

# Environment & Sustainability

Strategy

2022



Phase 1 Consultation Information Paper

# Contents

OVERVIEW OF STRATEGY KEY FOCUS AREAS.....4

FACTS & FIGURES..... 9

PRESSURES ON OUR ENVIRONMENT AND SUSTAINABLE LIFESTYLES..... 11

TRENDS, OPPORTUNITIES & GLOBAL INFLUENCES..... 13

CURRENT RESPONSES BY COUNCIL..... 14



The Moreton Bay Region is over 200,000 hectares and encompasses a vast range of natural environments from coastline in the east through to the hinterland ranges in the west. These environments support over 2,419<sup>1</sup> plant and 805<sup>2</sup> animal species, some of which are unique to the area.

The region is experiencing rapid population growth and is one of the fastest growing regions in Australia. Based on medium series population projections, the population in Moreton Bay Region is expected to grow from approximately 480,000 people in 2021 to 690,000 people in 2041. The development pressure associated with increased demand for housing and infrastructure alongside other pressures and trends requires us to plan, prioritise and take action to ensure the ongoing livability of Our Moreton for current and future generations.

The Environment and Sustainability Strategy (ESS) is being developed to set strategic policy directions and identify targets and actions for healthy environments and sustainable lifestyles over the next 20 years. The Strategy will provide a basis for coordinated action and will apply to both Council's operations and to sustainability actions and initiatives in the community.

...ensure the ongoing  
liveability of Our  
Moreton for current and  
future generations.



Image credit: Rob Auld

<sup>1</sup> Wildnet, data retrieved 04/08/2021

<sup>2</sup> Wildnet, data retrieved 04/08/2021



# 1. Overview of Strategy

## Key Focus Areas

The ESS will focus on key areas to achieve Council's role in supporting healthy environments and resilient, sustainable, inclusive and connected communities for the next 20 years. The following key focus areas (or outcomes) will form the roadmap to achieve our goal for healthy environments as reflected in Council's Corporate Plan. The following six outcomes are currently proposed:



Image credit: Rob Auld

### **Our region's natural ecosystems are connected, protected and enhanced**

Our natural ecosystems provide homes for many animals of national significance, such as the koala, as well as numerous other animals of regional significance, such as the Glossy Black-Cockatoo. The Region supports many different ecosystem types and vegetation communities, consisting of an extremely diverse range of plants and animals. Some of these plants and animals are unique to the Region and some are classified nationally as either endangered, vulnerable or threatened.

The variety of plant and animal life in the Region (also known as biodiversity) is reduced by habitat loss and fragmentation caused by activities such as urban development and rural production. Protecting and enhancing environmental and amenity values (e.g. scenic areas, water quality) will help safeguard the Region's unique natural values for future generations.

The ESS will seek to ensure that Council programs continue to protect, restore and rehabilitate natural areas to improve conservation outcomes on both public and private land, including through partnerships with stakeholders.

## **Our coasts and catchments are used sustainably, and environmental values are protected and enhanced**

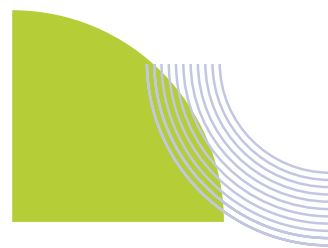
The Region features numerous freshwater and marine habitats that provide many functions, such as fish breeding grounds, migratory and threatened species habitat, water quality improvement, beach and bank stabilisation, clean air and scenic amenity, contributing to the wellbeing of our communities.

Moreton Bay's coastline consists of beaches, canals and estuary areas. Our coastline is also a major tourism drawcard and contributes to the health of the region's economy. In 2018/19 tourism brought 4.7 million visitors who spend \$1.1 billion in the Region, supporting 5, 313 jobs<sup>3</sup>.

The Region has three major river systems and many smaller creeks and catchments. While the Stanley River flows inland to a significant water storage dam, the Pine River, and the Caboolture River flow into Moreton Bay. Large areas of Moreton Bay are protected and recognised as wetlands of international significance and as Queensland State Marine National Parks. Managing the health of our rivers, streams and the water that flows into them is important for the overall health of Moreton Bay.

