generate and access energy, dispose of waste and consume resources will all need to adapt if we are to maintain a sustainable future.

Successfully negotiating these challenges will require innovative thinking and collaborative actions to effectively manage the growth anticipated, modification of our behaviours and the decisions we make as individuals, and as a community, to anticipate and adapt to what is coming our way. It is about understanding the potential effects of these changes while having the courage to embrace the opportunities that will present to improve our environment, social and economic health and wellbeing.



The Sunshine Coast is already on the journey to transition to live more sustainably and it is now a reality that energy derived from renewable sources can drive economic growth. This is set to rapidly increase as new innovations and technologies are deployed, making renewable energy more reliable and affordable.

To fully realise this transformation, council's strategic directions for how we live in the environment include assisting the community to understand and be empowered to live sustainably, adapt and reduce exposure to climate risks, maximise resource efficiency while supporting a transition to a clean energy and minimal emissions future.

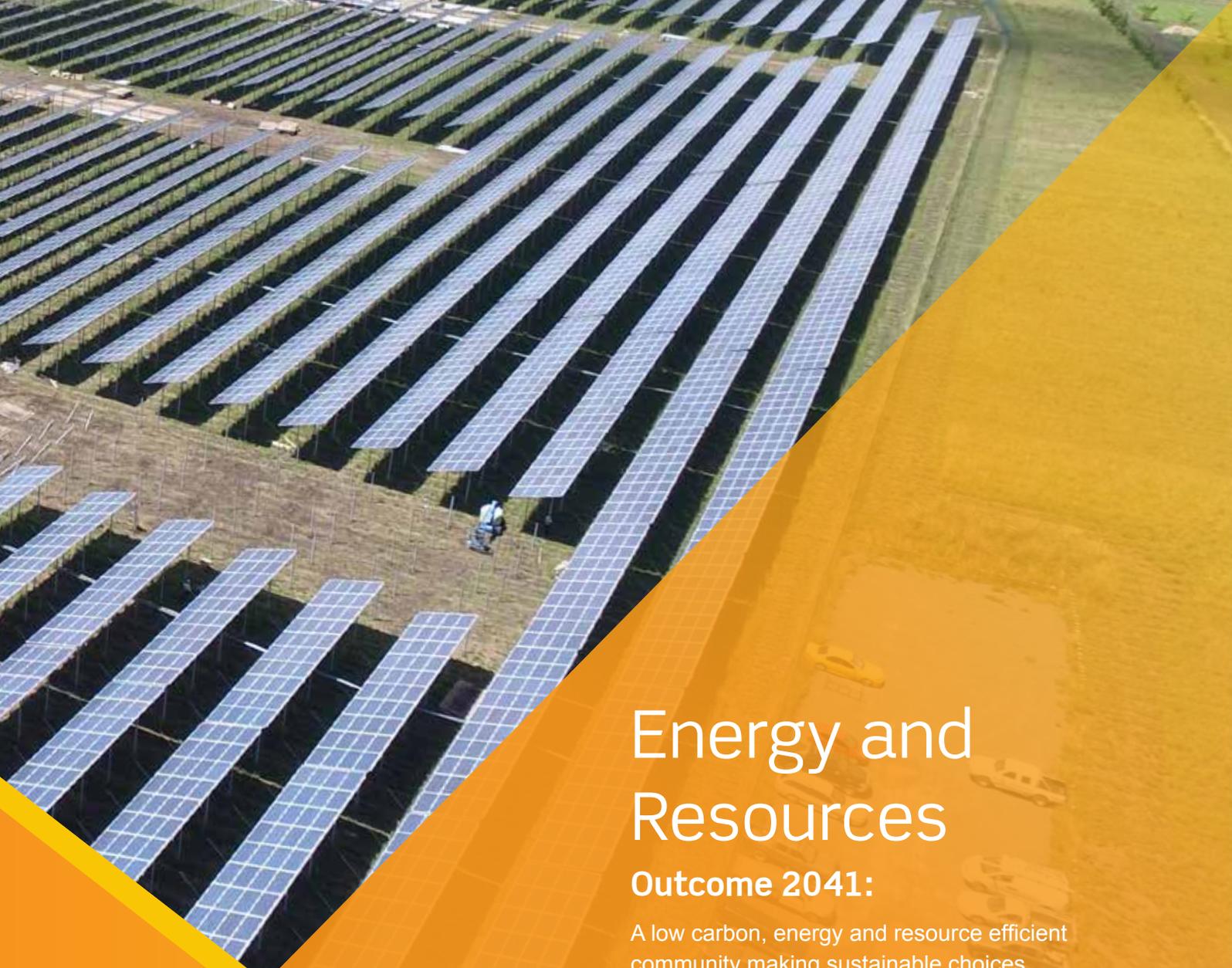
These strategic directions are progressed under three themes:

**Energy and Resources** – transitioning to a low carbon community through clean and secure energy sources, effective and efficient use of resources (including waste) and emerging technologies.

