



Sustainable Oceans and Coasts

Victoria 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 Victoria.

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.

This initiative has been generously funded by the Lord Mayor's Charitable Foundation.

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 Victoria's oceans and coasts from experts in the field. Speakers were asked to reflect upon their vision for sustainable oceans and coasts in Victoria, the unique features of Victoria'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 Dr. Anthony Boxshall, Chair of the Victoria Marine and Coastal Council, and Dr. Peter Macreadie, Associate Professor at Deakin University, and we thank them for their thoughtful contributions.

Victoria workshop

On 14 September 2020, Future Earth Australia hosted the second in a series of online consultation workshops in each state and territory across the nation, for its Oceans and Coastal Sustainability initiative.

42 attendees in Victoria contributed to the discussion, representing:

- the research sector, from RMIT University, Deakin University, and the University of Melbourne
- Traditional Owners and managers across Country
- all levels of government working across community engagement, conservation planning, marine and coastal management, water and utilities, and coastal council networks
- industry and business, particularly in tourism

- civil society, in particular, large policy advocacy groups and philanthropy
- community, such as natural resource management, surf collectives, and nature and wildlife conservationists.

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



understand what they are designed to save: property or nature.

Oceans and coasts are integrated systems and human communities are an important part of that picture. On this basis, participants felt that education about our impact on oceans and coasts, and how these affect one another, is important.

Finally, participants discussed integration in relation to how we use and bring together different knowledge systems, and in this sense, Western science and Indigenous knowledge have a relationship to be proactively maintained. Western society has a great deal to learn about how Indigenous peoples manage Sea Country, and this also means that Traditional Owners must have a greater say in how we manage and treat oceans and coasts.

National vision

For a national vision, participants discussed concepts of social and spiritual connection, coherence in management across the country, and moral obligations.

As global citizens and as a nation charged with stewarding a continent, 'right' was put forward to refer to the moral imperative to care for what we have. In terms of governance, the response to the

COVID-19 pandemic by all governments was highlighted as an example of the importance of a coherent approach. As our oceans and coasts are fundamentally connected, we similarly need to enable leaders across Australia to govern oceans and coasts in an integrated manner.

Dialogue focused on the fact that our individual and community connections with oceans and coasts are unique and spiritual. It is important for us to look at the multifaceted ways that we relate to oceans and coasts nationally and the benefits we derive from them. One attendee put forward the notion that we often see the ocean and natural environment as separate to us, as opposed to seeing humans as a functional part of the ecosystem; changing our perception of how we fit into the natural world is an aspiration. Attendees felt that the best success in community engagement comes from raising the profile of ocean and coastal issues and meeting people where they are by engaging the values held in the broader community, as opposed to only speaking with those that care. They concluded that if we need communities to agree to change, we must take a holistic approach to their perceptions of change and the cultural frames they use.

Participants also agreed that engaging meaningfully with Indigenous people and building partnerships must be a long-term priority.



Knowledge

Key points:

- We require a better working understanding of how we, as social and living communities and people, and oceans and coasts, affect each other
- We require a nuanced knowledge of how different knowledge systems fit in with one another and work together, which sits at the crux of centralising Traditional Knowledge in our work with oceans and coasts and with community knowledge
- Providing real-time information about environmental, social, and economic change in coastal and ocean spaces, including development of trustworthy indicators, can help us to quickly determine whether an initiative is working.

Victorian attendees began their discussion by acknowledging the fundamental gaps that exist around basic knowledge on oceans and coastal systems, and even more crucially, how Australians affect and are affected by oceans and coasts. They expressed a desire for an increased understanding of the ways the oceans and coasts affect our health and wellbeing, psyche, and our identity and social world, and on the flip side, how our social and economic lives affect the coasts and oceans.

Many participants believed that in order to be effective stewards of ocean and coastal health, we need a better understanding of the way these places and their processes affect our wellbeing, identity, and role in a narrative. This can assist us in a range of ways, such as in designing governance initiatives that make sense to communities and invite people as active contributors to our oceans and coasts, and in better understanding how education and new information will be received, interpreted, and used by people and decision makers.

