

Sustainable Oceans and Coasts

Queensland Perspectives



Sustainable oceans and coasts

In 2020, the United Nation declared this coming decade as the 'United Nations Decade for Ocean Science for Sustainability.' Their vision for the coming decade is underpinned by participative and transformative values:

"The Decade is embracing a participative and transformative process so that scientists, policy makers, managers, and service users can work together to ensure that ocean science delivers greater benefits for both the ocean ecosystem and for society.

This Decade will be designed to facilitate global communication and mutual learning across research and stakeholder communities. It will work to meet the needs of scientists, policy makers, industry, civil society and the wider public, but it will also support new, collaborative partnerships that can deliver more effective science-based management of our ocean space and resources."

Critically, the UN vision and activities that underpin it recognise the interconnectedness of land and sea. For Australia, explicit recognition and appreciation of this connectedness of our oceans and coasts is essential for our future prosperity. The oceans surrounding Australia are vast and comprise a multitude of economic, social, environmental, and cultural interests, and a majority of our population lives in coastal zones. Indeed, what we do on inland Australia has consequences for our coasts and oceans; our waterways flow into our coastal and ocean space and are important connectors of land and sea.

In light of this, in May 2018 the Future Earth Australia Steering Committee elected that the 2020 focus for the Future Earth Australia secretariat and Future Earth network be a ten-year national strategy for Australia's sustainable oceans and coasts.

The strategy will outline the steps we need to transform how we think about, govern, and protect oceans and coasts across Australia. Importantly, we take a systems approach to transforming oceans and coasts, as many sectors will need to work together to achieve our goal: social services, tourism, industry, land use experts, ocean and coastal researchers, and decision makers from all levels of government. This Outcomes Paper reports on the deliberations of a broad cross section of sectors in Queensland.

The importance of a national strategy

Australian oceans and coasts are threatened by the fragmented way we manage and govern the ecological and social processes that connect them; we do not have a clear path forward to ensure that these areas are healthy and resilient. The national strategy will outline clear, actionable pathways for achieving healthy and resilient oceans and coasts for all of Australia, incorporating common themes from the series of consultative workshops held by Future Earth Australia throughout 2020.

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Context setting

Prior to the online workshop, an introductory video was circulated to all participants. This video set the scene for the workshop, providing local perspectives on Queensland's oceans and coasts from experts in the field. Speakers were asked to reflect upon their vision for sustainable oceans and coasts in Queensland, the unique features of Queensland's oceans and coasts, and how their expertise guides their visions and goals for the future of oceans and coasts in Australia. The speakers were Andy Ridley, CEO of Citizens of the Great Barrier Reef, and Dr. Ian McLeod, Assistant Director of TropWATER at James Cook University, and we thank them for their thoughtful contributions.

Queensland workshop

On 16 September 2020, Future Earth Australia hosted the third in a series of online consultation workshops in each state and territory across the nation, for its Oceans and Coastal Sustainability initiative.

28 attendees in Queensland contributed to the discussion, representing:

- the research sector, from Griffith University, James Cook University, the Australian Research Centre for Coral Reef Studies, and the University of Queensland
- Traditional Owners and managers across Country
- all levels of government working across the Great Barrier Reef, climate and coastal planning, tropical

- industry and business, particularly in tourism and consulting
- civil society, namely philanthropy and advocacy for the Reef.

This document summarises discussions held around the fundamental elements, both from a Queensland perspective and pertaining to Queensland and Australia more broadly, which will define the National Strategy: vision, knowledge, institutional design and governance, community engagement, and implementation.



Vision

Participants were asked to consider their vision for a sustainable future for oceans and coasts in Queensland and the nation. They entered applicable words into an online poll to generate a word cloud, then discussed the thought processes behind those visions.

Vision for Queensland

Queenslanders put forward a positive, passionate vision for their oceans and coasts. 'Health' was explained to encompass resilience, given that health can be in flux but has the capacity to bounce back when impacted. Health is connected to people and is a concept at the crossroads of natural and human wellbeing. 'Accessible' referred to the idea that people of all walks of life, cultures, and abilities should have access to these spaces.

Another attendee expressed the view that we need to think bigger for our oceans and coasts. It was

suggested that 'abundant' was more ambitious for the future than just resilient and sustainable, which give the impression we are already managing these areas satisfactorily, when it needs to be improved. For example, the Great Barrier Reef strategy to 2030 exists already, but even if we stopped climate change right now, our Reef would still be facing significant problems in 2030. We need to plan on a much longer scale to achieve the kind of future we want.

