

Climate Ready Coasts 2023-2026
Highlights Report | September 2026

Prepared by LGA South Australia, working in collaboration with:

- SA Coast Protection Board
- SA Department for Environment and Water
- SA Coastal Councils Alliance
- Adelaide Coastal Councils Network

SA Climate Ready Coasts 2023-2026 program was funded by:

- Australian government: Coastal and Estuarine Risk Mitigation Program
- State government: SA Coast Protection Board
- Local government: Local Government Research and Development Scheme

Introduction

Accelerating coastal risks

South Australia has over 5000km of varied and dynamic coastline, and more than 90% of the state's population, critical infrastructure, and economic base are located on or near the coast. Half (34) of South Australia's councils are coastal.

Coastal hazards, especially flooding and erosion, present major disaster risks for South Australia. In the context of increasing coastal hazards and sea level rise, SA Climate Ready Coasts (CRC) was initiated in 2023 to accelerate coastal hazard adaptation planning and action.

Its premise was simple: reducing the future costs and impacts of coastal hazards requires strategic, systemic and evidence-based action, supported by strong coordination between State and local government.



Working together to drive systemic change

Delivered through a partnership between LGA South Australia (LGA), the SA Coast Protection Board (CPB), the Department for Environment and Water (DEW), the SA Coastal Councils Alliance (SACCA) and the Adelaide Coastal Councils Network (ACCN), the program has established a consistent basis for understanding coastal hazard and risk, prioritising effort and developing implementation-ready adaptation plans.

Key achievements of CRC between 2023 and 2026 included:

- Co-design of a common approach and minimum standards through the Coastal Hazard Adaptation Planning Guidelines, and support resources
- Targeted grants to enable councils to progress coastal adaptation planning
- Improved data, monitoring and technical support

- Training, peer learning and assurance to build sector capability
- Establishment of the 'Expert Panel on Coastal Adaptation' to provide peer review and quality assurance as new adaptation planning processes are embedded
- Attracting of funding and support to enable the work to continue to 2029
- Winning the National Commendation in the 2026 Planning Institute of Australia Awards for Planning Excellence in the Climate Change and Resilience category.



A partnership approach

Local government brings place, assets, local data and experiences, and community relationships to coastal conversations. State government brings statewide policy and data, and technical depth. Better outcomes are achieved through leveraging the different but complementary strengths of local and state government.

About the program

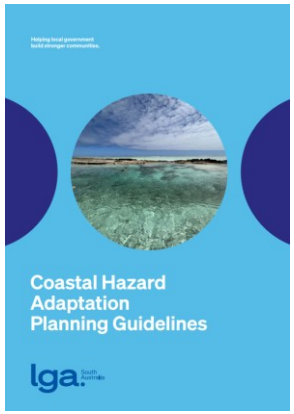
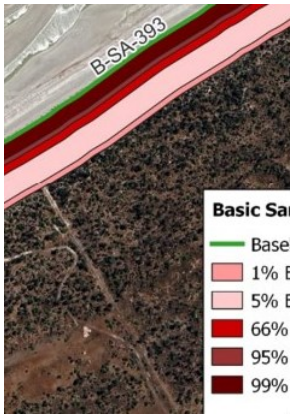
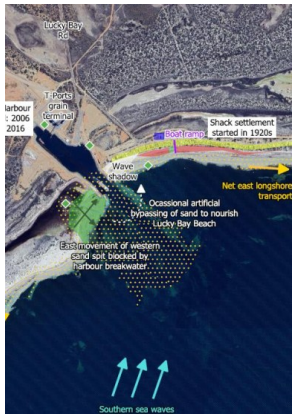
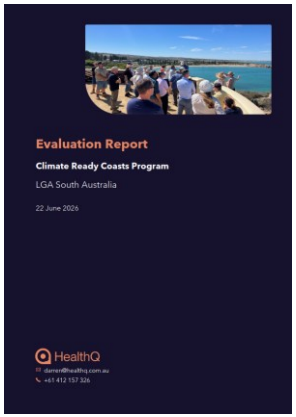
Objectives

The core purpose of CRC was to accelerate coastal hazard adaptation planning by:

- Improving understanding of coastal risk
- Establishing consistent approaches to coastal hazard adaptation
- Increasing capacity and knowledge in adaptation planning.
- Driving evidence-based decisions and investment.