Participants acknowledged that our relationships and conceptions of oceans and coasts are not homogenous, suggesting that we need to develop a better working knowledge of how we respect and work with different knowledge systems and approaches. A top priority is integrating the knowledge and practice of Traditional Owners, which

requires a collaborative and nuanced understanding of how Western and Indigenous knowledge might work together on a case-by-case basis deemed appropriate by all parties. Other knowledge systems, such as community and other non-scientific knowledge, also have much to offer, but can be difficult to incorporate in higher-level contexts.

Indeed, participants reflected on the key role of community knowledge. One part of meaningfully incorporating community knowledge is the need to identify the nature, strengths, and opportunities of what people know about oceans and coasts. While many see citizens as needing to be educated, conversely, there are many communities that have a deep wealth of knowledge. However, this knowledge can often be isolated from others who might learn from it or put it into action at higher scales.

Therefore, within communities, we need to know which groups have particular expertise and how this changes across demographics. In the context of a rapidly changing climate and environment, it is important to have a better gauge of awareness within communities of the imminent threats to their wellbeing and how they use this information. For example, will a more comprehensive awareness urge pressure from governments to prepare and act? If so, what are the conditions that make this likely?

Participants also spoke about the substantial gaps in basic knowledge that exist in understanding the state and dynamics of how oceans and coasts are changing through time. In comparison to climate, where we still have much to learn about how it will behave in future but have an adequate knowledge of its state and fundamental properties, we lack this basic information for ocean systems. Participants suggested that a solution to this issue could involve a holistic mapping of what we know and subsequent strategic prioritisation and planning around the gaps of highest risk or impact.

Other attendees focused on a need for real-time information about environmental, social, and economic elements that can be expressed through trustworthy indicators. This is invaluable in enabling adaptive management, as we can quickly discern how successful different initiatives are. It also helps

us better gauge the drivers affecting oceans and coasts, such as land use planning in response to population and demographic change in urban areas.

Victorians identified a range of topical emerging issues that will be significant in defining the state of our oceans and coasts, including:

- marine pests
- climate change impacts and sea level rise
- the behaviour and properties of waves
- the changing profile of contamination, including for example, sediments, nutrients, and herbicides, and new contaminants such as pharmaceuticals
- major infrastructure requirements to protect built and intangible assets, and the innovative solutions that can adapt to changing conditions

- the ways that emotion, culture, belonging, and identity relate to policy and governance in ocean and coastal spaces, and how we can improve the relevance of these as fundamental rationale for decision making
- the most effective ways to communicate between decision makers, investors, and knowledge holders to individuals and back again, with finite resources
- how to meaningfully embed Traditional Owners' culture, knowledge, and action in governance, on their terms and as appropriate to them.



Institutional design and governance

Key points:

- There is a sense that coastal and marine issues are not seeing attention in the policy agenda proportionate to their urgency. Many citizens are not aware of what is coming, and consequently, these issues are not a high priority for governments, forcing a responsive, rather than anticipatory, regime
- We must build a dialogue about values and priorities when we talk about protection and our vision for the future, integrating both a top-down and bottom-up approach
- We require clearer attribution of responsibility between levels of government so everyone can do their job
- We must share power from the earliest stages of a process to shape governance, and normalise failure and trialling new approaches
- There are major policy areas in which there is a regulatory vacuum, and many others where regulation is static, siloed, and prone to legacy issues.

Salient in Victoria was a sense that broader society does not fully grasp the urgency of the imminent challenges facing oceans and coasts, and that we are in real danger of gross under-preparedness. Some felt that while the citizenry is aware of current problems like ocean pollution, they are not aware of coming threats. As such, these are not prioritised by government representatives or decision makers.