'Inspiring' was proposed as an important precondition for sustainability, as these environments and places need to inspire the community and professionals working in the field to take care of it. Empowered and connected coastal communities have an important role in marine management.

Numerous attendees pointed to the uniqueness of Queensland coasts, given the mix of rugged and wild coast-scapes with urbanised landscapes, and

What is your vision for the future of oceans and coasts in Queensland by 2030?



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concluded that celebrating these diverse areas offers many opportunities for improved stewardship. This idea of stewardship and celebration can be extended to coasts and oceans around the country as well.

National vision

Queensland attendees discussed the need for long-term improvement of the legal framework for marine and coastal governance.

'Connected' referred to the need to address the significant discrepancies between coastal management regimes between different states, and spoke to a desire for greater coherence. Ocean and coastal systems do not function or form according to human boundaries like state or federal rules, and additionally, variation between states is encouraged by unhelpful competition that lets down the system as a whole.

'Integrated' also referred to catchment to reef connections, interconnections between states and regions, between and across generations, and cross-sectoral and systemic management of oceans. This involves multiple objectives and planning according to the triple bottom line (economic, social,

and environmental priorities) and negotiating new industrial interests in addition to the plethora of existing ones.

'Loved' was advanced as an important way of understanding our responsibility to oceans and coasts, inspired by the way that Traditional Owners love their Country. This is significantly different to the conventional policy mindset which understands these ecosystems and places as being valuable as resources first. 'Reciprocation' emerged from the perspective of an Indigenous participant to describe their relationship with the natural world: a sense that whatever you take from the environment, you need to give back. This is married with the belief that the environment is a living thing that is not subservient to humans. Terms like 'optimal utilisation' in legislation therefore do not have meaning to Indigenous frameworks and relationships with their Country. Successful policy in balancing needs while ensuring nature thrives is only possible with the right mental frame and underlying drivers.

Queenslanders felt that a national vision and strategy for oceans and coasts must be contextualised by the fact we are part of a global system.



Knowledge

Key points:

- Queensland attendees focused on the need for integration and linkage, between the natural world and human systems, between different ways of understanding the world, and between oceans and coasts. Seeing each of these in a piecemeal, siloed fashion prevents us from fully using the power of our knowledge for healthy, thriving oceans and coasts.
- There was an emphasis on the need to take action. While there is always more to know, we have been talking about information gaps for decades and need to focus more on governance design and behavioural change.
- We need to look forward and develop solid projections of the different trajectories we could embark on, and the adaptation pathways to deal with coming changes.

When asked about the critical knowledge gaps for oceans and coasts, Queensland attendees put particular emphasis on the need for better integration and connectivity between knowledge sets and types. These relationships between knowledge sets define our ability to put knowledge into action, by giving us a working understanding the behaviour of oceans, coasts, and humans in a system.

Participants felt that we need to better understand humans as part of their ocean and coastal environment, which includes social, economic, and cultural studies as linked to the marine. In particular, importance was placed on more nuanced working linkage of different ways of seeing the world between Traditional Owners and Western approaches, with one attendee expressing frustration that despite working on coastal Country in Queensland, they don't know the relevant Indigenous terms or concepts for the environment they work in day to day. Different ways of knowing

also includes better integration of non-specialist and non-scientific knowledge held by community members.

In an ecological sense, participants expressed a desire for a greater research focus on the marine habitats and ecosystems that link oceans and coasts to better operationalise a connected lens for decision making. This can include, for example, a greater focus on mangroves, estuaries, and mid-shelf habitats.

Queensland attendees noted that we have been discussing knowledge gaps for decades, and that building knowledge must be couched in the context of encouraging action in decision making and behavioural change. There are many elements to the knowledge-to-action continuum that require ongoing expertise. These include:

- skilled communication, which crafts an evolving narrative that can incorporate new information and refers to future scenarios people understand and can envision
- using social sciences and the humanities to link relevant information and action together
- skilled linkage of political literacy (to induce systemic change through formal governance structures) and behavioural change (actions by communities and individuals changing the system's behaviour)