Moreton Bay provides important feeding areas for a number of nationally threatened wildlife, such as the green turtle, hawksbill turtle and loggerhead turtle, as well as the internationally vulnerable dugong. The area is also home to many migratory birds that are protected by international conservation agreements. The natural beauty of the Bay attracts many recreational visitors. As our population grows, it will be important that residents and visitors interact with the Bay in a sustainable way, ensuring the health of the Bay for future generations.

The ESS will seek to ensure that Council programs focus on improving and regenerating waterway, wetland, catchment and coastal health through education and restoration programs, community partnerships and reducing waste and pollutants entering waterways.



---

<sup>3</sup> Moreton Bay Regional Economic Development Strategy 2020-41



## **Our neighborhoods, buildings, and infrastructure support sustainable living**

Rapid population growth, an ageing population, increasing urban densities and the impacts of climate change will require thoughtful and intelligent planning and design of our homes, neighborhoods, and their associated infrastructure. This is important because this population growth will require the construction of 88,300 new homes between 2017 and 2041<sup>4</sup>.

How the built environment is planned and designed can significantly influence the daily choices of individuals and communities. Well designed and planned neighborhoods, buildings and infrastructure can help reduce the proportion of private vehicle trips, promote active lifestyles and facilitate lower energy and water consumption. These factors can also influence health and wellbeing, affordability and quality of life - all aspects that contribute towards a sustainable lifestyle.

The ESS will seek to ensure that new neighborhoods integrate green space and natural areas and facilitate walking and cycling. Additionally, built environments will incorporate sustainable building designs that incorporate features suited to our climate, encourage water and energy efficiency and promote local economic opportunities and social connectedness.

## **We are a region that is actively responding to climate change and natural disaster risks**

The impacts of climate change are already being experienced at regional and local scales. The expected effects of climate change include rising sea-levels and coastal inundation, increased bushfires, increased intensity and frequency of heatwaves, increased intensity of storms and changing rainfall patterns<sup>5</sup>.

The consequences of these climate change impacts are already being felt by many natural areas and communities within the Moreton Bay Region. The latest research is telling us that global warming of 1.5°C and 2°C will be exceeded this century, unless deep reductions in global greenhouse gas emissions occur in the coming decades<sup>6</sup>.

Every increment of global warming will intensify the severity and frequency of extreme weather events<sup>7</sup>. Even if the goal to limit global average temperature rise to below 2 °C above pre-industrial levels is reached, a legacy of historical emissions mean that these consequences are expected to intensify into the future<sup>8</sup>.

The ESS will seek to ensure that Council and communities work together to reduce greenhouse gas emissions within council's operations and the community and adapt to the risks and impacts of a changing climate on the frequency and intensity of storms, storm tide inundation, bushfires, heatwaves and floods in the region.

---

<sup>4</sup> <https://moretonbay.qld.gov.au/Services/Reports-Policies/Regional-Growth-Management-Strategy-2041>

<sup>5</sup> Pathways to a Resilient Queensland: Queensland Climate Adaptation Strategy 2017-2030

<sup>6</sup> State of Environment Report 2020 (CSIRO and BOM)

## **We ensure our materials and resources are recycled and used cleverly, avoiding waste and pollution**

Many of the resources we use in our daily lives are 'finite' meaning that there is a limit to how much of them there are. To use these resources efficiently and wisely, it makes sense to reduce excess waste by keeping products and materials in use for as long as possible. Improvements to resource efficiency benefit communities, businesses and the natural environment through saving businesses money and reducing the total annual greenhouse emissions of the region.

