

LGA SA
23ADL-0783
27 February 2024

Engagement Summary Report Stage One

Climate Ready Coasts Foundations Project

Engagement Summary Report Stage One

27 February 2024

Lead consultant	URPS 27 Halifax Street Enter via Symonds Pl Adelaide SA 5000 (08) 8333 7999 urps.com.au
In association with	Hatch
Prepared for	LGA SA
Consultant Project Manager	Anna Pannell, Associate Director apannell@urps.com.au
URPS Ref	23ADL-0783

Document history and status

Revision	Date	Author	Reviewed	Details
V1	19.01.24	E. Mansfield	N. Halsey, A. Sandery, M. Arman	Draft for client review
V2	24.01.24	E. Mansfield	N. Halsey, A. Pannell, A. Sandery, M. Arman	Updated based on client feedback
V3	23.02.24	E. Mansfield	N. Halsey, A. Pannell	Updated based on client feedback
V4	27.02.23	E. Mansfield, N. Halsey	A. Sandery	Updated based following review

We acknowledge the Kaurna People as the Traditional Custodians of the land on which we work and pay respect to their Elders past, present and emerging.

© URPS. All rights reserved; these materials are copyright. No part may be reproduced or copied in any way, form or by any means without prior permission. This report has been prepared for URPS' client. URPS and its associated consultants are not liable to any person or entity for any damage or loss that has occurred, or may occur, in relation to that person or entity taking or not taking action in respect of any representation, statement, opinion or advice referred to herein.

https://urpsau.sharepoint.com/sites/Synergy/Shared Documents/Projects/23ADL/23ADL-0783 - Climate Ready Coasts Foundation Project/Reports/240227_R3_v4_Engagement summary report.docx

Contents

Engagement snapshot	i
Considerations for the content of the Standards	i
Considerations for the implementation of the Standards	iii
1. Introduction	1
2. Regional workshops with councils	3
2.1 Council experiences of coastal adaptation planning	4
2.2 Considerations for the Standards – what we heard	6
2.3 Regional workshop feedback forms	12
3. Agency discussions	14
3.1 Where agencies are at.....	14
3.2 Challenges	16
3.3 Considerations for the Standards – what we heard	16

Appendix A - Regional workshop meeting summaries

Appendix B – State agency discussion summaries

Engagement snapshot

The SA Climate Ready Coasts program has been initiated to accelerate coastal adaptation planning and drive a more strategic and integrated approach to coastal management in South Australia¹.

One of the first components of the program is to develop Coastal Adaptation Planning Standards (Standards) that provide principles and methodologies for coastal adaptation that are agreed upon and adopted by local and state governments. This component of the program also involves developing the Framework around the Standards including determining the policy placement, roles and responsibilities, and other arrangements required to successfully implement the Standards.

The first stage of engagement with local and state government stakeholders has been undertaken to inform the preparation of the Standards. A series of workshops and discussions were undertaken to understand local and state government experiences in coastal adaptation planning, what is needed from the Standards in relation to content and scope, and how the Standards could be best implemented.

60 staff from 30 coastal councils participated in regional workshops. 59 State Government staff from 11 State Government agencies participated in meetings. Further to this 1:1 interviews were held with representatives from each coastal Council; at the time of reporting 21 interviews had been conducted.

This Engagement Summary Report provides a summary of the first stage of engagement for the Standards. It includes an outline of the challenges and learnings about coastal adaptation that councils and state government agencies have encountered, and the resulting considerations to inform the development and implementation of the Standards to support their success.

More detailed summaries of each regional workshop and agency discussions are included in Appendix A and B.

A 'snapshot' of the key themes that emerged from the first stage of engagement is provided below. More detailed description of the feedback gathered by the engagement is provided in the body of this report.

Considerations for the content of the Standards

Local and state government stakeholders provided the following feedback about what they would like to see in the content of the Standards and the framework to support their implementation. Commonly raised feedback has been grouped under four themes: engagement, governance, technical matters, and presentation of the Standards.

¹ Local Government Association of SA 2024, SA Climate Ready Coasts, accessible via <https://www.lga.sa.gov.au/about/what-we-do/sa-climate-ready-coasts#:~:text=The%20SA%20Climate%20Ready%20Coasts%20program%20will%20deliver%20a%20series,improve%20understanding%20of%20coastal%20risk>

Support the delivery of effective engagement on coastal adaptation

- The Standards should:
 - Provide guidance for the community, stakeholder and Elected Member engagement to be undertaken when preparing a coastal adaptation plan. This advice should include who and when to engage, provide case studies of successful and unsuccessful engagement, and convey the importance of educating the community and stakeholders, getting everyone on the same page, and identify agreed community values.
 - Communicate the value proposition of coastal adaptation to generate commitment to coastal adaptation actions from Elected Members, the community and other stakeholders. This includes explaining why councils should undertake coastal adaptation and how councils and communities will benefit and being clear that while coastal adaptation planning does not remove complexity, it provides the information councils need to manage this complex process.

Clarify and improve governance arrangements around coastal adaptation planning

- The Standards should:
 - Clarify roles and responsibilities in coastal management and adaptation planning. There is a need to explain what councils are expected to do in relation to coastal adaptation and clarify the role the state government and other stakeholders play in coastal adaptation, including across multiple land tenures such as Crown land and private land.
 - Provide links to other local and state government plans, processes and funding requirements. This includes council's long term financial plans, asset management plans, the Planning & Design Code, and funding avenues at a local, state and federal government level.

Clarify a range of technical matters for planning for and implementing coastal adaptation

- The Standards should:
 - Provide guidance on finding, using, gathering and interpreting data. This includes guidance on what existing data councils should access and where they can find it (including historical data), which climate change projections to use, what additional data councils should be collecting, and how this data can be used to inform decision making about coastal adaptation.
 - Consider the level of prescription required regarding their use. Some would like the Standards to describe the process and options for coastal adaptation but allow for flexibility. This could be achieved through a principles-based approach which would enable coastal adaptation planning to match local circumstances and resourcing. Others would like a more prescriptive approach which provides minimum standards, quality control and consistency across councils.
 - Provide a prioritisation process to assist with adaptation option consideration and selection at both a local and state level. This includes explaining how 'intangible' elements such as community values can be captured in multi-criteria analysis alongside quantitative analysis, and how weighting of values can be approached. The Standards should also encourage rigorous options analysis processes underpinned by comprehensive qualitative and quantitative data.
 - Promote taking a holistic, risk-based, long-term and staged approach to coastal adaptation.