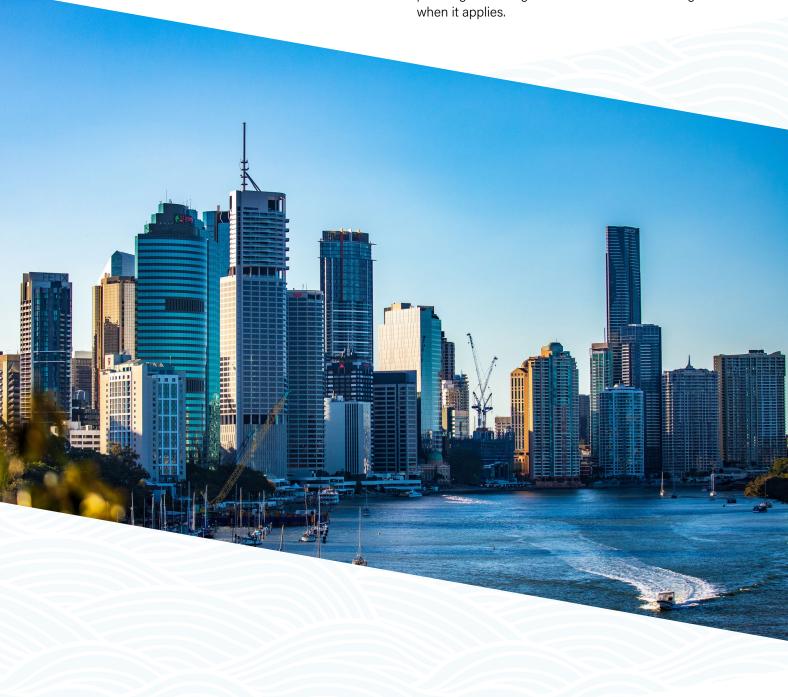
Another important knowledge requirement is a dynamic grasp of how oceans, coasts, and our human communities are changing over space and time. Participants want to better understand how people are relating to oceans and coasts, how and why this changes, how people are responding to changes in oceans and coasts, and how their wellbeing is affected by change.

Participants also felt that a dynamic understanding of change in oceans and coasts could enable us to develop solid projections of possible future trajectories, and the adaptation pathways that could lead us to those futures. Information about possible futures, informed by evidence, is key for decision makers, businesses, and communities to have a tangible pathway to react to and act upon, both in terms of avoiding the kind of futures we clearly do not want and taking advantage of opportunities.

Queensland attendees contributed a wide range of emerging topics in ocean and coastal sustainability, including:

 mapping and synthesising what we know and major gaps

- putting effective science communication into practice at scale
- gauging unknown and shifting baselines
- crafting an inclusive and coherent narrative about oceans, coasts, and Australians
- identifying opportunities for ecodevelopment with emerging technologies and domains (for example, new energy storage technology enabling settlements into remote areas)
- translating social and community values about oceans and coasts to decision makers
- understanding cumulative impacts of natural disasters
- planning for managed retreat and understanding



Institutional design and governance

Key points:

- Good governance is not possible without real people getting together to form a joint vision, objectives, and goals
- We need a high-level national vision and strategy for oceans and coasts to provide coherence from the national to local level and provide structure for keeping decision making accountable
- A partnership approach that involves a diverse range of interests and people is the best way to pursue these initiatives.

Participants from Queensland pointed out that good governance of oceans and coasts is not possible without real people coming together to define the vision and objectives which would answer the question, where are we going? Gathering to set the course is powerful when it includes diverse perspectives and interests and will inevitably require navigating conflicts and addressing how trade-offs between groups will affect some more than others.

A high-level, national vision and strategy for oceans and coasts is seen as fundamental for giving a framework into which governance activities at other jurisdictional levels can work.

A national policy and strategy assist with increasing accountability where local pressures and interests might lead to decision making which contravenes the public good. Some expressed the desire to see better transparency around the way major decisions could be affected by vested interests and better accounting for how decisions affect marginalised people. This points to a major frustration at the lack of coherence between jurisdictions which is difficult to navigate and is not fit for governing complex ocean and coastal systems that do not act neatly within government boundaries.

Participants felt that much legislation requires reform to adequately address the issues that will define the future of our oceans and coasts. Arrangements in which local, state, and federal governments collaborate were touted as possible solutions, such as City Deals in metropolitan city planning. Bilateral agreements for the Great Barrier Reef were seen as an improvement in governance, and their ultimate success will be defined by the way different stakeholders are managed. Even though participants were awaiting substantive improvements in ecosystems and communities, it was noted that commercial fisheries were already benefitting from bilateral agreements.

Attendees expressed that governance activities should be based on systemic behaviour as opposed to isolated issues of the day and that the ramifications of 'no action' should be more consistently considered and communicated.