Program components

					
CRC Foundations	**Data Workstream**	**Grants**	**Adaptation Support**	**Capacity Building**	**Securing the future**
Codesign of coastal hazard adaptation planning methods, tools and implementation model	Improved coastal hazard datasets and monitoring infrastructure	Funding to incentivise the progression of CHAPs	Project, technical and engagement support for council CHAP projects	Professional development and networking to building skill and confidence	Capturing learnings, and setting up the next phase of work
Research and Benchmarking Report Stakeholder Engagement Reports (2) CHAP Guidelines Implementation Model Compendiums (4) Tools and templates (6)	Data Stocktake Report Statewide Coastal Erosion Hazard Assessment Wave buoys Tide gauges Priority data acquisition	Grant Guidelines 15 funded projects $1.558 million awarded $1.025 million of council contributions leveraged	Project scoping Technical review Steering Committee participation Ad-hoc support and advice Resource library	Stakeholder webinars Community of Practice Workshops Informaiton sharing Coastal Resilience Short Course (3 days)	Evaluation Report Expert Panel on Coastal Adaptation Business Case for continuing the program Investment attraction

Timeline

2023	Investment attraction
	Program planning and establishment of program governance
	Early consultation
	National and international research and benchmarking
	Delivery of a Coastal Data Stocktake
2024	Co-creation of Coastal Hazard Adaptation Planning Guidelines and Implementation Model
	Joint adoption of planning and implementation framework by LGA Board and CPB
	Coastal adaptation maturity assessment of all coastal councils
	Procured new coastal monitoring infrastructure
	Commenced a statewide coastal erosion hazard assessment
2025	Compendiums and support resources released
	15 council grants announced
	Community of Practice established
	Statewide erosion hazard mapping finalised
2026	Hands-on support to council CHAP projects
	Data acquisition completed
	Scoped and secured resourcing for the Expert Panel for Coastal Adaptation
	Three day Coastal Resilience Short Course
	Independent evaluation
	Awarded a National Commendation by the Planning Institute of Australia
	Successfully attracted $2.54 of Commonwealth (DRF) and State (CPB) funding to continue the program to 2029