- Explain the different scales and scope that coastal adaptation planning can occur at including across a range of land tenures, for specific sites or locality, in regional and metropolitan areas, for a single council or groups of councils, and for different stakeholders.
- Ensure that coastal adaptation plans consider natural assets and nature-based approaches to adaptation.
- Promote monitoring and evaluation of coastal management actions and review of coastal adaptation plans as a result. This includes explaining the level of monitoring required by councils to ensure they do not “way over cook”² or “way under cook” the monitoring.
- Provide support in defining the study area for a plan, acknowledging the coastal system is likely to extend beyond jurisdictional boundaries and an ‘catchment to coast’ approach is likely to be needed. Further to this, acknowledging that coastal hazards are a sub set of natural hazards, the interconnected and compound risk needs to be considered.
- Recognise the unique, linked nature of Adelaide’s metropolitan coasts and the coordinated response that is required to manage sand movement.

Ensure the presentation of the Standards is user-friendly

- The Standards should:
 - Be user-friendly and be concise, practical, clear and accessible, with inclusion of case studies and visual elements such as flow charts, graphics and photographs.

Considerations for the implementation of the Standards

Local and state government stakeholders provided the following feedback about what is needed to support the successful implementation of the Standards. Commonly raised feedback has been grouped under five key themes: quality control, governance, funding, data and education.

Deliver quality control

- The Standards should:
 - Provide a process for independent technical review and advice for councils’ coastal adaptation plan preparation and implementation that delivers quality control. Advice and feedback provided throughout the planning process will reduce the risk that adaptation plans have not been appropriately prepared and will provide greater certainty for councils. Some stakeholders expressed a strong preference for advice, quality checks and some sort of formal endorsement eg from the Coast Protection Board (or similar), while others would like this to be optional to avoid overcomplicating the process.

² Where comments are written in “quotation marks” this denotes a direct quote recorded during the engagement.

Consider improving or establishing new governance arrangements to support coastal adaptation planning and implementation

- The Standards should:
 - Consider establishing mechanisms or levers to support the implementation of the Standards. There were differing views about whether this mechanism should be legislative or whether there are other levers such as funding or development requirements that could be used to ensure the Standards are implemented.
 - Consider how the state government can provide greater leadership to drive coastal adaptation in South Australia to reduce the burden on local governments who have limited expertise, resources and capacity. This is particularly the case in regional areas.
 - Facilitate greater collaboration between local, state and federal government to develop and implement coastal adaptation planning.
 - Consider how to facilitate better integration of coastal adaptation into land use planning including through Regional Plans and the Planning & Design Code.
 - Consider new governance and funding models to support preparation and implementation of coastal adaptation plans such as that used by the Stormwater Management Authority.
 - Consider opportunities for coastal staff shared between multiple councils, or opportunities for coastal adaptation staff to regularly come together in regional groups to share resources and knowledge.

Provide more and long-term funding

- The Standards should:
 - Consider how to deliver more and longer-term funding for both coastal adaptation planning and implementation, with general preference from stakeholders for incentivising coastal adaptation planning through access to funding rather than making the process mandatory.

Improve provision and understanding of coastal data

The Standards should:

- Provide more accurate and localised coastal data and mapping in a centralized location.
- Provide support for using, mapping and interpreting coastal data.
- Clarify local and state government roles in monitoring and collecting coastal data, including advocacy for a state-wide coastal monitoring program led by the state government.
- Map coastal adaptation plans across the state to identify where coastal adaptation plans have been prepared and what their key findings are.

Educate councils on coastal adaptation

Training on coastal risks and coastal adaptation planning for councils including use of the Standards should be delivered to support their implementation.

1. Introduction

The SA Climate Ready Coasts program has been initiated to accelerate coastal adaptation planning and drive a more strategic and integrated approach to coastal management in South Australia. The program is being led by the Local Government Association of SA (LGA) working in partnership with the SA Coast Protection Board (CPB), Department for Environment and Water (DEW), the Adelaide Coastal councils Network (ACCN), and SA Coastal councils Alliance (SACCA).

The SA Climate Ready Coasts program is comprised of a number of projects which together will support coastal adaptation planning in South Australia. This is outlined in Figure 1 below.