**Sustainable Living** – changing our behaviour to increase sustainable living practices and improve the way we live.

**Adaptation and Resilience** – anticipating and proactively responding to changing climate and natural hazards to build community resilience.

Each theme is further explained in this section.



# Energy and Resources

## Outcome 2041:

A low carbon, energy and resource efficient community making sustainable choices.

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## Target:

Sunshine Coast Council is a zero-net emissions organisation and the community is low carbon by 2041.





The Sunshine Coast's community and visitors consume energy in the form of electricity and fuels for lighting and heating or cooling and to power vehicles and business. We also use natural resources such as water and agricultural lands for food production.

Energy, food, air and water are essential to our individual lives, society and economy. None of us can live or function without them. In addition to our use of resources, we produce significant volumes of green, organic, plastic, and construction and demolition waste. The waste we generate can be reduced and recovered to become a usable resource while reducing greenhouse gas emissions.

To build capacity for low carbon, resource efficient and resilient communities will require a shift to lower emission transport options such as electric vehicles, driverless cars and increased use of pedestrian, cycle and public transport.

To support a thriving community now and in the future it is critical that we manage our energy and resources efficiently and sustainably. By doing so, households can achieve better energy performance and lower running costs and businesses can gain improved cash flows, greater productivity and higher profits. Energy and resource efficiency also reduces environmental impacts and greenhouse gas emissions, supporting a healthier planet.

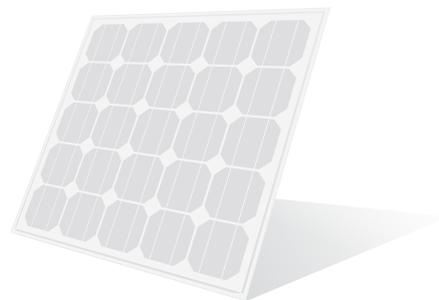
Together, council, the community, businesses and other stakeholders need to act to ensure a sustainable Sunshine Coast community and minimise financial and environmental risks such as extreme climate events.

This requires a transition to using cost effective, low (or zero) carbon energy, renewable resources, and effective transport and waste management that is delivered through resilient assets and systems, to maintain business continuity and confidence.

The community will benefit from this transition through:

- cost savings from reduced energy and resource consumption
- reduced exposure to increasing energy costs
- reduced greenhouse gas emissions and environmental impacts
- access to energy and resource assets and distribution systems that are resilient to climate risks
- maintained and enhanced liveability and lifestyle
- innovative opportunities that emerge from the transition to a low-carbon and resource-efficient community.

This transition will also ensure that the Sunshine Coast contributes to achieving international, federal and state greenhouse gas reduction targets.



**1st**  
local government in Australia to  
build a utility scale solar farm

Council organisational  
greenhouse gas emissions:

- 77%** waste (council and community)
- 12%** electricity
- 7%** street lights
- 3%** fuel
- 1%** liquid petroleum gas

## Planning for change

The drivers of change will have varying levels of impacts on energy and resources and will continue to present challenges for the future.

Key impacts may include:

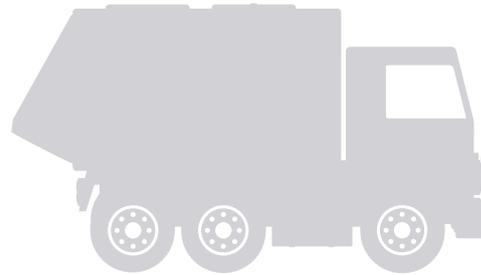
- the cost and availability of energy and resources
- increased demand for energy, resources, consumables and services
- an increase in waste generated and sent to landfill
- increased greenhouse gas emissions
- increased risk to energy security and resource infrastructure, especially energy, water, transport of essential goods and waste disposal facilities, due to extreme weather events.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

Council's key role is to provide strong leadership and strategic direction for the use of innovative technology and techniques, transitioning to a new approach of energy and resources use on the Sunshine Coast. Council role is to lead by example, trialling new technology and sharing learnings, knowledge and collaborating with industry and the community to effect change.

Regulation of energy markets and setting national energy renewable targets is the responsibility of federal and state governments.



Community generates **24,700** garbage trucks of waste per year

**38%** of dwellings have solar power compared to 20% average across Australia



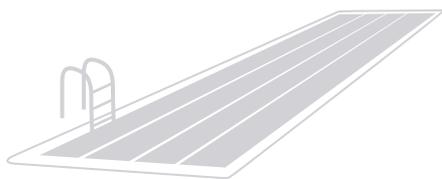
## Energy and Resources policy positions

### 10.1 Energy and resource usage, and waste management are transformed to minimise emissions and maximise environmental, social and financial benefits:

- a Emissions and air pollutants are minimised and residual greenhouse gas emissions managed to mitigate climate risk.
- b Renewable energy usage is maximised and underpins a transition to a clean energy future.
- c Consumption of energy and resources is minimised and managed to reduce costs, waste generation and environmental impacts.
- d New models and partnerships in waste management maximise resource recovery.
- e Innovative solutions and technologies are tested and adopted to achieve energy, waste and resource efficiencies and grow the economy.