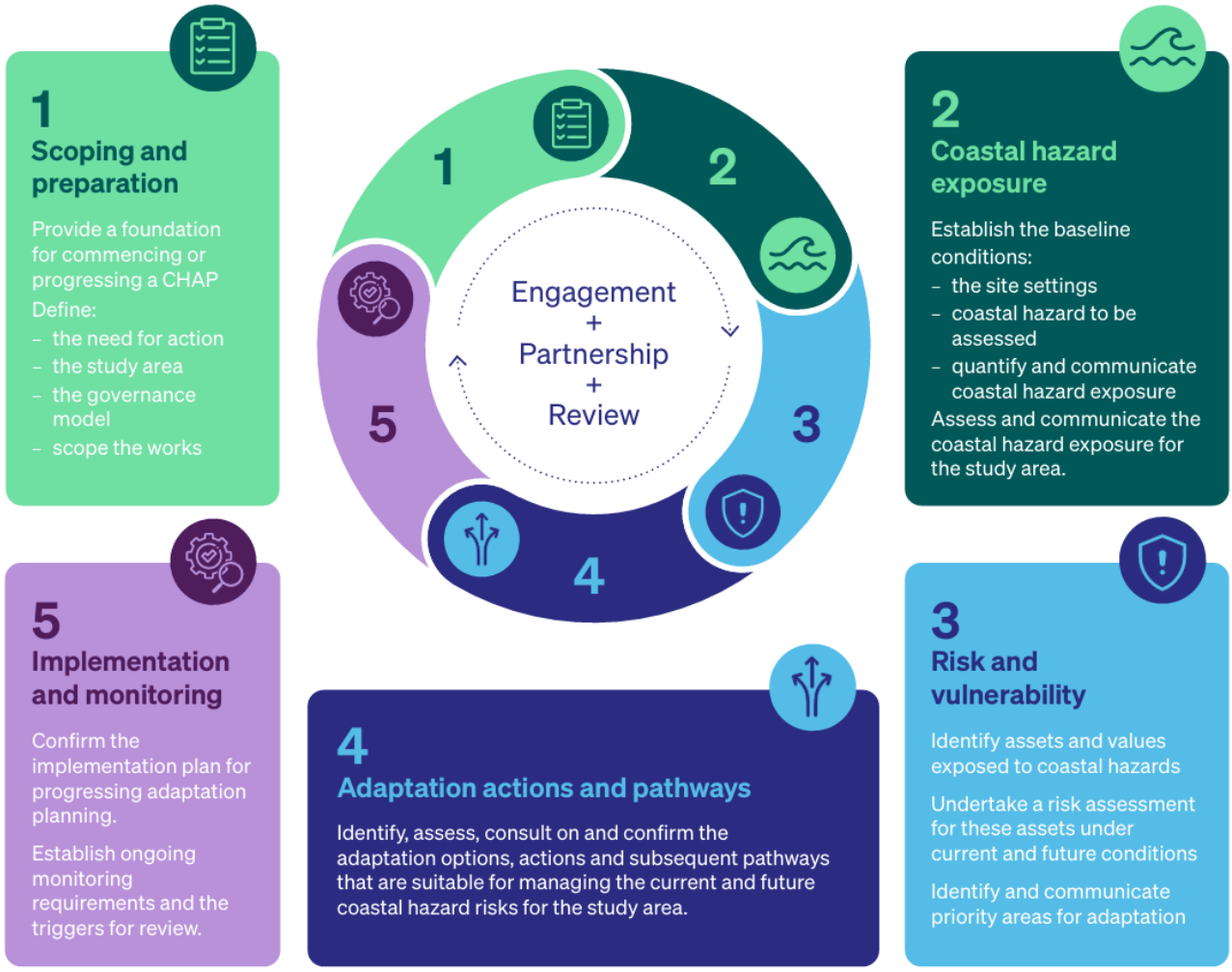
Program highlights

CHAP Guidelines

The guidelines provide step-by-step guidance on how to prepare a Coastal Hazard Adaptation Plan (CHAP) in South Australia. The guidelines were informed by:

- Analysis of coastal hazard adaptation planning frameworks implemented in other Australian states and overseas
- An engagement program with local and state government stakeholders to learn from their adaptation experiences, and identify needs, requirements, and expectations.

The guidelines facilitate a standardised approach to coastal hazard adaptation planning to enable robust and consistent decision-making and resource allocation at all governance scales. They have been developed with different coastal contexts in mind. This provides flexible application to suit any kind of coastal hazard, local coastal governance arrangement, or resource base.



The program also developed four compendiums to support coastal practitioners with the practical use of the guidelines addressing: Coastal hazard assessments; Coastal adaptation actions; Economic analysis in coastal adaptation; and Engaging stakeholders and communities in coastal adaptation.

Data Workstream

Improving the accessibility to authoritative, quality assured coastal data and information for key stakeholders and end users, including state and local government, consultants and researchers, was central to the overall outcomes of CRC.

Given this, DEW received $1.565 million of CRC funding to support a major uplift in South Australia's coastal hazard data and monitoring infrastructure.



The first deliverable was a **Coastal Data Stocktake**, which compiled all known coastal datasets including hazard, ecological, infrastructure, cultural heritage and asset-related datasets across state, local, federal and non-government sources. Outcomes included:

- Creation of a structured dataset library identifying availability, quality, ownership and access conditions.
- Identification of data gaps to inform future data acquisition priorities
- Recommendations for improving data accessibility, sharing, and integration across agencies and councils; and which informed the next phases of the CRC Data Workstream.

DEW then enhanced SA's **Coastal Monitoring Infrastructure** through:

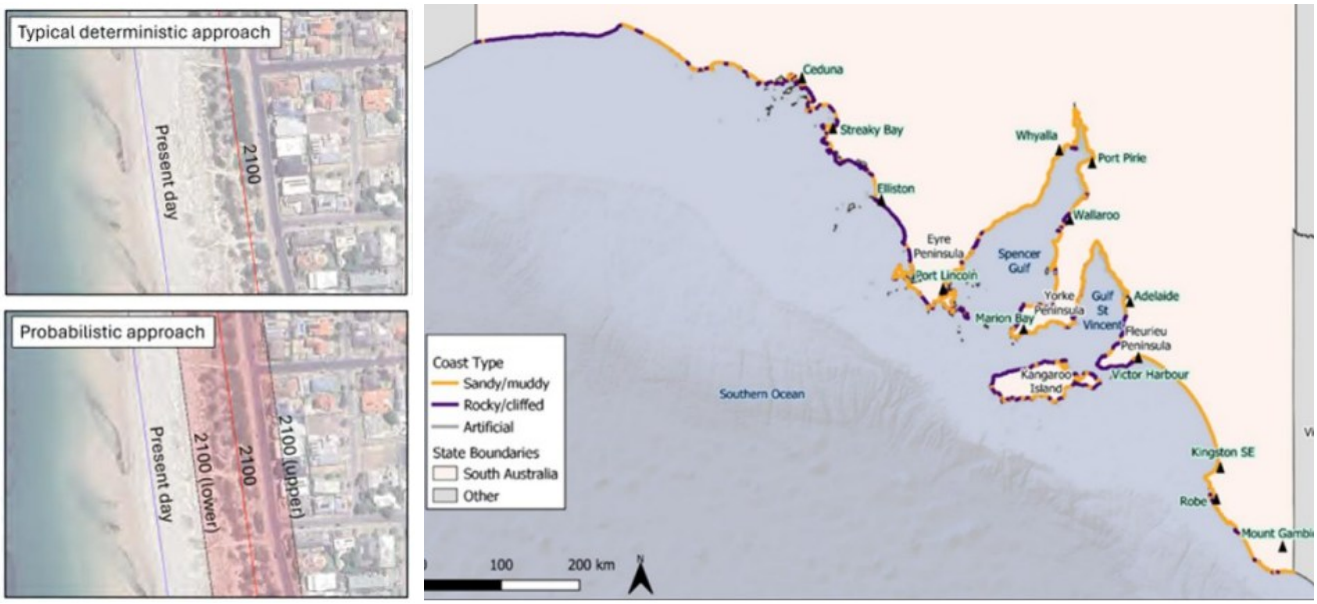
- Deployment of seven long-term wave observation sites, in partnership with the Integrated Marine Observing System (IMOS), SARDI and Flinders University; and
- Installation of three tide gauge with Global Navigation Satellite System receivers at Venus Bay, Cowell and Stenhouse Bay, supported by Coast Protection Board funding.