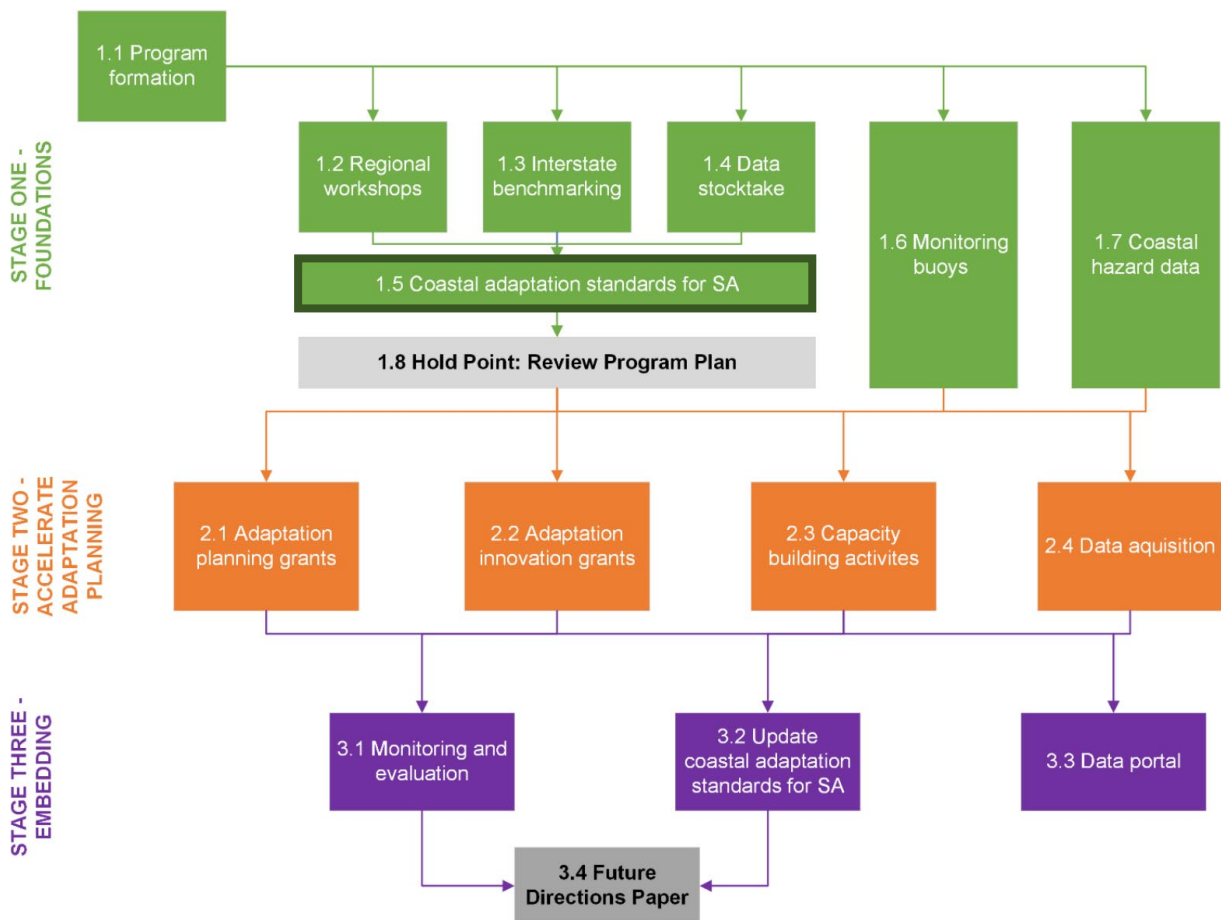


Figure 1 – Climate Ready Coasts program stages

Stage One of the program is the Foundations Project. A significant task in this stage is to develop Coastal Adaptation Planning Standards (Standards) that will provide principles and methodologies for coastal adaptation that are agreed upon and adopted by local and state government. These Standards will build on the LGA’s Coastal Adaptation Guidelines which were last updated in 2020 to create a consistent state-wide approach that outline the baseline (minimum) standards for coastal adaptation planning and provide supporting tools and resources. A Framework to support the effective implementation of the Standards will also be developed in this stage.

The Foundations Project was commenced in late 2023 and the first stage has involved engagement with local and state government to understand their experiences to date in coastal adaptation planning, what is needed from the Standards in relation to content and scope, and how the Standards could be best implemented. This stage of engagement included the following engagement activities:

- Seven regional workshops with staff from coastal councils across South Australia.
- Post-regional workshop feedback forms for attendees.
- Discussions with key state agencies.

60 staff from 30 coastal councils participated in the regional workshops. 18 staff from seven councils completed a post-regional workshop feedback form. 59 state government staff from 11 state government agencies participated in meetings.

Further to this, as part of the Foundations Project, 1:1 interviews with coastal Councils are being undertaken to inform the maturity of each Council in coastal adaptation (interviews are being undertaken by Foundations Project lead, Hatch), the maturity assessment is intended to support future stages of the Climate Ready Coasts program. The 1:1 interviews have also provided an opportunity for coastal Councils to speak to their challenges and learnings in coastal adaptation (or in coastal management more broadly), at the time of reporting 21 1:1 interviews have been conducted, the key themes arising are reflected within this report.

This report provides a summary of this first stage of engagement and resulting considerations to inform the development and implementation of the Standards. More detailed summaries of each regional workshop and state agency discussions are included in the Appendices.

One-on-one discussions with council staff were also held following the regional workshops. The outcomes of these discussions have not been captured in this report.

2. Regional workshops with councils

Seven regional workshops were hosted with council staff with responsibilities for coastal adaptation planning and implementation as follows:

Region	councils that participated in the engagement
Adelaide North	Cities of Charles Sturt, Holdfast Bay, Marion, Port Adelaide Enfield, Salisbury and West Torrens
Adelaide South	Alexandrina council, City of Holdfast Bay, City of Onkaparinga, Kangaroo Island council, Yankalilla council, Victor Harbour City council, South Australian Coastal councils Alliance
Yorke Peninsula	Wakefield Regional council, Yorke Peninsula council, Copper Coast council and Barunga West council
Eyre Peninsula East	City of Port Lincoln, District council of Lower Eyre Peninsula, District council of Franklin Harbour and District council of Tumby Bay
Eyre Peninsula West	District council of Elliston council and District council of Streaky Bay
Upper Spencer Gulf	Port Augusta City council, Whyalla City council, District council of Mount Remarkable, Port Pirie Regional council
South East	Wattle Range council, Kingston District council, District council of Robe and Coorong District council

The workshops aimed to:

- Build knowledge and understanding of council staff about the importance of coastal adaptation planning.
- Understand their experiences of coastal adaptation.
- Identify council needs regarding adaptation planning and capacity building in relation to coastal adaptation.

The findings of the regional workshops are summarised in the following sections. Individual summaries of each regional workshop can be found in Appendix A.

2.1 Council experiences of coastal adaptation planning

2.1.1 Where councils are up to

Discussions at the regional workshops revealed that there is **significant variation in coastal adaptation progress** between different coastal councils across South Australia.

Some councils have undertaken significant coastal adaptation planning and implementation. Actions have included preparation and review of plans, engagement with the community, coastal hazard modelling, sand replenishment, coastal revegetation, rehabilitation of areas to allow for retreat of coastal ecosystems, retreating infrastructure, redesigning stormwater infrastructure and building protective infrastructure such as sea walls, levees, sandbags, groynes and breakwaters.

Other councils have not done much at all.

Most council staff reported wanting to be further progressed in their coastal adaptation work.

Most councils have taken a **reactive approach** to date with coastal management, mostly due to constrained resources (financial, time and expertise). Many councils recognised that improved Standards for coastal adaptation will help them to take a more proactive and strategic approach to coastal adaptation rather than responding as issues occur.

It was clear that **metropolitan councils were more progressed** than their regional counterparts. The lack of staff and resources, low density population and extensive coastlines relative to their resource base have been barriers to regional councils undertaking effective coastal adaptation.

There were a number of regional councils particularly in the South East and on Yorke Peninsula who are well progressed in their coastal adaptation planning and implementation. This has usually occurred in areas which are **already experiencing significant coastal impacts**.

2.1.2 Challenges

Discussions at the workshops identified that coastal councils, both in metropolitan and regional areas, experience a number of common challenges in relation to coastal adaptation planning and implementation including:

- A lack of **funding**, including access to long term funding and funding for implementation of works.
- A lack of **staff time, knowledge and continuity of staff**.
- A lack of **community and Elected Member support** for implementation of coastal adaptation measures.
- Difficulties in **community and stakeholder engagement** including getting people interested in the adaptation planning phase, changing community and stakeholder attitudes over time (ie between planning and implementation phases), and lack of trust in data relating to projected impacts and changes along the coast.
- **Unclear roles and responsibilities** for coastal adaptation and coastal management more generally, particularly between state government and local government.
- The **highly political nature** of coastal adaptation. This means that the need for and benefits of adaptation can be undermined by political agendas, and that it can be “very challenging to bring Elected Members along on the journey” due to their lack of awareness and desire to act”.

