



# Sustainable Oceans and Coasts

## South Australia Perspectives



# Sustainable oceans and coasts

In 2020, the United Nations 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 South Australia.

## 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 South Australia's oceans and coasts from experts in the field. Speakers were asked to reflect upon their vision for sustainable oceans and coasts in South Australia, the unique features of South Australia'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 Associate Professor Beverley Clarke of Flinders University and Peter Owen, South Australian Director of the Wilderness Society Australia, and we thank them for their thoughtful contributions.



# South Australia workshop

On 18 September 2020, Future Earth Australia hosted the fourth in a series of online consultation workshops in each state and territory across the nation, for its Oceans and Coastal Sustainability initiative.

22 attendees in South Australia contributed to the discussion, representing:

- the research sector, from Flinders University and the University of Adelaide

- all levels of government working across science and environmental protection, fisheries, regional council networks, and water planning
- industry and business, particularly in fisheries and tourism
- civil society, namely environmental protection groups and policy and science advocates.

This document summarises discussions held around the fundamental elements, both from a South Australia perspective and pertaining to South Australia 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 South Australia 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 South Australia

South Australians had a number of aspirations for how oceans and coasts could function and how to achieve their vision. 'Integrated' and 'management' were often mentioned together, with attendees asserting that governance needs to be less siloed, less sectorally divided, and more collaborative. By designing governance to respond to the

'connectivity' between oceans, coasts, and the land, other values like productivity will result.

While 'sustainable' was the dominant response from South Australians, one attendee pointed out that the word is overused, instead offering 'equilibrium' to recognise that humans play a role in, fit into, and are affected by balance or a lack thereof in the system.

The sea and the coast are sources of community and social wellbeing. 'Healthy ecosystems' was advanced as a precondition for intergenerational sustainability (which includes social and economic benefits). One attendee gave the example of labelling fish as 'clients' in a Strategic Plan, to give function to the fact that taking care of fish means taking care of fishers.

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



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Dialogue also focused on the different facets of 'resilient', which meant to one participant that key ecosystem elements are maintained and functioning properly. To another, resilience was something to be built within communities, with a capacity for flexibility and planning for adaptation as the natural world changes. 'Planned' was mentioned as a priority, given that adapting to new conditions brought by climate and environmental change will require difficult conversations within communities about how land is zoned and used, now and in the future.

Lastly, 'recognition' in reference to the long occupation of these places by First Nations people was emphasised as an important principle to accompany and underpin these aspirations for the future.

## National vision

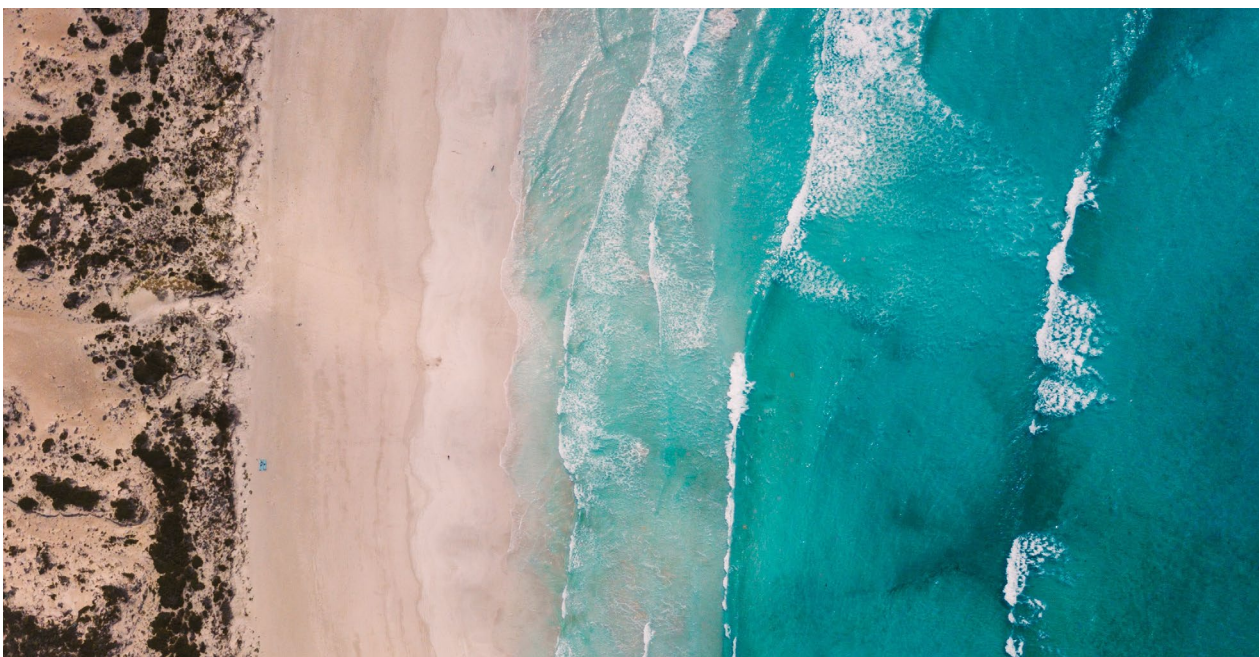
Discussion centred on the need for a governance agenda informed by scientific priorities, with improved collaboration across jurisdictional boundaries and communities connected with the latest information on oceans and coasts.