### 10.2 Essential resources and systems are secure and resilient to change:

- a Agricultural and food production areas are protected and effectively managed, enabling an adaptive and flexible local food supply.
- b Resources and services are sustainably produced and sourced locally to support self-sufficiency and containment.
- c Disruptions to energy, water and waste assets from climate risks are minimised.
- d Energy and resource security, including business continuity is provided through a diversity of centralised and decentralised systems.



Community consumes **8,800** Olympic swimming pools of potable water per year

Community waste:

**37%** diverted from landfill

**63%** landfilled



**20%** of land is used for food production

Greenhouse gas from community waste and electricity is equivalent to emissions from

**294,880** cars per year

**1,480**

gigawatt hours of electricity used by the community per year



WATER  
E!

FREE CHILLED WATER  
REFILLS HERE!

# Sustainable Living

## Outcome 2041:

Sustainable living practices are embedded in our community culture.

---

## Target:

Increase community understanding and adoption of sustainable living practices by 2041.





Sustainable living focuses on the relationship between how people live in the natural and built environments. It is about responding to change and making sustainable choices and decisions that reduce the use of natural resources, improves wellbeing and builds resilience.

Sustainable living applies to communities, individuals, households, and to business and industry. It also applies to how council undertakes its own business and makes decisions.

Key areas of focus are choices and behaviour relating to:

- transportation and mobility
- energy consumption and renewable options, resource efficiency (including water and waste)
- food and other consumables
- connections to the natural environment
- sustainable and affordable living (capacity to live within our means)

As many communities strive to live more sustainably, the Sunshine Coast has struggled to reduce dwelling size with the average house on the Sunshine Coast increasing in size over the last 10 years. These larger homes are often being built on smaller lots changing the way our neighbourhoods function, placing greater pressure on public land for access to green space and outdoor activities.

With the majority of residents living in large detached low density housing with a reliance on private car travel and limited access to frequent public transport, we place significant pressure on our finite resources and existing infrastructure.

The benefits and outcomes of sustainable living can offer both long-term and short-term gains.

Benefits include:

- cost savings from reducing energy and resource consumption
- enhanced financial advantages and performance
- reduced greenhouse gas emissions
- improved community wellbeing, social cohesion and resilience
- mitigating human impact on the environment

The impacts of consumer choices and other behaviours vary, depending on the nature of the business and/or a person's location, habits, and personal preferences. To maintain and improve our enviable lifestyle and healthy environment it is essential to enable the community and businesses to strengthen their knowledge, skills and social connections to live sustainably.

Having a better understanding of how current living practices impact our natural environment and liveability will enable us to deliver more effective programs and information to enable a transition to a more sustainable lifestyle.

Enabling informed decisions, through innovative systems and processes that can demonstrate the benefits, will increase our capacity for taking collective action.



Council partners and supports  
community sustainability  
programs

## Planning for change

The drivers of change will have varying levels of impacts on sustainable living and will continue to present challenges for the future.

Key impacts may include:

- an increasing requirement for effective sustainability engagement and change management programs
- an increasing demand for services and infrastructure
- a decline in liveability and affordability driven by rapid population and economic growth
- disruptions to our way of life caused by more extreme weather events
- changes in climate that impact the health and wellbeing of communities, particularly vulnerable groups.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

Council's role is to support the community, industry and business to take a more sustainable approach to living on the Sunshine Coast, become more resilient to climate change through strong leadership, education, partnerships and ongoing advocacy.

Within its own business activities, council's role is to demonstrate leadership and embed sustainability and resilience into council systems and processes, delivery of infrastructure and facilities and service provision.



**10%** of residents participate in council-run sustainability programs

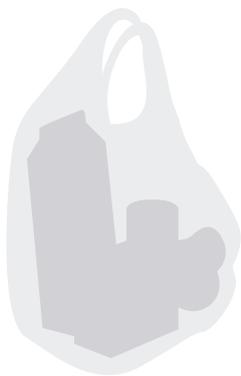
**52%** of households have 2 or more cars



## Sustainable Living policy positions

**11.1 Strong leadership and collaboration enables the community, industry and business to act and embrace sustainable behaviours to support health and wellbeing and economic outcomes:**

- a Community willingness to act is supported and community capacity enhanced.
- b Innovative technologies and concepts are trialled and knowledge shared to increase community awareness and uptake.
- c Strong and enduring partnerships are established and supported to improve resilience, embed sustainable living practices and grow business knowledge and opportunities.
- d Sustainability principles are embedded into systems and processes to inform and guide decision-making.