- **Diverse and conflicting values** in the community as it relates to the coast, and the difficulty of reaching an agreed decision about what to do.
- A lack of **locally specific, accurate data** to inform decision making about what coastal adaptation approaches are preferred.
- The **complexity** of coastal adaptation. The coastal environment is a contested and busy space. For example, it is subject to numerous pieces of legislation, there are different land tenures and approaches to its care, control and management, it has a range of stakeholders with a diversity of interests and values, there are a range of options that can be used to adapt, there are different impacts of adaptation options and how these do or don't align with values and there is a need for large resources to implement adaptation approaches.
- The difficulty in taking a **long-term approach** in a context where stakeholders' views, election cycles and funding cycles are short-term.
- A **lack of leadership** by state government agencies regarding what to do where, when and how, leaving councils feeling a disproportionate share of responsibility for coastal adaptation.
- A **lack of collaboration between different levels of government** to prepare and implement coastal adaptation plans.

2.1.3 Learnings

From their experiences to date with coastal adaptation planning, a number of consistent learnings by local government in both metropolitan and regional areas were identified including:

- Coastal adaptation is complex. **There is no simple solution** to most coastal issues. Each location is likely to require a tailored approach and "it takes time".
- Community and Elected Member **engagement and support from very early on and throughout the entire process including implementation is critical**. Coastal adaptation is highly political and it is important to understand people's values and "bring them along" on the journey to build support and understanding. It is also important to raise awareness of why undertaking coastal adaptation is so important, for example through "awareness training for Elected Members" or a "summary sheet on roles and responsibilities for Elected Members".
- Coastal adaptation requires a **long-term approach** and in order to be effective we "need to stop making short term reactive decisions". Coastal adaptation planning **is expensive** and requires significant and ongoing investment.
- **Localised, "rigorous studies and data"** is essential to inform good decision making.
- Coastal adaptation in metropolitan Adelaide is not effective when using the current "piecemeal" "council by council" approach, and that a new "**more holistic systems approach**" undertaken "**at a regional level**" is required.

2.2 Considerations for the Standards – what we heard

Council staff identified what they would like to see in the content of the Standards and what is needed to support their successful implementation.

2.2.1 Content for the Standards

Provide guidance for community and stakeholder engagement

Council staff identified that they would like the Standards to provide advice about how to engage with the community and Elected Members. Council staff know that engagement is critical to coastal adaptation, but also that is a complex and political process. Many councils have experienced challenges engaging the community such as:

- One regional council engaged with their community and Elected Members and reached a consensus to undertake a retreat strategy. However, four years later when the council was able to implement the strategy, the community and Elected Members withdrew their support as community sentiment had changed.
- One regional council heard from some sections of its community that they would like to fix one of their boat facilities. However, when the council undertook a survey that explained what the cost implication of undertaking this activity would be on rates, 80% of people preferred council to not undertake this action. In contrast, one metropolitan council's community approved a 1% 'levy' to fund climate change work.
- One regional council has attempted twice to install a seawall at a key risk area identified through a coastal hazard study. However, both times this was unsuccessful due to a lack of support from residents. This lack of support continued even following a storm surge event where public assets were underwater. Most residents did not support the sea wall due to visual impacts. Only a minority of residents were able to think longer term and support the wall due to the long-term protection it would provide for their properties.
- Several regional councils shared their experiences of inland and coastal ratepayers having different priorities regarding the spending of resources on coastal adaptation.
- Many regional and metropolitan councils have found it difficult to engage their communities early in the coastal adaptation planning process.
- Many metropolitan councils struggle with the large number of stakeholders, differing values and strong community opposition to some adaptation options.

Inclusion of case studies on successful and unsuccessful engagement experiences in the Standards may be useful so that councils can learn from others.

Advice about who and when to engage is required. Council staff suggested that the Standards could include a principles-based approach which encourages engaging early and regularly, understanding community and stakeholder values and educating the community rather than prescriptive engagement approaches and/or activities.

Clarify roles and responsibilities in coastal management and adaptation planning

Many council staff would like the Standards to clarify roles and responsibilities for coastal management and provide guidance about governance structures that enable coastal management. This clarity is sought regarding both coastal adaptation planning and coastal management more broadly.

Many council staff also want clarity about the role of councils in coastal adaptation planning across land tenures that they do not own or manage. Across the board, council staff felt a great deal of confusion about their responsibility for different land tenures and acknowledged the complication of the legislation in this space. They noted that particularly in regional areas, much of the coast is Crown and private land, however they still feel as if the responsibility for managing this land is placed on councils. Council staff would like the Standards to be especially clear about what councils need to do and where, and whether councils have any role in managing other land tenures. Some council staff identified that if councils need to manage other land tenures, that the Standards should explain how to partner and work with others.

Case studies could be provided to demonstrate collaboration between different parties. For example, one regional council shared that they worked together with SA Water who owned a pipeline and a private caravan park on the foreshore to relocate inland their own council owned pathway that was being impacted by erosion.

Provide guidance on finding, using, gathering and interpreting data

Many council staff would like the Standards to describe the where, when, who, how and why of data collection. Councils would like to know where they should be accessing existing data, what additional data they need to collect, how to interpret data, and how to use data to inform decision making. They identified that a lack of accurate local data or understanding of what data to use and how to capture it as a major current barrier to identifying the preferred approach to coastal adaptation.

Two regional councils identified the importance of using historical data and photos which identify previous states of the coast to understand change occurring over time and use this to communicate with the community. One council staff member said that “looking back historically is just as important as current hazards and future risk”. The Standards could describe the usefulness of historical data to engage with their community and inform their future planning.

Provide guidance on monitoring

Many council staff felt that the Standards would benefit from identifying measures of success and monitoring and evaluation requirements. They felt that this would promote consistency and understanding on how to measure progress and success of coastal adaptation and avoid councils from either “way over cooking” or “way under cooking” their monitoring programs. They identified that the Standards should clearly identify the value of monitoring.

Some councils identified the desire for guidance about their role in monitoring changes along the coast (for example storm analysis, monitoring cliff change, beach profiles etc.) to support an adaptive management approach to coastal adaptation. Multiple council staff recognised the benefit of working together on monitoring programs including increased efficiency and consistency. One council staff member suggested that a state-led approach to monitoring would be of use, while another suggested that councils in each region could work together to deliver regional monitoring programs.

Link the Standards to funding requirements

Many councils identified that the Standards should enable council coastal adaptation plans to link directly to funding opportunities and requirements. They would also like the Standards to describe possible funding arrangements and responsibilities.

Consider the level of prescription in the Standards

Council staff held a diversity of views regarding how prescriptive the Standards should be.

