National Climate Change Adaptation
Department of Climate Change, Energy, the Environment and Water
GPO Box 3090,
Canberra ACT 2601, Australia
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Dear Climate Change Adaptation Secretariat

Submission on the National Adaptation Issues Paper

Emeritus Professor Barbara Norman, Dr Jo Mummery and Emeritus Professor Bruce Thom

The Australian Coastal Society (ACS) welcomes the development of a national adaptation plan for Australia. The ACS is 'dedicated to healthy coastal ecosystems, vibrant coastal communities and sustainable use of coastal resources', and comprises members with strong professional, academic and practitioner expertise (for more information see - https://australiancoastalsociety.org.au/).

The approach of a first pass national risk assessment feeding into the draft adaptation plan is supported, presumably informed later by the more detailed second pass assessment. As indicated in the paper, the development of a national adaptation plan is needed and brings Australia in line with adaptation initiatives in most OECD countries.

This is a concise submission recognising that there are current and future opportunities for engagement in this process. The ACS has been party to several discussions to date through its individual members; and would welcome further opportunities for discussion and contribution.

Overall comments

1. The risks in relation to coastal communities for the adaptation plan stem from the first pass risk assessment which recognises that at least five of the ten key climate hazards identified are specific to or highly linked to coastal regions. However, the approach taken to review risks within systems or domains of national importance appears to have constrained the identification of regions of vulnerability under a changing climate. In our view this needs to be moderated by real life experience of coastal storms, cyclones, and a high level of concern by coastal communities.

   In addition, there is growing concern across the research community that higher-impact and

lower probability climate and weather events, which could be catastrophic in coastal areas, are not receiving sufficient consideration in risk assessments by either governments or businesses. The current approach may lead to an underestimation of coastal risks and insufficient policy and investment attention in building preparedness for managing future impacts relevant to most Australians.

2. The Issues paper highlights risks to regional communities but does not clearly recognise risks to major cities from coastal inundation and impacts. Both are at risk and arguably the greatest risk is where there is an overlap of a significant urban population, critical infrastructure, and coastal storms/flooding. In a largely coastal urban nation, the overlay of current and future urban growth corridors with projected climate risks will identify and highlight the immediate need for coast and climate change planning for coastal communities, cities, and infrastructure.

3. Parallel to the national adaptation plan process is the development of the *national urban policy* that will address 'urgent challenges facing our major cities – from equitable access to jobs, homes and services, to climate impacts and decarbonisation. It will bring together a vision for sustainable growth in our cities'. It is very important that these two significant national policies, that have spatial implications for the pattern of urban development, mutually support each other.

More specific comments.

1. Foundations for a national adaptation plan should be embedded in an intergovernmental agreement that is supported by regulation. Such an approach will help provide the continuity needed to address coastal environmental, social, cultural, and economic risks of this magnitude and temporal duration. We need to learn from the experience of previous effective initiatives, including the existence for a period of a National Coastal Council, as well as from relevant other countries. The USA with its set of national environmental laws dating back to 1972 provide a template for specific sector legislation that establishes partnerships with states and through them local government. Such partnerships include guidance and funding arrangements and could embrace an ongoing national commitment to coastal management including a national estuaries program. The alignment of other national initiatives and regulation, such as that relevant to insurance, insurance affordability, and disaster support, is also needed with a national approach to managing coastal risk.

2. Most of the Australian population lives in coastal urban centres. Here the threat of inundation as sea levels continue to rise is very high. A key issue that has not received adequate consideration to date is the effectiveness of stormwater drains that are at present tied in elevation to current low water mark. Rising low tide levels "closes" the drainage window with implications for urban stormwater and sewer overflows. A well-adapted plan requires working with water authorities and local councils in understanding the risks of this happening at certain time and spatial scales and the need to undertake costly measures using a pathways approach. There is a previous model of federal support for local councils in stormwater management: Coast and Clean Seas Program, 1998-2002 and the national Local Adaptation Pathways Program 2010-13. Other issues that need more attention are the risks of toxic waste emerging from historic landfill sites in the coastal zone, that have only been clay-capped and could be exposed by greater storm events (one estimate is that there could be more than 500 such sites), and more thorough risk assessment of coastal critical infrastructure in a changing climate, including underground city transport tunnels.

3. Opportunities for institutional change call for the establishment of a formal partnership with states and local government. Many of the risks facing communities rest with local councils,

which are challenged by significant knowledge and capacity gaps impacting on their ability to cope with climate change impacts (e.g. increased heat, floods, coastal storm inundation, sea level rise, modification of estuarine waterway health with increasing pollutants and higher water temperatures). The *Sustainable Development Act* of Canada is an example of a national approach in a federated country that has received bi-partisan support over several years. This is supported by an integrated national *Sustainable Development Strategy* (https://www.canada.ca/en/environment-climate-change/services/climate-change/federal-sustainable-development-strategy.html).

4. National leadership is also needed to overcome barriers to strengthening adaptation, including that arising from policy silos and the differing priorities of the three levels of government and other key coastal organisations such as utilities. There are areas where facilitation is needed for information and learning to be shared, for example across state authorities like ports or water utilities. Adaptation must be embedded within all sections of all governments as continuing climate change will become more costly to budgets and the well-being of Australians.