This is pronounced in Victoria in the coastal space, in which a large proportion of the coastline is public land; this dampens the political imperative to address coastal erosion and rising sea levels. In New South Wales, much of the coastline is inhabited by private property owners whose assets are falling into the ocean, creating a more urgent problem for governments.

Attendees noted that as is the case with other grand environmental challenges, the lack of a sharp crisis

point makes it difficult for major policy issues to come to the top of the agenda. The COVID-19 pandemic has starkly demonstrated the capacity our governments have in responding to emergencies.

Discussion also revolved around answering the question, *protecting what?* Coasts and oceans are intertwined, along with inland waterways and catchments, making the governance scope large and complex. This complexity requires governance and institutional arrangements that are fit-for-purpose, in that they are engaged across all levels of government with responsibilities clearly defined. When this is achieved through cooperation, all Australians benefit from effective governance in which institutions know their role.

Some attendees lamented that there is no federal policy in this space to comprehensively lead other governments and stakeholders. They suggested that ideal federal leadership should provide a policy framework and a clear target for other stakeholders to work towards, while also facilitating and supporting decentralised visioning, planning, and governance at a local scale.

Participants felt that local governments are often expected to take responsibility for too many issues that affect oceans and coasts. It was asserted that state governments need to clearly articulate the 'non-negotiables' for Councils to act upon. Victorian attendees praised the Victorian Marine and Coastal Policy 2020, which is seen to appropriately outline governance priorities that guide investment and take pressure off local governments to make strategic decisions they are not equipped to make. While responsibilities must be divided, it was suggested that an independent advisory body should be institutionalised as a reliable and trustworthy guide for policy making, as the Climate Authority is charged to do.

Attendees acknowledged that such a complex policy space requires skilful negotiation, incorporating both top-down leadership to provide coherence and

bottom-up deliberation that centres the values, priorities, strengths, and weaknesses of local communities and places. Negotiation of the top-down and bottom-up is vital for building and maintaining social license in communities, without which governance of oceans and coasts cannot be effective.

Victorians also spoke to a number of practical and ethical considerations. An integrated top-down and bottom-up approach requires skilled negotiating of localised information and values (critical to ownership in place) and systematic coherence (required to be context-less). This is particularly pertinent when meaningfully centralising the management regimes, protocols, and customs of Traditional Owners that are unique, hyper-localised, and protected by cultural custom. Attendees believe that the Victorian Department of Water, Environment, Land and Planning has navigated this space well, in being cautious, respectful, and investigative as part of their learning process.

In regulatory terms, some felt that our oceans and coasts would benefit from reforming inflexible, static legislation that creates legacy problems, and in its place creating new regulation for emerging sectors that need stability. For example, offshore energy presents major opportunities in the blue economy, but there is a policy vacuum to provide guidance on how it should develop in line with public expectations. A range of existing regulation is static, siloed, and ill-suited to adapting to changing pressures. For example, infrastructure and planning regulations frequently lead to legacy difficulties and lock in.

Participants felt that the megatrends that will define our oceans and coasts require our governance regimes and institutions to normalise experimentation, failure, and trialling, which are fundamental to innovation and adaptive governance.



Community engagement

Key points:

- We must prioritise dialogue on both vision and management; this is the essence of an iteratively co-designed, co-developed, and co-implemented approach
- Engagement of community in visioning and management requires that ocean and coastal work be embedded in the local networks that make up the community, and that engagement be made real through on-going projects, citizen science, and monitoring
- We need a dynamic understanding of the diversity of values and priorities within and between communities
- Resourcing is required for all this work; productive and positive relationships can only be built on a long-term, stable basis.

It's never too early to engage the public, and it's never too late. Most of engagement failures come from power holders being too concerned about having 'the right message' to go to the public with. We need to be open to having a risk-friendly approach whereby they go to the public with "we have this problem". There is often a lack of clarity around what the negotiables and non-negotiables are.