Household waste: **16%** of waste in general waste bins could be recycled

**1** in **5** bags of groceries is wasted

**8** sustainability programs provided for council staff

**58%** of council staff participate in sustainability programs

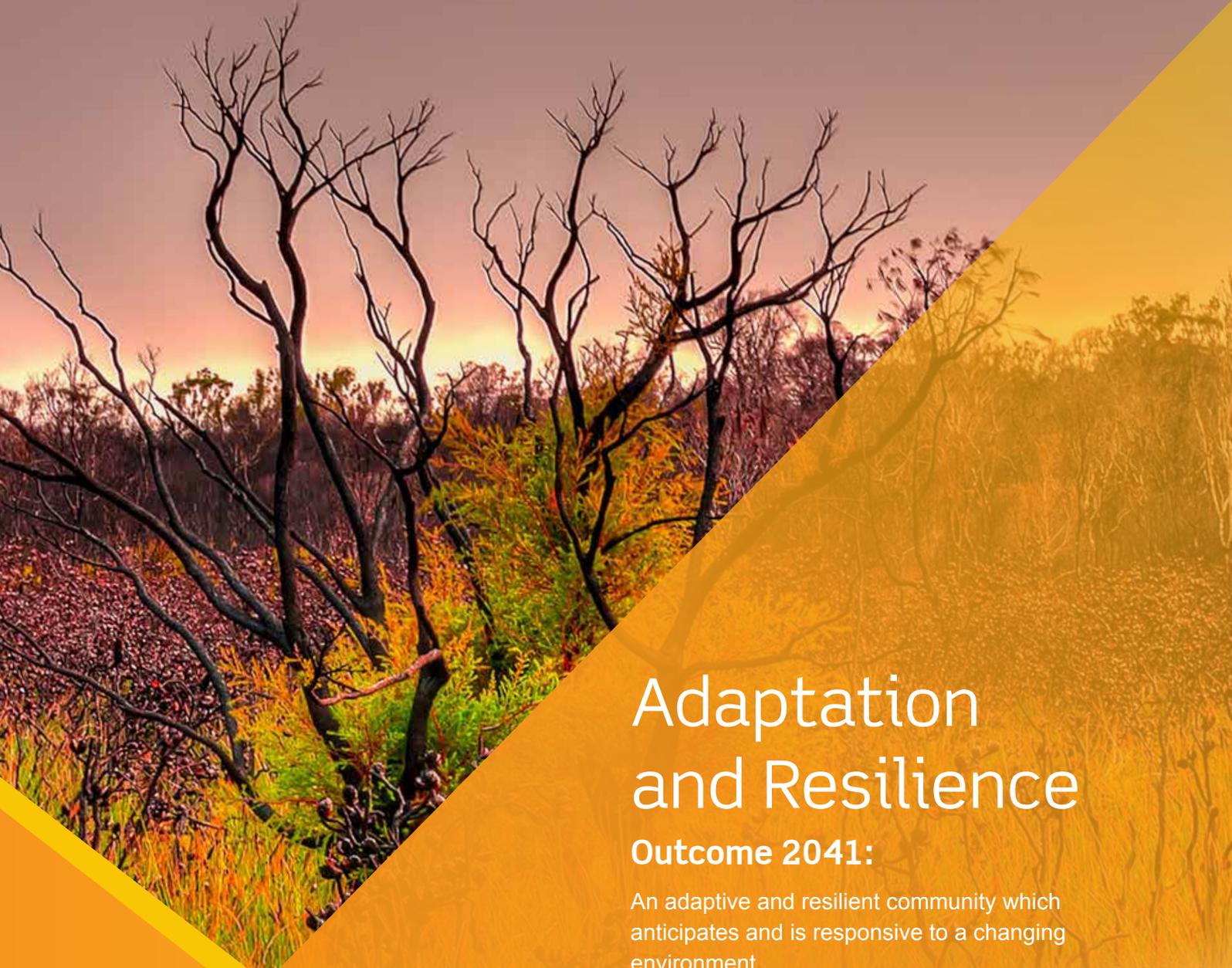


over **40** community gardens:  
**8** on council land

Average of **172L** of water consumed per person per day



House size has increased by **70%** over 25 years



# Adaptation and Resilience

## **Outcome 2041:**

An adaptive and resilient community which anticipates and is responsive to a changing environment.

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## **Target:**

Maintain or increase community resilience by 2041.





## We need to build our community’s ability to respond and adapt to changing climatic conditions.

Based on recent climate projections, we can expect our natural and built environments and communities to be exposed to a range of impacts such as more intense storms and flooding; increased damage to buildings and infrastructure; prolonged heat waves impacting public health and increased bush fire risk; as well as likely shifts in the diversity of our plants and animals as conditions change due to increased climate variability.

These impacts have the potential to affect the way in which we live, how we recreate and experience our natural environment and ultimately the liveability of our region. Adaptation and resilience focuses on minimising the impacts of climate change and natural disasters within the context of an increasing population and changing economy.