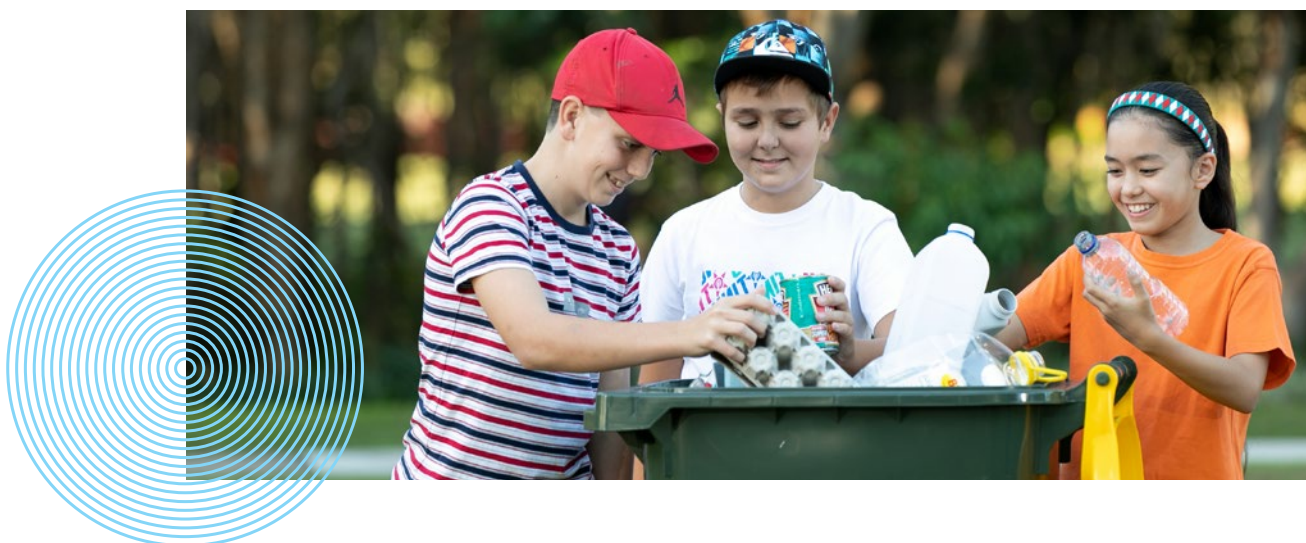
The ESS will seek to ensure that Council adopts and encourages innovative and efficient ways to recycle, repurpose and reuse materials, and provides support to communities and businesses to use resources wisely.

## **Our communities and businesses practice sustainability in the choices they make every day**

Every day we make choices about what we buy, how we move around and what we throw away. Practicing sustainability can take many forms like supporting local businesses, using renewable energy, using low emission transport or growing your own food.

It is important that opportunities are available for businesses and the community to participate in everyday behaviours, actions, practices and other lifestyles choices that are sustainable.

The ESS will seek to enable Council, businesses and communities to embrace sustainability by using renewable energy options and low emission products, minimising waste and supporting local food producers and other local business.



<sup>7</sup> IPCC, 2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In Press.

<sup>8</sup> <https://www.climatechangeinaustralia.gov.au/>







## 2. Facts & Figures

- The Region has 106,203 hectares of mapped native vegetation (including protected areas and other vegetation outside of these areas) which equates to over half of its land area<sup>9</sup>.
- Over 2,419 plant and 805 animal species have been recorded in the Region. Of these, 41 plant and 55 animal species are regarded as Endangered, Vulnerable or Near Threatened under State and National Government legislation<sup>10 11</sup>.
- Council manages over 10,000 hectares of natural areas, including riparian corridors and road reserves, with high biodiversity values.
- The internationally important wetlands of Moreton Bay cover more than 120,000 ha and were recognised as a Ramsar site in 1993<sup>12</sup>.
- There are over 2,600 kms of streams and waterways mapped by Council within the MBRC local government area<sup>13</sup>.
- The Corso public halls at North Lakes is an example of a five-star green rated building.
- Under business as usual emissions, by 2050 the climate of Caboolture may be similar to the current climate of Proserpine, and by 2090 may be similar to parts of Northern Queensland<sup>14</sup>.
- Southeast Queensland's current summer average temperature is 24°C. This could rise to over 25°C by 2030 and to over 27°C by 2070<sup>15</sup>.