Developing a healthy mindset that embraces risk as part of innovating in the governance process was seen as an area for cultural change, along with creating incentives for collaboration and for scaling successful local solutions both horizontally and vertically.

Participants proposed that iconic, well-known figures and active groups can foster pride and love for our oceans and coasts and encourage people to see themselves in the process, suggesting that these people should be brought along for visioning and strategising processes.

Queensland attendees also advocated for a partnership approach at all scales and situated in-place, which would involve all sectors, knowledge sets, and stakeholders to build a collective narrative about the role of oceans and coasts in our lives. It is important that the range of stories and associations

people have with oceans and coasts be part of our narrative, drawing on the richness of our immigrant and First Nations perspectives, cultures, and histories.

In participants' experience, partnerships are built on a constructive, positive, and future-focused mindset that prioritises building trust. Building long-term relationships and trust involves individuals, not institutions, and is difficult in the context of a casualised labour market in which people move

The ocean and coastal space involves complex politics given the enormous number of interest groups. Some participants believed that the knowledge sector's role is to remain impartial and agnostic, and to aim to provide information focused on end-users without dipping into advocacy. Others, however, saw advocacy as a critical part of putting knowledge into action.



Community engagement

Key points:

- Relationships and empowerment are the two fundamental principles that underpin a participatory process for stewarding our oceans and coasts
- Capturing diverse perspectives requires a bespoke approach, and even though conflict will happen, it remains critical
- Tokenism in engagement of Traditional Owners and community members is damaging and must be avoided—cultural values need to be embedded more fundamentally in our governance frameworks.

Queensland attendees advocated for productive and genuine engagement with the community which is based in striving to build relationships and empowering others. Participatory governance processes include a range of elements, beginning with understanding the diversity of values held across the community, inclusive visioning and strategising from the beginning, co-design of goals, and co-production of processes to achieve them. This contrasts with the prevailing consultation framework which is seen as ineffective in garnering buy-in and can lead to disillusionment when there is no opportunity to substantively shape a project. As stated by one participant, "people are brought into a process thinking things are still up for negotiation but they aren't—everything has already been decided."

Part of the art of community engagement is creating goodness-of-fit between the engagement scope and the cause of the problems. It was noted that many major issues facing the ocean and coastal sphere emerged from national and international behaviours, and so locally based activity may not be adequate to meaningfully tackle the root causes. Therefore, there is a need to manage expectations and be

transparent about the scope of the engagement, while nesting local community contributions in a broader framework that aligns goals across scales.

Consultation fatigue was seen by many participants as a common problem, particularly in work related to communities on the Great Barrier Reef. Fatigue was also seen as a considerable barrier to engaging with Traditional Owners. There was a perception that tokenistic engagement of Indigenous people, which does not provide a means of genuinely influencing the issue, has led to a prevailing view among First Nations communities that Indigenous perspectives wouldn't be listened to properly, leading to low motivation for engagement. It was suggested that a more consistent effort to collate or aggregate consultation information be made, so as to enable researchers, practitioners, decision makers, and community members to better gauge what we already know and how community views and preferences are changing, without having to repeat the same studies and create consultation fatigue.

Queenslanders felt that capturing diverse values requires a bespoke approach, and application of formulas will often miss the diversity of views or depth required. Proper engagement takes time and calls for a variety of avenues for people to be involved, which is particularly important when accommodating people who are time poor or do not feel confident contributing in public. Generic engagement processes are prone to being captured by those who have strongest views, so an important part of engagement is building the confidence of different groups to have their perspective heard. Community engagement requires expertise, and it was noted by some participants that it can feel overwhelming to figure out how to engage with an enormous number of stakeholder groups at the right An important part of engagement is acknowledging that conflict will occur and that not all points of view will be reconciled. Queenslanders pointed out that engagement involves ongoing negotiating and juggling of interests which are often not resolved.

A key concern for participants was the way that muddying of evidence and information in the public is now affecting our ability to engage on the same wavelength. Aggregated news from a range of unreliable sources, on social media for example, and ideologically-charged publications were seen as major threats to people having a clear understanding of what is happening in our oceans, coasts, and governance, making it challenging to engage different people who have a common understanding on the same basic level.

Queensland participants suggested a range of strategies for engaging the public and stakeholders around ocean and coastal sustainability:

- It is important to orient visioning and engagement in relation to forging an exciting and inspiring future—collaboration has no energy when it is framed in doom and gloom.
- Partnering with independent community groups can be invaluable in community engagement as it situates the work in the context of an existing long-term relationship.