The session opened with a conversation about the amount of work that has already been done across the nation, at state and federal levels, to undertake ocean and coastal governance in a coordinated manner. Some expressed frustration that states do not work well together to integrate governance regimes for the greater good, given antagonistic relationships and different agendas. Significant work has been done to develop a National Oceans Act,

but a national oceans policy still requires political will to prompt action. Attendees were enthusiastic to build on these efforts by acknowledging the barriers where they sit.

Some participants felt that crisis is an important catalyst for action, but incremental crisis is not as compelling as a catastrophe. They suggested that a national strategy could incorporate growing awareness within the community and amongst decision makers about how much our oceans and coasts are changing over the medium and long term. A barrier to recognising the urgency of addressing major problems is that people base their perception of change on their personal experience, as opposed to change over a generation, so they do not have the perspective on what systems and places should look like in a healthy state.

South Australians felt that it should be a national priority to situate evidence and science as key pillars defining the governance agenda for oceans and coasts. They felt that priority governance issues are too often defined by interest groups and flavours of the day, and an important step in boosting the role of science is to create a societal expectation for the incorporation of science into governance. Creating a national dialogue that communicates information in a clear manner, so the public can connect with the evidence, is a priority. Additionally, an important part of maintaining a healthy relationship between science and democracy is creating an environment in which public servants and academics are free to speak plainly about their knowledge, particularly in respect to controversial issues.



# Knowledge

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## Key points:

- **We have a high volume of quality knowledge across ocean and coastal sustainability, but we need to integrate it in a systematic way to allow for scenario planning and decision making about the future of oceans and coasts**
- **'Recognising knowledge where it sits' must be a priority, including cultivating better working relationships with Traditional Owners and their knowledge**
- **Identifying knowledge gaps has been an ongoing process across decades, and we have a great opportunity to build upon existing work associated with state based marine planning.**

Attendees to the South Australian workshop focused on ways that existing knowledge might be better connected and integrated. By integrating existing information on a systems basis, we are better able to identify the most critical gaps that can address major drivers of change (such as global warming and settlement patterns), undertaking scenario planning (possibly on a bioregional basis) with the information we have, and use these scenarios as a platform for negotiating the kind of future we want. Additionally, some pointed out that better connections can reduce duplicating previous efforts, saving time and resources.

Across groups, South Australians believed that the relationship between First Nations people and their knowledge and Western knowledge systems has substantial room for improvement which could see us better manage oceans and coasts. This sentiment took many forms, including the desire to better understand Indigenous models that connect the inland, coast, sea, and humans as part of an integrated system, an interest in understanding how to seek permission to access and share traditional knowledge with respect, a need to build frameworks to enable efficient access to knowledge that has been shared already, and a desire to learn how to position Indigenous knowledge as a complement to Western knowledge across governance of oceans and coasts.

Accompanying an integrated view of our existing knowledge, South Australian attendees asserted that

we need a more responsive and consistent set of baseline data that can be used to monitor trends. This data should be accessible to all, so that all actors and sectors can collaborate and work from the same fundamental basis. This data would also enable us to differentiate between long term trends and acute events like marine heat waves. Further, it would enable us to incorporate cumulative change, rather than studying phenomena as independent occurrences.

The role of knowledge in guiding community was viewed from several perspectives, especially in terms of the way knowledge holders see their role in creating and supporting action. Some believed that a primary role of knowledge building is to inform the broader community about the state of oceans and coasts and provide guidance on what can be done about emerging trends. Others thought that evidence should be built only to provide more objective, technical support for decision making and should avoid engaging with social and cultural factors surrounding decision making, which can affect the perceived trustworthiness of the evidence.