<sup>9</sup> Moreton Bay Regional Council GeoPortal, data from 2019

<sup>10</sup> Nature Conservation (Wildlife) Regulation 2006

<sup>11</sup> Environment and Biodiversity Conservation Act 1999

<sup>12</sup> Australian Wetland Database - Directory Wetland Information Sheet (environment.gov.au)

<sup>13</sup> Moreton Bay Regional Community Plan-Valuing lifestyle, Environment Protection Policy (Water and Wetland Biodiversity)

<sup>14</sup> Queensland Government, Climate Change in the Southeast Queensland Region ([https://www.qld.gov.au/\\_data/assets/pdf\\_file/0023/67631/seq-climate-change-impact-summary.pdf](https://www.qld.gov.au/_data/assets/pdf_file/0023/67631/seq-climate-change-impact-summary.pdf))

<sup>15</sup> Queensland Government, Climate Change in the Southeast Queensland Region ([https://www.qld.gov.au/\\_data/assets/pdf\\_file/0023/67631/seq-climate-change-impact-summary.pdf](https://www.qld.gov.au/_data/assets/pdf_file/0023/67631/seq-climate-change-impact-summary.pdf))









# 3. Pressures on our environment and sustainable lifestyles

## Climate Change

The impacts of climate change are serious and widespread. Even though Queensland has long experienced the impacts of extreme weather including storms, floods, heatwaves and bushfires, climate change will amplify the frequency and severity of these events.

These climate change impacts are already influencing natural and human environments in the Region, with impacts expected to intensify in severity and frequency into the future. This requires the consideration of climate change impacts and their consequences across all Council operations. For example, wildlife movements may be altered under different climate conditions, such as rising temperatures and heatwaves. Council will need to consider the implications of these altered wildlife movement patterns such as when planning for wildlife corridors.

Increased intensity, duration and frequency of heatwave events will also significantly impact human health, particularly for vulnerable groups such as the very young and elderly. This requires consideration as to how urban areas and public spaces can be cooled; and how our communities and wildlife can be supported during heatwave events that are anticipated to become more frequent and more intense.

Rising sea-levels will lead to expanding tidal extents and associated inundation of low lying coastal areas which will impact coastal communities. Council is already considering how we manage coastal hazards under emerging climatic conditions.

## Population Growth

Moreton Bay is one of Australia's fastest growing regions. It is anticipated that by 2031, the Moreton Bay Region will have a larger population than Tasmania. Indeed, based on medium series population projections, the population in Moreton Bay region is expected to grow from approximately 480,000 people in 2021 to 690,000 people in 2041. In accordance with the State Government's Southeast Queensland Regional Plan 2017, the Region is required to deliver an additional 88,300 dwellings to accommodate this population growth<sup>16</sup>.

This growth in population and the housing, infrastructure and other services to accommodate it will have corresponding impacts on our natural environment (both positive and negative). However, the type and scale of impact can be influenced by where and how the growth occurs and the actions of stakeholders (including other levels of government) industry stakeholders and individuals. Innovation, knowledge/data, partnerships and a willingness to 'do things differently' will be critical to tackling the challenges of this expected growth.



---

<sup>16</sup> <https://moretonbay.qld.gov.au/Services/Reports-Policies/Regional-Growth-Management-Strategy-2041>







## 4. Trends, opportunities and global influences

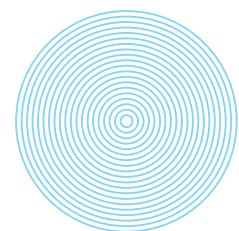
We live in a rapidly changing world and in recent decades several social, environmental, technological and economic trends have emerged which will influence how Our Moreton develops and grows into the future.

Population growth, ageing populations and more people living in urban areas will require intelligent built design. Worldwide decline in biodiversity and natural resources will require better, more integrated, protection of environmental values. Advances in technologies and a more connected world will require a smart region that is responsive to and can readily adopt new and emerging technologies.

The Region will need to continue to show resiliency to global pandemics, such as coronaviruses, which are expected to persist into the future.