5. Healthy and resilient coastal environments and communities require robust and long-term measures that can mitigate the cumulative impacts especially from catchment runoff and estuary dredging. The national government can ensure the protection of sites of national environmental significance including a range of estuaries. While this is a matter for EPBC legislation, the link to climate adaptation can be demonstrated through the way driving forces (e.g. sea level rise) can be exacerbated by damaging cumulative impacts.

The following responses are provided to some of the key consultation questions from the perspective of the ACS:

1. *The plan will respond to the priority nationally significant risks identified in the National Climate Risk Assessment. Within those, what areas should be the Commonwealth's priority for this National Adaptation Plan and why?*

As indicated above, the National Adaptation Plan needs to recognise the significant challenges facing a highly urbanised coastal nation. That is, much of the current and future risk lies where a large percentage of the population lives. Priorities need to be developed, in consultation with urban and regional communities, that can identify the 'hotspots' for immediate and near-term action.

There are many areas where development has occurred in coastal risk zones, and the most significant of these legacy areas need to be transparently identified and supported by partnerships to understand and reduce risks. Further examples include coastal planning to mitigate future risks, investing in healthy coastal landscapes to create natural buffers, and providing up to date timely data on hazards, risks and risk management options for professional decision-makers and local communities.

Finally, there is considerable expertise within the Australian Coastal Society and the Coast 2 Coast conferences are an effective mechanism to pull together emerging insights on coasts research from all around Australia. There is an opportunity to work together that could enable a better linkage between research outputs and plan development and implementation.

2. *What is working well in adaptation policy governance at the national level? Are there more opportunities for collaboration, or institutional changes that will help build a more adapted Australia?*

There is clearly significant catch up that needs to be done to fill the current gaps in coastal leadership, management and planning after 10 years of relative inaction at the national level. These were largely identified in the bi-partisan 2009 Parliamentary Inquiry report, *Managing our coastal zone in a changing climate: the time to act is now,* and in the report *Developing a national coastal adaptation agenda* from the 2010 national climate change forum hosted by the then federal Minister for Climate Change and Water. These reports, accompanied by the report from the Inter-jurisdictional Coastal Hazards Working Group, consistently identify a substantial national coastal adaptation agenda is needed to manage risks, built on collaboration.

As indicated above, the magnitude of coastal risks from climate change would benefit from greater national leadership and collaboration. There are lessons that can be learned from previous initiatives led by the Australian Government. There is also a need to clearly identify and address barriers to effective adaptation, including from regulation based on historic and static climate, siloed policy, and disjuncts between capacity and responsibility. A National Coastal Adaptation Advisory Council, or at a minimum, a coastal focus within a transparent National Adaptation Advisory Council, would be a useful start.

3. *What policies could be strengthened or added as the highest priorities?*

Higher education for practitioner qualifications on climate change is also needed and would benefit from facilitation, particularly where the magnitude of climate change suggests reforms may be needed to BAU practice. The UK has some examples of this e.g. climate change course content for accreditation in some professions in built environment where vulnerability is high (see e.g. the UK Construction Industry Council's toolkit on education and qualification). Formal vocational training for decision-makers and resource managers in vulnerable regions and managing at-risk assets is also useful. Good previous examples of training for coastal engineers with climate change content went very well and can be readily built on.

In this context, the development of an adaptation plan is a significant step forward. As identified in the Issues paper, this needs to be undertaken in collaboration with several major national policy initiatives currently underway – the proposed National Urban Policy, measures that will contribute to the net zero transition that also need to enhance resilience and adaptation outcomes, next steps for the National Environmental Science Program and the Australian Climate Service, initiatives to address vulnerable populations including through affordable housing that also needs to be resilient, and intended partnerships with First Nations people on managing land and water, as well as relevant Regional Development policies. Any revision of the EPBC Act should clearly recognise the impacts of climate change that are with us now and will continue for centuries beyond a stabilisation of emissions.

4. *What are the biggest opportunities for First Nations peoples in the context of the National Adaptation Plan?*

Significant coastal regions are already managed and cared for by First Nations communities, particularly in northern Australia. The active involvement of First Nations peoples in coastal adaptation is strongly supported by the ACS and should be mainstream around coastal Australia.

The Torres Strait Climate Centre of Excellence is one example of a good initiative. There needs to be consistent consideration and support for other key regions that are both highly vulnerable and culturally significant, led by First Nations groups.

There are now accepted roles for the national government in several areas directly informing coastal adaptation; the 2021 Cross-jurisdictional Coastal Hazards Working Group report entitled T*owards a National Collaborative Approach to Managing Coastal Hazards in Australia*; the development of a *National Urban Policy*, Higher Education, and meaningful engagement of First Nations peoples in coastal, land use and marine policies.

In the above context, the ACS welcomes the development of the national adaptation plan and looks forward to seeing the next iteration. A healthy coastal environment can provide a very resilient buffer for coastal communities and needs protection and investment for the short and longer term.

On behalf of the ACS

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