There was a strong sense in South Australia that there is a substantial gap between what experts know about the health of oceans and coasts, and what is present in the public consciousness. It was noted that the skill and experience that non-government organisations and advocates have in engaging the public and raising awareness is not translated to or well-understood in the knowledge sector. Citizen science can play an important role in creating buy-in and increasing awareness in communities about oceans and coasts, as well as providing a mechanism for community knowledge to be integrated into formal structures.

Finally, participants acknowledged that there are practical knowledge gaps pertaining to fundamental implementation challenges. For example, we require innovative and effective means of generating more funding to not only meet the existing funding gap but keep up with the rising cost of changing coastlines and their management. In this context, a consistent eye on the issue of 'who pays' is critical.

# Institutional design and governance

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## Key points:

- An integrated vision and approach for the entire nation is needed, which can provide a legitimate umbrella into which federal, state, territory, and local strategies can work together
- Collaborative frameworks should be used to ensure that the high-level vision and approach respond to the lived reality of the public
- A broad institutional rethink is needed to embody an integrated ocean and coastal agenda, one that involves greater transparency around decision making and enforcement and provides coordination and structure to empower local governance.

In governance discussions, leadership and linkage were dominant themes that defined South Australian priorities. An integrated vision and approach, which is adopted and coordinated by all levels of government, will define a clear and coherent idea of what long-term success looks like. South Australian attendees asserted that without a widely well-known set of goals, existing priorities are not acted upon or enforced, monitoring and evaluation are inadequate, and statutory requirements are weak. However, some examples were given of local and state-based attempts to break down silos, including the South Australian Chief Executives Meetings and the New South Wales Marine Estate Planning activities.

Some participants felt that the current National Cabinet framework is not adequate because it lacks an environmental focus. Furthermore, previous advisory groups that played an important role in seeking information exchange for whole-of-government approaches to environmental issues no longer exist, and this is a major functional gap across the country. Participants expressed that marine biodiversity has moved out of focus, and the system of marine parks is under-resourced.

South Australian attendees pointed to leadership across governments as a key to raising the profile of oceans and coasts for government and non-government entities. High-level leadership across government levels can lend legitimacy and longevity to ocean and coastal governance, with an eye to maintain consistent governance actions across electoral cycles. This assists with inviting buy-in from both government and non-government entities that require strategic rationale for investing in a policy area. Indeed, coastal councils are recognising the strength that comes from collaborating across common issues, sharing approaches and information, and advocating as a group.

Collaborative frameworks and methods, in which stakeholders and communities have a means of shaping governance priorities, were seen as the most effective means of inviting long term buy-in from the public. Participants emphasised the current disconnect between local realities and priorities and those found in high-level governance strategies. They felt that people want to see how policy objectives and implementation methods link to their backyards, social networks, and values. South Australians stressed that stakeholders and community should be engaged early and consistently in developing a vision and strategy for oceans and coasts, helping to develop social license and keep people involved. The WildEyre Project was put forward as a South Australian example of a successful collaborative initiative that has brought groups together; it had a diverse steering committee and a mission to protect, conserve, utilise, and harmonise uses of the land and seascape in the Eyre region.

In institutional terms, many participants saw a case for major reform to the way organisations and government entities are structured and work together. New national institutions that are designed



to work on oceans and coasts as an integrated system are needed. Transparency and trustworthiness could be institutionalised through the creation of a statutory or independent body for ocean and coastal governance. A long-term coordination and funding role could be embodied in a structure like National Landcare, which empowers nationally coherent, locally led decision making.

Lastly, participants spoke about the practical capacity and implementation issues that prevent existing arrangements from maximising their potential. Firstly, local government practitioners in particular require greater support in accessing a range of expertise. Land managers at the local level are assumed to be able to cover a wide range of issues at the intersection of environment, economy, and community which in reality they cannot

adequately address alone, especially as the climate changes. Secondly, engagement of First Nations people and incorporation of their perspectives in projects is a mainstream requirement which is positive. However, both organisations and Indigenous people need greater resourcing and support to do this well and productively. This is particularly important in the context of consultation fatigue on the part of Indigenous people. Third, it is critical to consider succession and promote fresh faces and ideas in discussions about oceans and coasts. As is the case in many issues, circulation of the same ideas and people can slow innovation and create malaise. We need to ensure that we get the right balance of interests and perspectives at the table.