The upcoming 2032 Olympic and Paralympic Games will offer opportunities to positively influence the development of the Region as Southeast Queensland prepares for the 'Climate Positive' games.

Population growth, ageing populations and more people living in urban areas will require intelligent built design.





# 5. Current responses by Council

Council is already undertaking a variety of programs, activities and projects relevant to the environment and sustainability outcomes identified above for the proposed ESS:

- Council supports partnerships and initiatives with community to protect and enhance our natural areas and environment, such as Land for Wildlife.
- Council operates a Land Buyback for Environmental Purposes Program, which acquires strategic properties to enhance green corridors and protect habitats for priority species, including the Koala.
- A new Green Infrastructure Plan is currently under development to ensure a healthy green infrastructure network is maintained and enhanced allowing for meaningful connections between people and nature and to support our natural, semi-natural and engineered green spaces.
- The Mill at Moreton Bay includes a significant koala habitat revegetation and conservation program, and utilises smart bins and smart lighting technology in the design of this emerging development area.
- Council protects our waterways through restoration and protection programs, such as managing pollutants before they enter waterways, assisting fish movement through waterways and reducing erosion.
- Council's Total Water Cycle Management Plan (TWCMP) provides a comprehensive set of plans for the stormwater network primarily relating and focusing on waterway health.
- Council is now planning the next TWCMP phase, aiming to link land-use planning and water planning to enable an equally comprehensive approach to integrate planning for stormwater infrastructure with planning for water supply and wastewater services.
- Council supports green living and business through sustainable infrastructure and water planning and providing community guidelines such as the Climate Smart Living Guide and the Next Generation Homes Guideline.
- Council operates three environmental education centres, supporting the community and visitors to learn about the Region's special natural areas and wildlife and how to live a more sustainable lifestyle.
- Council is responsive to natural hazards and disasters and undertakes community engagement and capacity building programs, as well as providing early warning to communities on extreme weather events.





- Council has installed solar panels on buildings and has upgraded lighting, heating and cooling systems to achieve greater energy efficiency.
- Council undertakes landfill gas capture, which currently generates enough electricity to power the equivalent of 6000 homes a year.
- Council is currently investigating options for the development of a solar power farm.
- Council's waste services are proactively serving community needs and providing education and raising community awareness around improving resource use efficiency.
- Council has partnered with Grow It Local in the Moreton Bay Region to provide a free platform where residents and groups are encouraged to learn about and to grow fresh produce. Grow It Local is one of a number of Council initiatives designed to encourage positive sustainable living behaviours and food systems, facilitate community building, and support waste education and divert organic waste away from landfill.
- Council supports the establishment of community gardens.
- Council participates in ASPIRE, an online marketplace which allows businesses to search alternative solutions for waste going to landfill. It works by intelligently matching businesses with potential remanufacturers, purchasers or recyclers of their waste resources.
- Council is currently undertaking FOGO (Food Organics Garden Organics) household waste bin collection feasibility investigations.
- Council is a member of the Cities Power Partnership and Queensland Climate Resilient Councils to increase capacity and further action towards addressing climate change.
- A Coastal Hazards Adaptation Strategy (Living Coast) for the Moreton Bay region is currently under development. This strategy aims to proactively manage coastal climate change impacts, including coastal erosion, storm tide inundation and predicted sea level rise, on our coastlines.
- Council is developing a Sustainable Libraries Plan that aims to demonstrate community and sector leadership by making sustainable decisions that demonstrate respect and care for our environment, use our resources carefully, and support healthy practices.
- Innovative programs for reuse of materials in Council construction projects such as with replacing sand with recycled and ground up glass in asphalt, and recycling old tyres and plastics for use in asphalt production.
- Moreton Bay All Hazard Risk Assessment 2021 - This project will inform the Council and the community of the disaster risks present in the region and identify mechanisms and process to appropriately manage and account for these risks.
- Council is a member of the Smart Cities Council (ANZ), and the Australian Smart Communities association, facilitating collaboration with other Councils, Government bodies, and the technology sector, to develop ways to use data to inform better design and planning whilst improving Council operations.