– Senior State Government Advisor

When reflecting on the role of community engagement, Victorians suggested that it must be central to our collective stewardship of oceans and coasts, first and foremost in defining exactly what we are stewarding. Community empowerment is important in both defining the long-term vision for oceans and coasts, and in co-managing partnerships. Sharing power to define these elements is at the core of co-design, co-production, and co-implementation. This is particularly vital in inviting contribution by Traditional Owners and requires more than consultation on a policy that is already developed. Rather, it opens dialogue around questions such as, what are we fighting? What do we want? What ideas and structures will we need to change, reform, or dismantle to achieve it?

Participants acknowledged that a certain amount of political risk is involved in this type of power sharing, but highlighted the benefits of co-management. Implementation of a vision is not possible without credibility and action in the local community to not only engage in co-management, but also avoid actively undermining what can be seen as a threat. New Zealand's water co-management regimes were touted as example of how this can be done at scale.

Some attendees focused on the key role of dialogue, and the skill that is required to create proactive communication. It should offer consistent feedback on the ways that community input have affected decision making, and outline the next steps of the process. Too often, crucial linking pieces are omitted from these communications. For instance, it should be clear to communities why continued engagement is relevant to their interest, and there should be consistent opportunities for communities to hold authorities accountable for implementation.

To develop and maintain community engagement, participants suggested that ocean and coastal work should be embedded into local community networks. Furthermore, engagement can move into tangible on-going projects, citizen science initiatives, and monitoring plans. These projects can be developed iteratively to keep people engaged and invite new contributions.

Victorians asserted that communities are not homogenous, and attention must be paid to a comprehensive and dynamic understanding of the diversity of values associated with oceans and coasts. This involves creating safe spaces and a range of avenues through which all feel they can contribute. Participants suggested that invitations to engagement activities should be extended to a broad range of community groups, including those that are not residential to coastal areas but are also linked through tourism, use of inland water catchments, and a sense of care as Australian citizens. Indeed, while it may be easy to identify values that certain groups associate with the coast, values associated with ocean landscapes are more difficult to assign, given that most people do not

have a direct relationship with the ocean. A better understanding of this gradient can be useful for governance.

Lastly, but crucially, attendees universally acknowledged that proper community engagement requires resourcing, time, and expertise.



Implementation

Key points:

- We could make enormous progress by creating structures to facilitate capacity and knowledge sharing between communities
- We must understand and work with people's attitudes and values for the oceans and coasts, and within their psychological means
- We lack the basics for putting vision into action, including a national planning framework and co-produced work on the major barriers to implementation and what we will do about them.

Victoria has great capability to implement a vision for sustainable and productive oceans and coasts. There is a wealth of community knowledge, expertise across research and practice, and passion across sectors to work towards common goals.

Participants spoke to the key role of knowledge sharing and capacity building in implementing activities. We require structures in which active community members, authorities, thinkers, and investors can discuss their approaches to similar issues and learn from one another. Bringing local best practice out of isolation from other examples has deep impact, and this can be accompanied by training to improve capacity. Not only is best practice usefully shared horizontally, but it is also powerful in informing decisions at state and federal government levels, affecting investment decisions in the private sector, and guiding researchers in responding to on-the-ground information needs.

Attendees spoke to a range of important factors to successful implementation, including the need to meet others where they are; that is, to be cognisant

of their attitudes and values for oceans and coasts. These included:

- A vision must be contextualised by proximity to the interests of communities and stakeholders and make clear the value proposition so they can be co-owners.
- We must push relevant issues up the policy agenda by engaging people's love of the ocean and their coast, building a coherent narrative of their relationship.
- The complexity of ocean and coastal issues, their causes, and the possible solutions must be communicated skilfully and in manageable parts.
- All of these objectives could be supported by mapping the social, cultural, economic, and natural values associated with oceans and coasts, at a national level.

Victorian attendees emphasised that while there are a range of plans, the gap is in putting them into action. They suggested that a co-designed program with stakeholders and communities aimed specifically at identifying and breaking down the major barriers between vision and action would be a valuable contribution. As previously indicated, this would also include clear definition of responsibilities between levels of government and a variety of stakeholders.