As a region we need to be proactive with managing future risks and to increase our capacity to recover quickly from disruptions as hazards become more severe. We also need to have the flexibility to adjust and reorganise our social, economic and environmental systems when and where required. Our approach to decision-making and adaptation planning also needs to be agile and responsive as new information and evidence of changing risks and vulnerability becomes available.

Taking a ‘No Regrets’ approach to adaptation decision-making enables this flexibility. ‘No Regrets’ approaches are based on taking action now without being certain about all dimensions of future climate change. In this context, measures are implemented in a precautionary sense with the aim of responding to likely impacts before the risks become too great, providing benefits for future generations, while also enhancing the living conditions of people in the present.

It is an approach designed to respond to different types of hazards while also delivering environmental, social and economic benefits. Underpinning this approach will be the application of innovative thinking to processes and systems as we seek to identify appropriate adaptation pathways and deliver successful adaptation outcomes.

Becoming a well-adapted and resilient community is a long-term strategy which requires shared responsibility with collective outcomes achieved through planning and the implementation of timely action by householders, asset owners, communities, businesses and government.

Successful adaptation can offer both long-term and short-term gains, including:

- increased social, economic and environmental resilience to the impacts of climate change across all sectors
- improved community safety and wellbeing (especially for vulnerable members of the community)
- ensuring the built environment is resilient to environmental change
- ensuring critical infrastructure is resilient to natural disasters and climate change influences
- enhanced financial advantages and performance
- ensuring a sustainable balance between human activity and the natural environment.



### Community access to resources and real-time information via the Online Disaster Hub

Annual Average of **6** Disaster Activations for Severe Weather and Flood Events.

## Planning for change

The drivers of change will have varying levels of impacts on our ability to adapt and respond to change and will continue to present challenges for the future.

Key impacts may include:

- potential degradation and loss of natural values and ecosystems
- increasing numbers of people and assets exposed to the consequences of natural hazards
- escalating operational, living and insurance costs for asset owners and operators
- increasing health impacts as temperatures and heat waves become more frequent and prolonged.

To proactively respond to these likely impacts and seek new opportunities, a strong set of policy positions has been prepared to achieve the desired outcome.

## Council's role

As an asset custodian and provider of public infrastructure council plays a key role by ensuring these assets are appropriately located, designed, constructed, managed and maintained to enable ongoing functionality and accessibility.

Council also provides strong leadership and strategic direction which supports the development of community capacity and communities that are resilient to natural disasters and climate change via its legislative roles in land use planning and disaster management.

In addition, council's role is to embed adaptation and resilience measures into systems and processes.



Projected sea level rise of **0.8m**  
included in the Planning Scheme





## Adaptation and Resilience policy positions

### 12.1 Adaptation enables the whole community to build climate and disaster resilience:

- a Risk assessment, risk reduction, adaptation, and disaster management are embedded into decision-making, systems and processes.
- b Resilience is enabled through cost effective investment in risk assessment, adaptation, disaster management and the utilisation of innovative technologies and concepts.
- c Accurate and current models, mapping and other corporate datasets inform the understanding of the risks associated with climate change.
- d Adaptation and disaster risk reduction planning minimises economic, social, environmental and infrastructure impacts.
- e Strong and enduring partnerships are established and supported to improve understanding and action on climate adaptation.
- f Collective action delivers a resilient Sunshine Coast.

Beach nourishment:  
placement of approximately  
**55,000m<sup>3</sup>** of sand  
across **4 locations**

Investment in resilience  
pre-planning can reduce  
disaster recovery costs  
by up to **10** times

Over **\$6.1 million**  
is allocated per annum on  
disaster response, recovery,  
planning and mitigation



**43** facilities can function as  
evacuation centres or places of  
shelter

Over **\$1.2 million** is  
allocated per annum on mosquito  
control / and vector-borne disease  
prevention





## Implementing the Strategy

A range of council services is central to the delivery of the strategy and is informed by these strategic directions. In addition to these services, a suite of Transformational Actions actively responds to the drivers of change.

### Transformational Actions and strategic pathways

To activate and implement the policy positions, 26 Transformational Actions deliver an integrated and targeted approach. Transformational Actions have been intentionally designed to contribute to multiple theme outcomes and do not align specifically with individual policy positions.

These Transformational Actions will be delivered through five strategic pathways that guide implementation and assist in achieving a healthy environment and a liveable Sunshine Coast:

- 1 A resilient region shaped by clever planning and good design.
- 2 Protection and enhancement of our natural assets and distinctive landscapes.
- 3 Responsive, accessible and well managed assets and infrastructure.
- 4 Transitioning to a sustainable and affordable way of living.
- 5 A reputation for innovation and sustainability.

*Table 1* summarises these Transformational Actions under the strategic pathways and demonstrates how each of the actions contributes to the integrated delivery of theme outcomes. Some of the actions and tasks are underway or in planning stages, while others will be considered over the term of the strategy.

These Transformational Actions form the basis of the Five-Year Implementation Plan outlined in further detail in Part B.