Some council staff wanted the Standards to be very directive, providing minimum standards that would deliver quality control and consistency. They felt this approach would make coastal adaptation more straightforward for many councils particularly those who are not well progressed in their coastal adaptation action. Some felt that the current LGA guidelines are too flexible and 'principles based' and would like the new Standards to provide clearer guidance about what exactly should be done to prepare a coastal adaptation plan.

Some councils staff wanted the Standards to include technical specifications for specific coastal adaptation options such as a sea wall or sand replenishment, however it was acknowledged that this may be outside of the scope of the Standards.

Other council staff would prefer a principles-based approach to the Standards which allows flexibility for councils to cater their coastal adaptation to local conditions, values, resources and priorities. These staff suggested that the Standards could incorporate the general steps councils should go through to undertake coastal adaptation planning and describe common coastal adaptation options that councils could implement. However, these staff generally would like the Standards to not be prescriptive about these steps and provide options to allow for local nuance. They were concerned that mandating processes or options that may not work for some councils could lead to maladaptation.

Provide guidance for considering and prioritising adaptation options

Many council staff identified that a prioritisation framework or process would be a useful tool for the Standards to include. Councils would like guidance for prioritising actions, as they currently struggle with selecting the most suitable pathway from the long list of possible options that often emerge from the adaptation planning process. Some councils explained that they felt that their current coastal adaptation actions were not based on sound evidence and did not have adequate reasoning behind their selection.

Multiple council staff raised the challenge of identifying, quantifying and weighting both tangible and intangible community, environmental, economic and other values in a multi-criteria analysis or other prioritisation process. They noted that this is especially difficult when community values differ strongly. These councils would like the Standard's suggested prioritisation process to assist councils in understanding and quantifying environmental, social and economic values. They suggested that this process could also assist with identifying triggers and thresholds for action.

Explain the expected scale and scope of coastal adaptation plans

Many council staff would like the Standards to provide guidance for councils regarding the desired scale and scope of their adaptation plans. This is especially the case for regional councils who are currently unsure of where to focus their efforts and the scale of planning expected of them. Some regional councils felt that they only needed to focus their efforts on one or two townships or specific localities within a

township, while others felt the pressure of attempting to consider best practise coastal adaptation across their entire coastline.

It was therefore identified by numerous councils that the Standards should provide guidance about when coastal adaptation plans should be prepared for entire multiple councils, a single council area, township/settlement or particular assets, and set out what is needed to prepare an adaptation plan at these different scales. The Standards should also explain the role of councils in planning for different land tenures and stakeholder types.

Further to this, a number of Councils noted the need for the standards to provide support in defining the study area, acknowledging the coastal system is likely to extend beyond jurisdictional boundaries and given coastal hazards are a sub set of natural hazards (e.g. bush fires, catchment generated flooding, increased temperatures) it is likely that a 'catchment to coast' approach (i.e. broader study area) is likely to be needed.

Consider compound risks

Numerous council staff identified the need for the Standards to consider compound risks that occur along the coast. This includes when sea level rise, storm surge, bushfires and stormwater flooding occur, and how councils should account for this in their adaptation planning.

Link the Standards to other council plans and processes

A number of council staff identified that while coastal adaptation is highly relevant across many areas of council, it is usually considered in isolation. They identified that it would be useful for the Standards to link coastal adaptation planning into other council processes including land use planning, financial planning, risk assessment, asset management, conservation etc.

Deliver Standards with a user-friendly look and feel

All council staff identified that the Standards should be concise, practical and accessible. Many suggested that the inclusion of both successful and unsuccessful case studies would be useful. Many council staff identified they would also like the Standards to have a clear purpose and clearly differentiate between what is required (i.e. minimum standard) and what is recommended. Inclusion of visuals and flowcharts is desired to help explain information and concepts graphically.

Identify which climate change projections to use

Most council staff would like the Standards to identify what climate change and sea level rise projections (i.e. what timeframes, scenarios and sources) should be used for coastal adaptation planning to promote consistency, clarity and transparency.

However, some council staff noted that if these projections are different to those the council have used in the past, this may lead to a breakdown in community trust.

Identify the value proposition of coastal adaptation

Some council staff identified they would like the Standards to clearly set out why they should undertake coastal adaptation and how councils and communities will benefit. This will help councils to garner staff, Elected Member and community support. One council staff member noted that although coastal adaptation planning "does not solve the problem or remove complexity, it helps us to manage the process and arms councils with information to manage a complex challenge".

Promote taking a risk-based approach

Some council staff suggested that the Standards could promote taking a risk-based approach to coastal adaptation.

Recognise the unique issues facing Adelaide's metropolitan beaches

Multiple council staff at the metropolitan workshops highlighted that a coordinated approach is required to address issues of sand movement along Adelaide's metropolitan beaches. They noted that "given the connected nature of the coastal system from Seacliff to North Haven", there is a need for "a single solution" which applies across the system rather than taking a council-by-council approach. The complex and politicised process of sand pumping was raised. One council identified the benefit of sand pumping in "mitigating sea level rise in the short term". Another noted that their council is waiting for the outcomes of the Adelaide Beach Management Review before they proceed with their coastal adaptation.

Recognise that a staged approach is required for coastal adaptation planning

Some council staff identified they would like the Standards to recognise that coastal adaptation planning is an ongoing process which occurs over many years and that a staged approach or pathway would be beneficial. This would recognise that while councils cannot and should not do everything right now, they can plan ahead and identify triggers and thresholds for further actions.

First Nations

Some council staff noted the importance of First Nations engagement when planning for coastal adaptation, and the need to consider cultural values when undertaking options analyses.

2.2.2 Implementation of the Standards

Council staff also provided feedback about how the Standards and other elements of the SA Climate Ready Coasts program could be implemented to best set councils and other stakeholders up for success.

Deliver more and longer-term funding for both coastal adaptation planning and implementation

Funding is one of the biggest barriers for councils undertaking coastal adaptation. Council staff conveyed that they would like the Standards to be coupled with more and longer-term funding for both coastal adaptation planning and implementation.

Most council staff generally agreed that incentivising the use of the Standards by linking them to funding opportunities (for example, councils coastal adaptation plans need to be prepared consistent with the Standards to be eligible for funding) would be a more effective approach than making coastal adaptation planning using the Standards mandatory.

One council staff member suggested that aligning state and federal grants with councils' business plans, long term financial plans and asset management plans would be very helpful. Others suggested that the Standards could include clear value propositions and guidance for engaging with Elected Members to "get them on board" with allocating the large amount of funding required for coastal adaptation.

Provide better coastal data and mapping

Many council staff identified that they would benefit greatly from the provision of better data and mapping which can be accessed through a single source. Currently, councils struggle from a lack of accurate, local

data. Instead, they are faced with multiple sources of data which they are unsure which to use to inform their planning. Many councils only have access to high level, generalised modelling which does not provide the nuance required to accurately inform their coastal adaptation planning.