# Community engagement

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## Key points:

- Any strategy for ocean and coastal futures should be driven and owned by community
- There is great work already being done at the local level through social networks and programs, which can be made more impactful by joining up communities and sharing expertise
- Empowerment of communities to act as local stewards of oceans and coasts needs to be extended to deal with the emerging impacts of climate change. Communities are empowered by supporting the building blocks of their capacity, such as financing, caring for the wellbeing of active people, and building new leaders.

South Australian participants began their discussion by pointing out that communities have already been working on ocean and coastal stewardship activities for a long time, and that we need to build and support these efforts, not reinvent the wheel. Much can be gained from connecting these disparate efforts to enable mutual learning and understanding of existing initiatives. Collaboration at the local level is happening both informally through social networks and formally through programs and organisations. Councils are coming together to work on common issues, for example, as part of the South Australian Coastal Council Alliance. Coastcare was put forward as an effective model for community members to work together and facilitate learning between different places. Participants suggested that the program must be supported to deal with adaptation to climate change, as individuals and communities will need to lead in decision making about difficult issues like coastal retreat and relocation. Governments have an important role to play but will not be able to protect people from everything that is coming.

South Australians expressed that genuine empowerment of communities to deal with sustainability issues, particularly those associated with climate change, requires ongoing engagement. Pursuing an ongoing relationship requires attention to the practical foundations of such engagement on

the part of communities. For example, long-engaged individuals and leaders need to be cared for to avoid burn out and exhaustion. Additionally, critical knowledge and ways of working must be passed on to successors in a planned way, and young leaders should be encouraged through mentoring. Key to the sustainability of community buy-in is the energy that comes from hearing about and documenting success stories and securing sustainable financing models that can enable long term planning, capacity building, and action.

South Australian attendees emphasised that engagement with Traditional Owners is an imperative, and that it is our role to integrate with their ways and systems, not the other way around.

Participants felt that change in stewardship practices is driven by shifts in the social and cultural mindset, and that these shifts can be catalysed by direct experience and engagement with oceans and coasts. While much of Australia's population lives close to the coast and we celebrate this as part of our national identity, there is always more we can do to see our coastal identity encourage action for conservation and protection of these places. Not only is this the case for those communities adjacent to the coast, but inland populations who also have their own unique connection to the coast and the sea. Attendees suggested that fostering an active sense of connection can be facilitated through existing social networks and institutions like school and work activities, clubs, churches, and interest events like festivals. Additionally, citizen science is a more direct means of growing active engagement and learning about the way our coastal and marine ecosystems function.

In South Australia, there was a strong emphasis on the role of two-way, sustained communication between communities and marine and coastal experts. Participants pointed out that communities are frequently consulted, but rarely is there any meaningful follow up on how their inputs were used or what resulted from their consultation. There is also a sense that the general community would benefit from improved awareness and education about

oceans and coasts, expanding beyond the status quo of a small group of highly invested people. When it comes to inviting action and involvement, participants asserted that a communications strategy is required to give clear, understandable

knowledge and a pathway for what to do with that information. Finally, change is seen to be driven by shifts in the broad cultural and social mindset, and this must have a constructive relationship with science.





# Implementation

## Key points:

- Oceans and coasts need more thorough consideration and buy-in from political leaders, and the best way to achieve this is by raising awareness in their communities
- Partnership is vital to implementing any long-term strategy for sustainable, productive oceans and coasts, as it helps to align the influence of different players toward common goals
- Governance and regulatory regimes are old and not fit for dealing with the major issues defining oceans, coasts, and their communities. They are inflexible and siloed, leading to a lack of coordination and an inability to cope with rapid change.

Reflecting on the state of play in South Australia, there were a range of recommendations put forward by attendees as being vital for implementation, including a desire for partnerships, coherence across organisations and governments, and an elevated profile of ocean and coastal sustainability.

Many participants believed that ocean and coastal issues are 'out of sight, out of mind' when it comes to their position on the political agenda. Given the systemic nature of the forces that are shaping coastal and marine environments, South Australians believe that greater buy-in from political leaders at all levels is required if we are to see alignment of activities, appropriate investment, and attention to the issues. While some participants expressed a desire for bravery on the part of leaders, other maintained that the key to buy-in is building energy and demand in communities and constituencies. This can be accomplished by communicating science and stories and outlining the key actions and pathways to be taken as a result. It was noted that as climate change has climbed the political agenda, discussions are highly fractious, and care must be paid to avoiding divisiveness.