### Tracking progress

Monitoring and tracking our progress are critical to ensure the effectiveness of the final strategy. A number of targets and supporting indicators have been prepared to enable regular and meaningful reporting. This includes:

- Annual performance measures aligned to strategic pathways inform annual corporate reporting and the review of the rolling Five-Year Implementation Plan.
- Long-term theme based targets enable monitoring the progress of achieving the theme outcome and collectively the strategy's vision. Supported by a number of "indicators of change" for each theme, these targets are reported on a three to five-year basis which enables comprehensive data collection and assessment to be undertaken.

Table 1: summary of Transformational Actions

# ACTIONS

	Landscape and Character	Biodiversity	Waterways and Wetlands	Coastal	Open Space	Flooding and Stormwater	Neighbourhoods and Housing	Social Infrastructure	Sustainable Design	Energy and Resources	Sustainable Living	Adaptation and Resilience
<b>Strategic Pathway 1. A resilient region shaped by clever planning and good design</b>												
<p><b>1. Protecting the Regional Inter-urban Break</b></p> <p>Protecting the Regional Inter-urban Break in perpetuity to secure the environmental, production and recreation values.</p>	■	■	■		■	■	■					
<p><b>2. A better built environment through sustainable design</b></p> <p>Embedding sustainable, liveable and affordable design into our built environment that celebrates the subtropical lifestyle of the Sunshine Coast.</p>						■	■	■	■	■	■	■
<p><b>3. Housing for the future</b></p> <p>Demonstrating that we have the capacity in our urban footprint to accommodate a range of sustainable and affordable living options.</p>					■		■	■	■			
<p><b>4. Finding the happy medium</b></p> <p>Create a street-scale demonstration project to showcase sustainability, good urban design and the benefits of medium density living in partnership with government and industry.</p>					■	■	■		■	■	■	
<p><b>5. Being prepared</b></p> <p>Proactively planning for the potential impacts of climate change and natural hazards to build the resilience of the region.</p>		■	■	■		■	■	■			■	■
<b>Strategic Pathway 2. Protection and enhancement of our natural assets and distinctive landscapes</b>												
<p><b>6. Connecting nature and people</b></p> <p>Connecting our valued habitat areas to support our native flora and fauna and providing the community with opportunities to participate in conservation and to experience the natural environment.</p>	■	■	■	■	■			■			■	
<p><b>7. Protecting the green frame</b></p> <p>Securing and protecting the Regional Inter-urban Break and Sub-regional Inter-urban Breaks in perpetuity to frame our neighbourhoods and strengthen the identity of our community of communities.</p>	■	■	■	■	■		■					
<p><b>8. Maintaining the blue by protecting the green</b></p> <p>Delivering healthy waterways and beaches that continue to support our lifestyle and livelihoods through integrated catchment management.</p>		■	■	■		■					■	



## ACTIONS

	Landscapes and Character	Biodiversity	Waterways and Wetlands	Coastal	Open Space	Flooding and Stormwater	Neighbourhoods and Housing	Social Infrastructure	Sustainable Design	Energy and Resources	Sustainable Living	Adaptation and Resilience
<p><b>9. Stopping the brown from coming down</b></p> <p>Partnering with the rural, urban development and industries to reduce the impacts of sediment, nutrients and pollutants on waterway health.</p>			■			■	■					
<p><b>10. Celebrating our landscape and character</b></p> <p>Identifying and understanding the defining landscapes, character and history of the Sunshine Coast to enable growth and development to be respectful and complimentary for the future.</p>	■	■	■	■	■						■	
<p><b>11. A step ahead</b></p> <p>Providing for the reinstatement of vegetation and habitats that locally offset the unavoidable vegetation clearing required for our critical public infrastructure.</p>		■	■									
<b>Strategic Pathway 3. Responsive, accessible and well managed assets and infrastructure</b>												
<p><b>12. Growing the natural economy</b></p> <p>Strengthen the economic base around our natural assets and distinctive landscape features by enhancing a network of nature based recreation experiences supported by overnight accommodation and day visitor options.</p>	■	■	■	■	■			■	■	■		
<p><b>13. Healthy coast</b></p> <p>Providing a strategic and coordinated approach to the protection, sustainable use and enjoyment of our dunes, beaches, rocky shores and near-shore marine waters.</p>				■	■						■	■
<p><b>14. Expanding the green space</b></p> <p>Securing and activating space for future generations through an accelerated strategic land program to improve conservation, flood mitigation, sport and recreation opportunities.</p>		■	■		■	■					■	
<p><b>15. Great places and spaces</b></p> <p>In partnership with industry and community develop a network of contemporary places and spaces that provide and support opportunities for creative, community and active experiences.</p>								■	■	■	■	
<p><b>16. Managing our invasive plants and animals</b></p> <p>Providing a collaborative, effective and efficient response to the management of invasive plants and animals to reduce their social, economic and environmental impacts.</p>		■	■	■								