Most councils are unsure of their roles and responsibilities in data collection and monitoring and would like further clarity regarding this. Regional councils identified that they do not have the GIS or technical capability to create their own data or understand existing data produced by consultants.

It was recognised by some that councils who have access to more accurate data can better monitor and understand the threats they face. For example, one regional council has an arrangement with Flinders Ports where they access their tide gauge data when there is a storm tide warning. This enables them to more accurately track the height of the tides and the implications of these heights on their levees.

Multiple council staff recognised that working together on monitoring programs leads to benefits in terms of efficiency and consistency. One council staff member suggested that a state-led approach to monitoring would be of use, while another suggested that councils in each region could work together to deliver regional monitoring programs.

Advocate for state agency-led coastal adaptation

Many council staff felt that state agencies should be undertaking more coastal adaptation planning and implementation. Many council staff felt “councils should not hold the exclusive responsibility for implementation and funding” and that this is “not considered fair or equitable, and is highly likely to result in maladaptation and limitations in response due to local political views and funding barriers”. Council staff suggested that there was “a need for a new governance model to progress effective coastal adaptation”.

Many council staff would like state government to play a more significant role through planning, implementing, funding, and providing review and advice of coastal adaptation works. They felt that the coastal expertise, capacity, funding and higher level of political influence could be of great benefit. Metropolitan councils in particular would like to see a more “collaborative governance structure with the federal, state and local government” that better acknowledges the scale and complexity of coastal adaptation particularly for Adelaide's metropolitan coastline which needs a regional approach in order to be effective.

Some councils also questioned whether the Standards should also be applicable for state government use.

Provide independent technical review and advice for councils

Council staff generally agreed that they would benefit from the establishment of a body to provide technical advice and independent review of coastal adaptation plans. Some council staff suggested that this may be a subcommittee of the Coast Protection Board or a panel of academic experts and state government representatives.

Many council staff felt the review and sign off of coastal adaptation plans would give councils confidence that they are on the right track. The same would be the case if technical advice was provided at key milestones throughout a council's coastal adaptation project. One regional council said that they “don't want to get through the process only to find out that the CPB won't support it”, and that “preliminary

advice from the CPB along the way would reduce the risk that the final outcome will not be acceptable and will provide certainty”.

Most councils also highlighted the risks that introducing this process would cause. One regional council identified that there are “lots of issues with government bodies getting things approved with long waits for refusal”. They explained that it is “so hard when you are a small council with no money to meet the information requirements” that these sorts of processes introduce. Numerous other councils across metropolitan and regional areas expressed the desire for “not overcomplicating” the review process, with suggestions for “making the quality check optional”, “ensuring the advice of the panel align with community values” and ensuring that state agencies improve their ability to “comment on documents”.

Deliver training on the Standards

Some council staff suggested that delivering training on the new Standards would help to build council understanding, capacity and buy-in.

Integrate coastal adaptation into land use planning

A number of council staff identified they would like to see coastal adaptation embedded further into the land use planning system including the new Regional Plans and the Planning & Design Code.

Consider opportunities for cross-council shared coastal staff and groups

One metropolitan council suggested establishing a role for a coastal engineer which is shared between multiple councils. Several regional councils identified the benefit of forming coastal adaptation groups between councils in each region, to take a “regional approach to adaptation plans”, help with prioritisation of actions, or share other resources and knowledge. One council suggested that the LGA could play a role in facilitating this.

Consider the Stormwater Management Authority as a model for funding and planning across regions

Multiple councils identified that the Stormwater Management Authority model works well for planning for, funding and endorsing stormwater management plans at a system scale. These councils suggested that a state agency such as the Coast Protection Board could adopt a similar model for planning, funding and endorsing coastal adaptation plans.

2.3 Regional workshop feedback forms

Workshop attendees were provided with an optional feedback form following the regional workshops. The feedback form invited respondents to share any final thoughts on coastal adaptation planning. 18 feedback forms were completed from seven different councils. Feedback received in relation to coastal adaptation and the Climate Ready Coasts program is summarised below.

2.3.1 Feedback on coastal adaptation and the Climate Ready Coasts program

Establish a better governance model to drive coastal adaptation

A number of respondents identified that a better governance model is required to drive coastal adaptation planning and implementation.

Many respondents felt that local governments are burdened with an unfair share of responsibility for coastal adaptation and would like to see a more collaborative governance structure with federal, state

and local government to acknowledge the scale and complexity of coastal adaptation. This would enable federal and state government funding, knowledge and capacity to assist local governments. One council staff member said that “councils should not hold the exclusive responsibility for implementation and funding”.

Respondents would particularly like to see stronger leadership on coastal adaptation from the state government. Some respondents felt that the Climate Ready Coast program needs to more strongly feed into state level policy and action. Others felt that the state and federal government should have legislated roles in coastal adaptation. One respondent suggested that this could include coastal adaptation policies and plans requiring mandatory referral to the Coast protection Board and the Environment Protection Authority (EPA) with powers of direction to prevent the blocking of coastal adaptation action by local community and/or political resistance. Another council staff member said that they “would like to see some strong statements from CPB/DEW about how they will be providing statewide leadership, strategy and policy”.

Provide more funding for council coastal adaptation

Some respondents identified that better funding arrangements are required, with less pressure on councils alone to fund coastal adaptation works. One council staff member said, “we really need the funding arrangements to be in place so we can prioritise adaptation”.

Consider including a template for coastal adaptation plans

One respondent identified that a template of what to include in a coastal adaptation plan would be helpful.

Consider mandating consultation

It was suggested by one respondent that mandatory consultation with the community and Traditional Owners on coastal adaptation actions could be a legislated requirement.

Consider the potential positive impacts of sea level rise

One respondent acknowledged that sea level rise may have positive impacts in some areas, for example flooded areas creating retreat zones, additional habitat for birds, mangroves and samphire, and areas for aquaculture, recreation and canal development for residential areas.

Consider implementing an offset schemes

One respondent suggested that an offset scheme may help to balance out where damage may be caused by protective and mitigation measures to coastal vegetation, Aboriginal heritage, urban infrastructure and housing.

Consider other coastal issues

One respondent raised concerns about other coastal issues including pollution/litter, pest plants and animals and speeding vehicles on beaches.