Attendees suggested that part of improving the visibility of ocean and coastal governance across sectors is the need to link the case for sustainability as being intrinsic to the other things we value, like social cohesion, economic progress, and health and

wellbeing. Building a strong social and economic case for ocean and coastal sustainability also assists with the loss of institutional knowledge that happens when a new Minister is appointed every four years.

In terms of governance design and structure, some South Australian participants noted that the establishment of an independent statutory body could fill the void in terms of coherent, long-term leadership.

It was also noted that many decision makers are not well versed enough in marine systems to make effective and context-appropriate decisions. Marine and coastal systems are unique and have different characteristics than terrestrial systems, so greater education around these elements is important. An added complication is that even though there is a wealth of information and evidence that can be put into practice, siloed institutional setups can cause information to fall between the crack of departments, and a lack of institutional memory can cause links to be lost when key personnel move.

The regulatory regime was seen to be old, inflexible, siloed, and generally ill-suited to take on the kinds of issues facing oceans and coasts. A number of participants suggested that there should be a governance review of legislation, institutions, and the way they work together. This could also have scope for looking to how the governance system can incorporate principles from the Uluru Convention to embed Indigenous ways of doing and knowing across government activities. Importantly, a coherent vision with performance indicators is needed to know what success looks like and whether progress is being made. There is an abundance of best practice examples, for example, in the New South Wales Marine Estate Planning process. Inspiration and learning can be gleaned from other nations in how they have managed governance.

While all levels of government have critical and unique roles to play in implementation of coastal and ocean sustainability, South Australians pointed out that this cannot be done alone. Partnerships are a critical requirement for any strategy to have longevity, and a framework to enable this is considered indispensable. In South Australia, the



Spencer Gulf Ecosystem and Development Initiative was highlighted as a quality examples of a framework in which industry, community, the knowledge sector, and government can be brought to the table in an open yet safe space, basing joint work on science and evidence.

Lastly, attendees noted that implementation efforts must be designed to acknowledge and account for the ways that public and private interests can be oriented to a long-term vision for the future. In this context, private land and asset ownership and public interest can either come into conflict, or work together. It is important to harness opportunities while managing conflicts.





# South Australia

South Australia is the fourth largest state by area, covering 984,321 km<sup>2</sup> in the central-southern part of the country.<sup>2</sup> Over 30 Indigenous groups are Traditional custodians of Country in South Australia<sup>3</sup>, and most land is currently subject to Native Title claim or has been confirmed<sup>4</sup>.

The state has an arid, Mediterranean climate, with some of the driest desert in the country, and the Mount Lofty-Flinders Ranges mountains to the north, the Nullarbor plain to the west, and fertile valleys close to the Adelaide plains.

By population South Australia is the fifth largest state, with 1.7 million residents<sup>5</sup>. South Australians are overwhelmingly based in Adelaide with 77% of people living in the capital and its surrounds.<sup>6</sup> The second largest city is Mount Gambier, home to 26,276 people in 2016.<sup>7</sup> Whyalla and Port Lincoln on the Eyre Peninsula, and Port Augusta, are important regional centres. More than 90% of South Australians live within 50 km of the coast and as such, activities associated with industry and recreation have a considerable impact on marine health.<sup>8</sup>

South Australia's marine industries are an important part of the economy and contributed \$2.3 billion (or 2% of the state's GDP) to South Australia during 2015–16<sup>9</sup>. Major sectors include shipbuilding, tourism,

commercial and recreational fishing, aquaculture, and energy (oil, gas, wave, and wind).

South Australia's coastline stretches for over 3,700 km, and Kangaroo Island is a key feature. There are eight marine bioregions in south Australia, each with their own character and ecological characteristics. Up to 85% of Southern Australia's marine species are found nowhere else<sup>10</sup>, and iconic species found in South Australian waters include the southern right whale, bottlenose dolphin, little penguin, and Australian sea lion. There are 26 marine parks that protect many habitats including beaches, seagrass beds, and mud habitats on the abyssal plain (5000 m deep).<sup>11</sup>

The Commonwealth protects four marine parks off the South Australian coast, consisting of the Great Australian Bight Marine Park, the Western Eyre Marine Park, the Murray Marine Park, and the Nelson Marine Park.

[Explore Aboriginal language groups in Australia](#)

[See more information and maps for South Australian Marine Parks](#)

[See more information and maps on Australian Marine Parks](#)

# Endnotes

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- 11 National Parks and Wildlife Service South Australia, 2019. *Op. cit.*