Finally, a critical and difficult requirement for successful implementation is the sharing of power from the earliest stages, particularly with Traditional Owners and to create safe spaces where individuals feel they can contribute.

Victoria

Victoria is Australia's second smallest state by area, spanning 227,600 km² in the south-east corner of the continent.² There are a number of Indigenous Nations in Victoria, with 38 languages having been identified. A significant proportion of the state has Native Title determinations that are held by, "the Yorta Yorta peoples, the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagulk peoples of the Wimmera, the Gunditjmara Peoples, the Gunaikurnai people and the Gunditjmara and Eastern Maar peoples."³

Despite its small size, it is the second most populous state, with almost 6.7 million people calling Victoria home in 2020.⁴ While the vast majority of Victoria's population live in the state capital Melbourne; Geelong, Ballarat, and Bendigo are important regional centres. Increasing population density in Melbourne, the Mornington Peninsula, and Geelong (which are situated around Port Phillip Bay) exposes larger numbers to the impacts of climate change and coastal hazards.⁵ Areas within two hours of Melbourne like Bellarine Peninsula, Surf Coast, and Bass Coast have experienced population growth in recent years, though outside of these areas, population on the coast is modest or even declining.⁶ Tourists and part-time residents represent a significant flow and have important implications for coastal infrastructure and services, natural areas and landscapes, and community and culture. While tourism and holiday residents frequent many coastal areas, the Great Ocean Road and Twelve Apostles in the south-west are noteworthy as a nationally treasured coast-scape.

Victoria has around 2000 km of diverse coastline which has landscapes ranging from pristine beaches, heathland and forest, to sheer cliffs⁷; many areas uninhabited or occupied by small towns, contrasting with the southern coast where Melbourne and Geelong sit on Port Phillip Bay. Population sprawl across the coast has been limited by the large degree of public ownership, instead channelling development inland.⁸ A composite of 20 national parks, state forests, and coastal parks cover much of the coastline and extend to waters 5.5 km offshore.⁹ Being isolated from other continents for millions of years, 90% of the marine life found in Victoria's marine ecosystems is found nowhere else in the world.¹⁰ Marine parks and sanctuaries cover 5.3% of Victoria's waters, with commercial and recreational fishing prohibited in these zones.¹¹

There are a range of industries directly dependent on the coastal and marine in Victoria, including fishing, aquaculture, processing industries, and services like water transport¹²—these are situated in different parts of the state, for example, boat building and water transport are largely based in Melbourne and Geelong given the size of port facilities in those areas. Tourism and associated services are important contributors to local economies on the coast.

[Explore Aboriginal language groups in Australia](#)

[See more information and maps for Victorian Marine National Parks](#)

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

Endnotes

- 1 <https://www.oceandecade.org/about?tab=our-vision>
- 2 Visit Victoria, 2020. *About Victoria*. Available at: visitvictoria.com/Information/About-Victoria
- 3 ANTaR Victoria, 2020. *Local Nations: Language Groups*. Available at: <https://antarvictoria.org.au/local-nations#:~:text=Victoria%20currently%20has%20five%20determinations,the%20Gunditjmaraand%20Eastern%20Maar%20peoples>
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- 5 F McKenzie, 2020. *Coastal Demographics in Victoria*. Department of Environment, Land, Water and Planning. Available at: https://www.marineandcoastalouncil.vic.gov.au/__data/assets/pdf_file/0027/455904/Coastal-Demographics-in-Victoria.pdf
- 6 McKenzie *op. cit.*
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- 10 Parks Victoria, 2020. *Beaches and coasts*. Available at: <https://www.parks.vic.gov.au/get-into-nature/beaches-and-coasts>
- 11 Department of Environment, Land, Water and Planning, 2020. *Marine national parks and sanctuaries*. Available at: <https://www.marineandcoasts.vic.gov.au/marine/marine-national-parks-and-sanctuaries>
- 12 McKenzie *op. cit.*