3. Agency discussions

In-person meetings were held with a number of state agencies to introduce the goals of the SA Climate Ready Coasts program, understand related strategic priorities of each agency, and seek input on the development of the Standards. The following agencies were engaged:

- Department for Infrastructure and Transport (DIT)
- Coast Protection Board (CPB)
- Department for Environment and Water (DEW)
- Planning and Land Use Services (PLUS)
- Environment Protection Authority (EPA)
- SA Water
- South Australian Research and Development Institute (SARDI)
- Landscape Boards

The findings of these discussions have been summarised in the following sections. Full summaries of each discussion can be found in Appendix B.

3.1 Where agencies are at

Stage agency representatives shared the policies and projects they are currently undertaking which consider coastal risk and adaptation. They have been summarised below describing opportunities for the project or policy to link with the SA Climate Ready Coasts project and Standards.

Regional Plans

PLUS is currently preparing a new series of Regional Plans and suggested that once coastal adaptation plans with agreed adaptation options have been finalised, the directions could be embedded in the Regional Plans to provide a clear signal that coastal adaptation issues which have land use or development implications need to be considered in the future.

Planning & Design Code

PLUS identified that the current Planning & Design Code (P&D Code) Coastal Areas Overlay is coarse and could be improved in some areas. They noted that the Regional Plans may provide more nuanced mapping by depicting particular coastal features (such as conservation, dune drift, flood hazards, blue carbon areas etc.). This may assist with Code Amendments to refine Coastal Areas Overlay policy and boundaries.

DEW's Planning Team also identified that the outcomes of the Climate Ready Coasts program could assist in updating the coastal overlays in the P&D Code. They emphasised that the planning system will have a role to play with some adaptation pathways and actions involving planning mechanisms.

PLUS noted that while councils can initiate their own Code Amendments to spatially apply zones, subzones or other policy mechanisms available in the P&D Code library to address coastal adaptation

matters, any amendments or entirely new policies in the P&D Code would require oversight by the State Planning Commission and relevant state agencies.

Coastal hazards data

DEW's Climate Change Branch noted that they will be releasing updated statewide coastal 'bathtub' modelling. This modelling captures inundation risk at a high level only and does not include the level of detail provided by more complex hydrodynamic models.

PLUS noted that various inundation mapping prepared by councils and their consultants for the purposes of coastal adaptation plans may not be appropriate for use in development planning.

State wide climate risk assessment

DEW's Climate Change Branch is currently undertaking a statewide climate risk assessment. This is a high-level assessment which will not provide a fine grain understanding of local coastal risks. It also does not consider adaptation options.

While the statewide risk assessment will provide little input to the Climate Ready Coasts Adaptation Standards, there is opportunity for the two projects to 'meet in the middle' once complete by providing both a top-down and bottom-up approach to coastal hazards.

Coastal adaptation advice to councils and the community

DEW's Coast and Marine Branch currently provides advice and funding for council coastal adaptation in the following ways:

- Providing pre-lodgement advice before councils or community members apply for development approval (eg for a sea wall).
- Adding comments on development applications that identify that the local council needs a longer-term strategy for a particular settlement (because the onus is on the council, not the applicant).
- Funding projects that have been recommended through an adaptation planning process.
- Reviewing council coastal adaptation plans, either formally through CPB grants or development assessments, or on an ad-hoc basis when councils or consultants approach them for advice.

Climate change risk framework for new transport infrastructure

DIT have developed a climate change risk framework for new transport infrastructure to ensure a consistent approach to risk assessment. If the risk rating is deemed to be 'high' or above, the framework requires a high-level consideration of adaptation actions to reduce the rating to below 'high'.

Landscape Board projects

The Landscape Boards noted that they are generally distanced from coastal adaptation planning. Green Adelaide is currently updating the Metropolitan Adelaide and Northern Coastal Action Plan, and the Eyre Peninsula Landscape Board were recently involved in a bathtub flood mapping project with councils. Some other Landscape Boards have Coastal Action Plans which consider coastal adaptation at a high level.

EPA climate change program of work

The EPA noted that they are beginning to work on a climate change program of work including developing an Environmental Protection Policy and integrating climate change adaptation into their compliance role. They noted that they regulate a number of large industries in the coastal zone.

The EPA believe there is scope for the EPA and LGA to work together to inform each other's projects.

SARDI

SARDI currently collect wave data. Some of this data is some publicly available through the Integrated Marine Observing System (IMOS) while other data is still available but not collected under the IMOS banner. SARDI also undertake wave modelling including in partnership with the Bureau of Meteorology, and study extreme events.

3.2 Challenges

The following challenges and shortfalls of coastal adaptation plans prepared to date were identified by agencies:

- Insufficient engagement.
 - councils may assess risks to DIT assets during a risk assessment however findings are not shared with DIT
- A lack of funding which often prohibits implementation or delivery of effective engagement.
- Changes in community sentiment.
 - Communities can change their preferences over time, ongoing engagement or regular “check ins” with the community that the values and preferences used to inform adaptation plans is needed.
- Consultation fatigue.
 - councils, stakeholders and the community are regularly asked for feedback or input on multiple issues.
- A narrow focus on physical assets with a lack of consideration of natural assets.
 - Developing adaptation plans needs to build understanding of value of natural assets beyond council environment or sustainability teams so actions don't just focus on physical assets.

3.3 Considerations for the Standards – what we heard

Stage agency representatives identified what they would like to see in the content and implementation of the new Standards.

3.3.1 *Content of the Standards*

Align the Standards with the Planning & Design Code

PLUS noted that the Standards should be influenced by the current measures used to manage coastal hazards within the Planning & Design Code to avoid conflict. At the same time, they acknowledged the

need for the Planning & Design Code to be open to any improvements to the current approaches to manage coastal hazards through the content identified by the Standards.

Promote taking a holistic approach

CPB and DEW's Coast and Marine Branch noted that the Standards should promote a more holistic approach to coastal adaptation planning to ensure coastal risk is considered amongst other climate risks and integrated with other council climate adaptation plans.

Ensure coastal adaptation plans consider natural assets

The Landscape Boards and DEW's Coast and Marine Branch advised that coastal adaptation plans should focus on more than just physical assets and more strongly consider risks to natural assets. They also identified that the role and benefits of nature-based solutions should be emphasised, and that councils should be encouraged to consider coastal habitats and species adaptation in their approach. The Landscape Boards suggested that a broad definition of coastal management could be provided which integrates biodiversity.

Provide guidance for community and stakeholder engagement

CPB and DEW's Coast and Marine Branch noted that the Standards should highlight the importance of engaging stakeholders in understanding hazards and risks and selecting adaptation options. DEW's Coast and Marine Branch explained that the level of engagement undertaken should depend on the location, issues, complexity and community sensitivity.

Provide guidance for adaptation option selection

The EPA emphasised the importance of the Standards encouraging councils to undertake in-depth options analysis processes which they believe have been lacking to date.