- The Collective Impact Model² was suggested as a useful framework for effective engagement, as it incorporates principles of collaborative and inclusive visioning, shared measurement systems, mutual accountability and enforcement, continuous communication, and support by dependable institutions and organisations
- Long-term visioning and problem-oriented engagement activities are often successful at encouraging buy-in.
- Encouraging decentralised learning between communities is a powerful means of innovating and sharing effective solutions.
- Strategic science communication is vital to improving awareness in the community of the latest science, which in turn will encourage behavioural change through providing a clear suggestion of how individual actions can create positive change on a broad scale.
- A certification of social licence scheme, perhaps by the Marine Stewardship Council, could be a useful means of encouraging positive consumer behaviour.

Implementation

Key points:

- Ocean and coastal sustainability must be a more central part of our lives, identities, and governance agenda. Responsibility for thriving oceans and coasts is a shared responsibility and must be adopted across community, government, business, and more.
- Developing the notion of coastal and ocean citizenship is important if we are to integrate stewardship into our everyday life, and involves developing an exciting narrative we can all see ourselves in, promoting iconic leaders, sharing success stories, and learning about the marine from an early age
- Indigenous perspectives, worldviews, and principles must be made central in governance regimes, particularly in documents pertaining to place-based, local, and regional governance.

Discussions about implementation centralised on how sustainability of oceans and coasts can be elevated in the working agenda across sectors and be made into a more central part of the identity of Australians as they make decisions through their lives.

The notion of ocean and coastal citizenship emerged as a key concept in discussion about how ocean and coastal sustainability can be made a more central part of our identity, integrated with our values and priorities. This involves careful and proactive attention to the multitude of identities involved with these landscapes. Centrally, First Nations perspectives, worldviews, and perspectives must be made a core element of governance design and implementation, particularly at local and regional scales.

Coastal and marine citizenship could be advanced through a range of approaches, including:

 centralising the role of hope and excitement for our role in healthy oceans and coasts, which prioritises creating agency to care and act

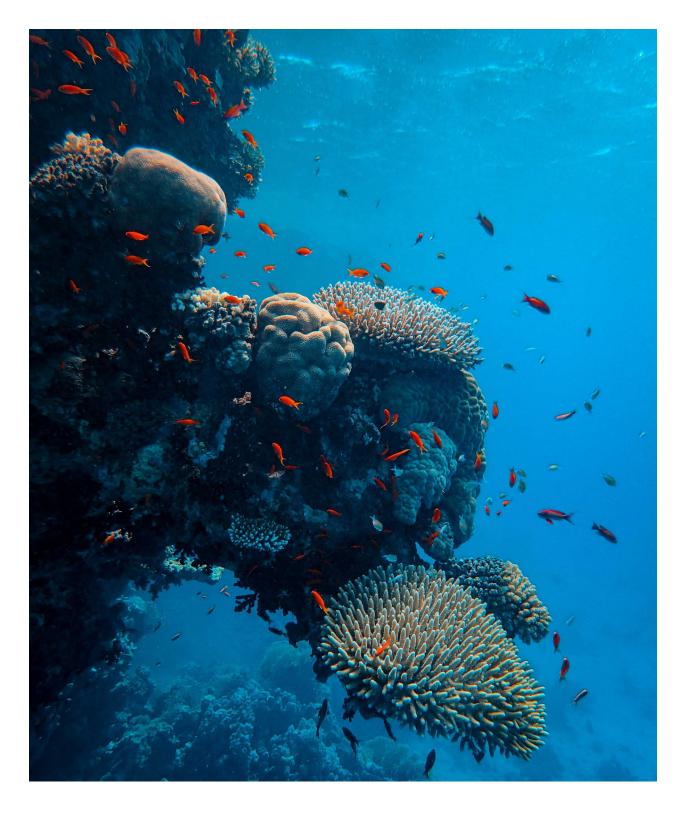
- mainstreaming a narrative of our shared oceans and coasts that captures the public imagination, involves iconic leaders that can bring everyone along
- understanding the social implications of existing community-based conservation activities, and extending them to include more marine ecosystems like mangrove and seagrass
- integrating ocean and coastal sustainability across relevant parts of the curriculum, ideally through outdoor and tangible teaching
- getting a better working knowledge and broader literacy across the community of our past successes in stewarding oceans and coasts
- creating a greater focus on the 'connective tissue' that connects the values and interests of diverse groups of people.