## ACTIONS

	Landscape and Character	Biodiversity	Waterways and Wetlands	Coastal	Open Space	Flooding and Stormwater	Neighbourhoods and Housing	Social Infrastructure	Sustainable Design	Energy and Resources	Sustainable Living	Adaptation and Resilience
<b>Strategic Pathway 4. Transitioning to a sustainable and affordable way of living</b>												
<b>17. Greening our neighbourhoods</b> Delivering cool and shady streets and places to connect and enhance our neighbourhoods and promote biodiversity, resilience and community wellbeing.		■			■		■		■	■	■	■
<b>18. An involved community</b> A major engagement and marketing program to inspire and empower the community to value the environment and play their part in a liveable, sustainable and resilient future.	■	■	■	■	■	■	■	■	■	■	■	■
<b>19. Changing our ways</b> Transitioning the Sunshine Coast to a more sustainable, resilient and low carbon way of living.							■	■	■	■	■	■
<b>20. Switch to a brighter future</b> Community organisations leading the way to a more sustainable Sunshine Coast through social infrastructure improvements.								■	■	■	■	
<b>21. How we live in the environment</b> Increasing our understanding how people interact with the natural environment.	■	■	■	■	■	■	■	■	■	■	■	■
<b>Strategic Pathway 5. A reputation for innovation and sustainability</b>												
<b>22. Zero emissions organisation</b> Delivering a zero-net emissions organisation and transitioning to a renewable energy future.								■	■	■	■	■
<b>23. Attracting sustainable industries/businesses</b> Strengthening our region's sustainability vision by attracting and nurturing research and sustainable industries and businesses.									■	■	■	
<b>24. Building our knowledge</b> Enabling evidence based decisions for a healthy environment and liveable Sunshine Coast.	■	■	■	■	■	■	■	■	■	■	■	■
<b>25. The living lab</b> Demonstrating design options and the way we live in self-contained neighbourhoods that deliver affordable and sustainable lifestyles.		■					■		■	■	■	
<b>26. Kicking goals with living infrastructure</b> Create a demonstration project to showcase the benefits and opportunities of the co-location of open space and water sensitive urban design.			■		■	■			■			■



## Glossary

### A

#### Affordable living options

The availability of a diverse range of sustainable housing options to suit all income levels and household types – appropriately located within self-contained neighbourhoods with convenient walk, cycle and public transport access to services and employment.

#### Activity centre

Commercial focal points which include a combination of land uses and infrastructure such as offices, retail, higher-density housing, entertainment, and civic or community facilities.

#### Adaptation

The process of adjustment to actual or expected climate and its effects.

#### Adaptation pathways

A set of adaptation options which can be implemented sequentially over a long-period in order to reduce risks and vulnerability.

#### Agricultural lands

Includes land with current and potential cropping of various intensities and pasture of various types.

### B

#### Biodiversity

The variety of species and ecosystems and the ecological processes of which they are a part.

#### Built environment

The surrounding components that make up a system of buildings, facilities and infrastructure services.

#### Bio-retention basins

Landscaped depressions or shallow basins used to slow and treat on-site stormwater runoff.

### C

#### Catchments (water)

An area of land where water collects when it rains, often bounded by natural features such as hills or mountains from which all runoff water flows to a low point.

#### Character

The intrinsic features and innate qualities of an area, (including natural, built, cultural and spiritual) that create a sense of connection in people.

#### Clean energy

Energy sources that emit either none or much lower quantities of greenhouse gases than current fossil fuel energy sources.

#### Climate change

Natural and human induced changes to the climate attributed to increased levels of greenhouse gases in the atmosphere.

#### Coast

Coastal foreshore and adjacent areas.

#### Coastal dependent development

Development that requires land adjoining the foreshore and access to tidal water to function.

#### Coastal erosion prone area

Parts of the coast considered to be potentially exposed to coastal erosion or permanent inundation by the sea over a defined planning period.

#### Coastal foreshore

Area between high and low mean spring tides.

#### Coastal hazards

Coastal erosion and storm-tide inundation that carries potential for loss or harm to the community, property or environment.

#### Coastal hazard area

A mapped area subject to coastal erosion or tidal inundation.

#### Coastal processes

Natural processes including ecological, waves, tides and tidal currents and sand movement.



## Coastal values

Beneficial functions of coastal areas, associated with healthy ecosystems, biodiversity, heritage, and opportunities for social, recreation and amenity use, and the economic activity that these support.

## Community view lines

Accessible public areas, which provide a vantage point overlooking significant views and vistas (natural and built environments).

## Connecting habitat area

Habitat areas supporting linkages between core habitat areas.

## Conservation estate

A collection of state, council and private lands managed for conservation.

## Constructed waterbodies

Human-made or highly modified bodies of water, including artificial channels, lakes and canals (tidal waterbodies with unhindered boat access to the ocean). They exclude sedimentation basins, stormwater treatment wetlands, water supply infrastructure and farm dams.

## Core habitat areas

Large areas of intact native vegetation.

## Cultural heritage

An expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values.