CPB and DEW's Coast and Marine Branch identified that the Standards could include a hierarchy of adaptation options to identify preferred approaches.

DEW's Coast and Marine Branch suggested that the Standards should explain that the weightings for each value used in multicriteria analyses should be informed by community and stakeholder engagement and will be different for every project.

Promote monitoring, evaluation and review

CPB and DEW's Coast and Marine Branch identified that it is important for the Standards to promote coastal monitoring and regular re-evaluation of risk and updates of plans based on the results of monitoring. DEW's Coast and Marine Branch also noted the importance of councils recognising when they do not have enough data and encouraging them to use a 'no regrets monitoring' approach in the short term rather than proceeding with an early protection strategy based on insufficient data.

Promote making long term decisions

DIT suggested that the Standards identify the need for whole of life asset costs to be captured and considered. They also noted that the design life of an asset should dictate the timeframes and projections used to consider its future risk.

DEW's Coast and Marine Branch reinforced the need to take a long-term approach to decisions around asset life and land use planning (especially land releases).

Provide guidance about land tenure

DEW's Crown Lands Team suggested providing strategies for councils to consider how currently unalienated land might be used to allocate land for coastal protection purposes.

The EPA noted that the Standards should encourage councils to consider industrial land adjacent to the coast, engage with industrial stakeholders and if possible, work with them to consider how their infrastructure may be at risk including through shared-funding models.

Consider the application of the Standards beyond councils

DEW's Coast and Marine Branch suggested that the Standards should also be applicable to small settlements and/or communities who may want to prepare their own coastal adaptation plan, as well as to council adaptation plans. The EPA noted that the private industry sector may also benefit from using the Standards.

Establish principles

DEW's Coast and Marine Branch suggested that the Standards should include principles for adaptation planning.

Provide advice on preparing business cases for long term investment

DEW's Climate Change Branch identified that business cases for long term adaptation actions are important to demonstrate the payback on the (often) initially large investment. The Standards could provide advice on how councils can do this.

Consider all coastal risks

DEW's Coast and Marine Branch suggested that issues such as stormwater and catchment management should be considered in addition to erosion and coastal inundation.

Consider providing a standard format for coastal adaptation plan summaries

DEW's Coast and Marine Branch suggested that providing a standard format for a high-level summary page of the outcomes of the study/plan would be useful for DEW to compare risks and outcomes across the state irrespective of the consultant who has prepared each plan.

Promote consistency while allowing for local nuance

DEW's Coast and Marine Branch identified that more consistency between council's coastal adaptation plans would be of benefit. They felt that the Standards could play a role in delivering this.

However, they also acknowledged that many elements of coastal adaptation planning such as weighting for options analysis and the level of engagement required is highly depending on local factors such as level of technical complexity, political and community sensitivities, options available, level of impact etc.

3.3.2 Implementation of the Standards

Deliver quality control

PLUS, the CPB and DEW's Coast and Marine Branch noted the need for quality control on councils' coastal adaptation plans.

They suggested that this could be achieved through an independent technical review of each plan by some form of independent technical board/advisory committee with funding. Numerous suggestions were made for the makeup of this board or committee including consultants, university representatives, state agency staff, interstate experts and even suitably qualified Elected Members. They noted that while quality control is extremely important, DEW have limited resources and it is also important to 'not create an entire industry around quality control'.

DEW's Coast and Marine Branch suggested that the CPB would be the logical body to lead the quality control process. They highlighted that a dedicated and funded team would be needed to deliver this. They also suggested that the state government should be involved in providing preliminary advice and advice during implementation phases in addition to coastal adaptation plan review.

Consider establishing mechanisms or levers to support implementation of the Standards

There was recognition by numerous state agencies that there is likely a need for a mechanism to ensure that the Standards are used. There were different views about whether this mechanism should be legislative or whether there are other levers such as funding or development requirements that could be used instead to ensure the Standards are implemented.

DIT noted that short term planning is a major barrier to coastal adaptation. They suggested that "embedding the Standards in the state regulatory framework" would help to enable coastal management over longer periods (20-30 years) rather than election cycles at a state and local level as well as improve consistency.

CPB identified that a regulatory approach could be used to properly establish or recognise the Standards through legislation. They also suggested that funding for coastal adaptation works could be dependent on meeting the minimum requirements as set by the Standards.

DEW's Coast and Marine Branch considered whether a legislative mechanism would be needed to support coastal adaptation plan implementation, give coastal adaptation plans "more influence" and possibly make taking action "legally binding". They also identified a number of alternative levers to encourage uptake including:

- Use of the CPB's grants and contracts process to "lock in" particular actions or processes.
- "Preventing future development" if an adaptation plan hasn't been implemented, for example how the CPB's advice helped 'force' the development and implementation of an adaptation plan in Fisherman's Bay.
- Ineligibility for councils to receive funding until they have prepared an adaptation plan in line with the Standards.

Investigate new funding models and sources

A number of comments were made about funding for councils' coastal adaptation:

- DEW's Climate Change Branch noted that their state wide climate risk assessment may assist in attracting funding for coastal adaptation works (if they mitigate a statewide strategic climate risk).
- DEW's Climate Change Branch identified that the national climate change risk assessment has funding options for adaptation.
- Theoretically, the CPB supports some tying of Board funding to the Standards.
- CPB also suggested a co-funded model between state and local government for councils who meet minimum standard requirements.

Educate councils on coastal adaptation

DEW's Coast and Marine Branch identified that many councils do not realise the risk they are exposed to and need to be educated about coastal risks and the importance of coastal adaptation.

Facilitate greater collaboration between local, state and federal government

CPB identified that a governance structure needs to be put in place to support greater collaboration between federal government, state government and local government. They suggested establishing a dedicated resource to provide connection between local and state government and facilitate regular information sharing. They suggested this could be done through the Adelaide Coastal councils Network (ACCN) and SA Coastal councils Alliance (SACCA).

Map coastal adaptation plans across the state

DEW's Coast and Marine Branch shared that they would benefit from a map of SA's coastline which identifies where adaptation plans have been completed, are currently being prepared or have not been prepared. Another state-wide map that identified short-, medium- and long-term risks identified from these plans would also be useful.

Consider establishing a DIT asset referral process

DIT would like a mechanism or trigger to be implemented to ensure that if a DIT asset is identified as at risk through council coastal adaptation planning processes, that this is referred to DIT. DIT could then engage with the council and influence the options assessment process. This currently does not occur.

Other

CPB noted that the SA Climate Ready Coasts program will need to identify all the elements needed to support effective implementation of the Standards including training to build capacity, regular reviews and technical advice.