In addition, participants felt that successful implementation can only be possible when the agenda and responsibility is shared across society and different sectors that have a stake in productive, healthy marine and coastal systems. When responsibility is defined narrowly as a government or community issue alone, we will not be able to unify stakeholders and create culture and incentives to mutual accountability. Attendees asserted that the extensive, year-long consultation process commissioned by the Great Barrier Reef Marine Park Authority to develop the Strategic Plan 1994 was an exemplar in building common understanding between an array of diverse stakeholders (over 60 groups were involved).

In sharing responsibility, participants expressed that communities must be empowered to have ownership over visioning, planning, and implementation of activities for oceans and coasts. These must be based on a realistic set of goals that are achievable and positive to better manage expectations. Some participants suggested that industry can lead by incorporating ocean and coastal sustainability values into decision making in

business planning and investments, particularly in superannuation. Others wanted government leadership to position the blue economy as a nation-building project to drive economic prosperity and support communities, and better incorporate ocean and coastal value (both tangible and intangible) into economic modelling. Importantly, collaboration between governments is irreplaceable in reviewing and improving the legislative landscape across jurisdictions and monitoring whether existing

decisions are being enforced. It was suggested that researchers, practitioners, and institutions can build connectivity across their community of practice and assist in linking learning between communities facing similar issues. Finally, participants felt that all sectors must turn their attention to addressing the need to fund large-scale projects that can set the course for other activities and raise ocean and coastal sustainability on the national agenda.



Queensland

Queensland is Australia's second largest state by area, covering 1,727,000 km² from the central to northern-most points of the east coast of the continent³. Queensland contains the ancestral lands of a great many Indigenous Nations and language groups, including the islands of the Torres Strait.

Being such a large state, Queensland contains a vast range of climates, geological profiles, and landscape types. South-east Queensland is the most populous region and a sub-tropical climate, and inland, the Darling Downs has extensive agricultural production and the mountainous Granite Belt. Northward, towns like Bundaberg and Hervey Bay are situated in the Wide Bay region which is known for sugar cane farming. Tropical north Queensland is home to rainforests like the Daintree and the Atherton Tablelands pastoral region. Western parts of the state are home to the Channel Country of rivulets and savannah landscapes.

Queensland is third largest state by population with 5.2 million people in 2020.4 With more than half of the population living outside of Brisbane, it is significantly less urbanised than other states and territories.5 The capital Brisbane is home to over 2.3 million people6; other large centres include the Gold Coast, Sunshine Coast, and Toowoomba in the south-east, Mackay and Rockhampton on the central coast, and Townsville and Cairns in the tropical north.

With over 80% of Queensland's population residing on the coast⁷, oceans and coasts are important contributors to the local, state, and national economy. For example, in 2019 tourism contributed \$12.8 billion to Queensland's economy⁸—many tourist destinations being on the coast and its hinterland. Gladstone, Brisbane, and Townsville all have major ports that facilitate export of minerals, resources, and agricultural products.

Queensland's coastline traverses almost 7000 km⁹, including the iconic Great Barrier Reef which runs 2300 km from north of Bundaberg to the northern tip of Queensland. The Great Barrier Reef is the world's largest coral reef system, is Sea Country to more than 70 Traditional Owner groups¹⁰, and is internationally renowned as a World Heritage Area and a Natural Wonder of the World. The Great Barrier Reef is host to complex and unique ecosystems and biological diversity and is critical to its associated communities as it contributes \$6.4 billion to the national economy annually and 64,000 full time jobs¹¹.

The Great Barrier Reef is protected as a marine park, along with the Great Sandy Strait Marine Park and Moreton Bay Marine Park.¹² Important marine ecosystems include mangrove forests, seagrass beds, mudflats, sandbanks, beaches, and reefs which are home to more species of marine wildlife than any other state.¹³ Moreton Bay is the only place globally where dugongs and sea turtles can still be spotted in significant numbers close to a major city. The Great Sandy Strait is a whale sanctuary, a World Heritage Site in waiting and has one of the largest Ramsar-listed wetlands in the world.¹⁴

Extending from the Great Barrier Reef Marine Park, the Commonwealth has responsibility for managing the Coral Sea Marine Park which covers 989,836 km², making it one of the world's largest marine parks. 15 It contains 49 different habitat types and is home to over 300 threatened species. 16

Explore Aboriginal language groups in Australia

See more information and maps for Queensland Marine Parks

See more information and maps on Australian Marine Parks

Endnotes

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