## D

### Defined urban footprint

Defined by the Sunshine Coast Planning Scheme, the urban boundary identifies preferred settlement pattern and defines the limits of urban development.

### Disaster management

The organisation and management of resources and responsibilities for dealing with social, economic and environmental aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.

## E

### Ecological connectivity

Natural vegetation corridors that provide connectivity between habitats to enable species movement and gene exchange.

### Ecologically functional

The effective functioning of habitats to support plants and animals.

### Ecosystem services

The benefits people obtain from the natural environment such as clean air and drinking water.

## F

### Flood conveyance pathway

Movement of floodwater along a particular pathway.

### Flood immunity

Protection or exemption from flood inundation.

### Flow-detention structures

Structures or basins that capture stormwater, collect it and slowly release it at a controlled rate so that downstream areas are not flooded or eroded.

### Fragmentation

Fragmentation is the clearance of native vegetation creating a patchwork of habitat areas with limited connectivity.

## G

### Gene flow

The movement of genetic material from one population to another.

### Greenhouse gases / emissions

Gases that contribute to the greenhouse effect and climate change. Gases include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>) and hydrofluorocarbons (HFCs).



## Green Star

Green Star refers to an Australian sustainability rating system for the design, construction and operation of sustainable buildings, fit outs and communities.

## H

### High ecological value waters

Waters that support and maintain diverse species and are effectively unmodified or highly valued.

### Housing stress

Experienced by households when they are paying more than they can afford on housing costs. Housing stress commonly occurs in households receiving the lowest 40% of income and pay more than 30% of their gross income on housing costs.

### Human scale

Creating and designing a built environment and surroundings from the perspective of the pedestrian at street level.

## L

### Living infrastructure

Multi-functional network of natural landscape elements, integrated with the built environments to provide a range of ecological, social and economic benefits.

### Low-carbon

Minimal output of greenhouse gases.

## M

### Mitigation

Activities to reduce, eliminate or prevent greenhouse gas emissions.

## N

### NABERS

A national rating system for the built environment that measures energy efficiency, water usage, waste management and indoor environmental quality.

## Natural environment

The resources such as water, soil, air, plants and animals, and the ecological and physical processes that affect them.

## P

### Protected areas

Public and private land tenures with a legally binding mechanism on the land title to protect the site's conservation values.

### Priority habitat areas

Areas in the natural landscape known to support priority regional ecosystems, core habitat areas, core and connecting habitat areas within a strategic biodiversity corridor, conservation estate and endangered, vulnerable and near threatened plant and animal species listed by Commonwealth and or State legislation.

### Pollutant loads

The amount of polluting material entering the environment.

### Public realm

Publicly accessible areas including open spaces, buildings and facilities ie civic buildings, streets, pathways, parks.

## R

### Ramsar listed

Wetland sites recognised under the International Convention on Wetlands.

### Recreation

Activity or pastime undertaken for leisure and enjoyment. May include active or passive activities which engage sight, sound, smell or touch senses.

### Regional Inter-urban Break

An area of forested, agricultural, conservation and recreational lands separating the Sunshine Coast from the Brisbane-Caboolture area.

### Renewable energy

Energy generated from natural resources such as solar, wind and tidal movement, which are renewable (naturally replenished).



## Riparian areas

Fringing zones along waterways and around wetlands.

## Risk assessment

The identification, evaluation, and estimation of the levels of risks involved in a situation, their comparison against benchmarks or standards, and determination of an acceptable level of risk.

## Risk reduction

Measures to reduce the likelihood of an occurrence of an event or its consequences, or both.

## S

## Scenic amenity

The collective appreciation of scenery / attractiveness of a place (natural and built environments) as viewed by the public.

## Self-contained neighbourhood

An urban residential area with an urban form that facilitates walk and cycle access to local services and facilities including integrated public transport options.

## Smart technology

A range of integrated information gathering and communication technologies such as sensors, data and real-time monitoring used to connect people, businesses, communities and the environment to improve economic, liveability and sustainability outcomes.

## Sub-regional Inter-urban Breaks

Areas of agricultural, conservation and recreational lands separating urban development areas across the Sunshine Coast.

## U

## Urban biodiversity

The variety of species and ecosystems and the ecological processes of which they are a part in an urban environment.

## W

## Waterways

The surface pathways that rain runoff follows from high areas down through a catchment.

## Wetlands

Local freshwater or tidal areas where water spreads out or sits in the landscape.

## Z

## Zero-net emissions

Achieving zero-net emissions assumes that emissions are measured, reduced as much as possible and then the remaining emissions are offset with carbon credits retired annually.







[www.sunshinecoast.qld.gov.au](http://www.sunshinecoast.qld.gov.au)

[mail@sunshinecoast.qld.gov.au](mailto:mail@sunshinecoast.qld.gov.au)

T 07 5475 7272 F 07 5475 7277

Locked Bag 72 Sunshine Coast Mail Centre Qld 4560