All monitoring data is accessible by the public upon request and is being used to inform current and future coastal hazard risk. Wave buoy data is currently available from the AusWaves website.



The state's coastal hazard datasets were strengthened through the development of the first complete **Statewide Erosion Hazard Assessment**. This included:

- Mapping of potential erosion extents for multiple sea level rise scenarios and planning horizons.
- Probabilistic outputs illustrating uncertainty bands, confidence ranges and data limitations.
- Geodatabase of outputs to support effective integration into GIS data systems and viewers.



Left: The Statewide Coastal Erosion Hazard Assessment adopted a probabilistic approach showing potential extent of coastal erosion for varying timeframes under different scenarios including considerations of sea level rise.

Right: The assessment considered erosion in the context of the sandy and cliffed coastlines across South Australia.

The final component of the Data Workstream was **Priority Data Acquisition** to fill priority coastal data gaps to complement current Coastal Hazard Adaptation Planning needs.

A structured, risk-based prioritisation process identified five key coastal datasets needed to fill critical information gaps to provide a stronger technical foundation for coastal hazard risk assessments underpinning Coastal Hazard Adaptation Planning.

1. Expanded coastal monitoring network

   South Australia's coastal monitoring infrastructure network has been expanded through the acquisition of additional GNSS-coupled tide gauges and wave buoys to provide valuable long-term, local observations of sea level rise and storm surge, and wave climate and oceanographic conditions, respectively.

2. New cross-shore profile surveys

   New cross-shore profile data will improve shoreline change assessments and erosion modelling.

3. Statewide wave hindcast dataset

The statewide wave hindcast dataset provides comprehensive historical wave climate information to support future hazard assessments and engineering investigations.

4. High-resolution 3D cliff modelling and geological profiling
   High-resolution cliff monitoring datasets have established important baseline information for priority cliff-backed coastlines.
5. Satellite-derived bathymetry

   Satellite-derived bathymetry products have demonstrated a cost-effective approach to characterising shallow coastal environments across large geographic areas.

To ensure the long-term benefits of the CRC investment are realised, DEW is integrating these new datasets into its broader environmental data architecture and enhancing discoverability through existing data portals and platforms.



3D cliff modelling, such as this example commissioned by the City of Onkaparinga, is important to understand risks in rapidly changing coastal contexts.

Coastal Hazard Adaptation Grants

In 2024, $1.558 million of funding was awarded to 15 projects around the state. The grants supported councils with:

- New work to progress one or more of the planning stages in the Coastal Hazard Adaptation Planning Guidelines
- review and update of CHAPs already completed, and/or additional investigations and coastal monitoring.

The CRC program partners actively supported councils to deliver these projects and share their learnings from progressing coastal hazard adaptation planning.

New coastal hazard adaptation planning work

Council	Project Title	Funding
District Councils of Elliston and Streaky Bay	Coastal Hazard Adaption Planning – Stages 1-3	$80,000
Cities of Holdfast Bay, West Torrens, Charles Sturt and Port Adelaide Enfield	A CHAP for Adelaide's Metro Beach System - Stage 1	$160,000
Copper Coast Council	Copper Coast CHAP – Stages 1-5	$267,880
City of Port Lincoln	Coastal Hazard Adaptation Plan – Stages 1-3	$96,460
District Council of Franklin Harbour	Adapting to Change: Cowell's Future on the Coast – Stages 1-3	$60,000
City of Port Augusta	Coastal Hazards Adaptation Planning – Stages 1-3	$100,000
Cities of Salisbury, Playford and Port Adelaide Enfield	Coastal Hazard Adaptation Planning for Port River and Barker Inlet Estuary – Stage 1	$150,000

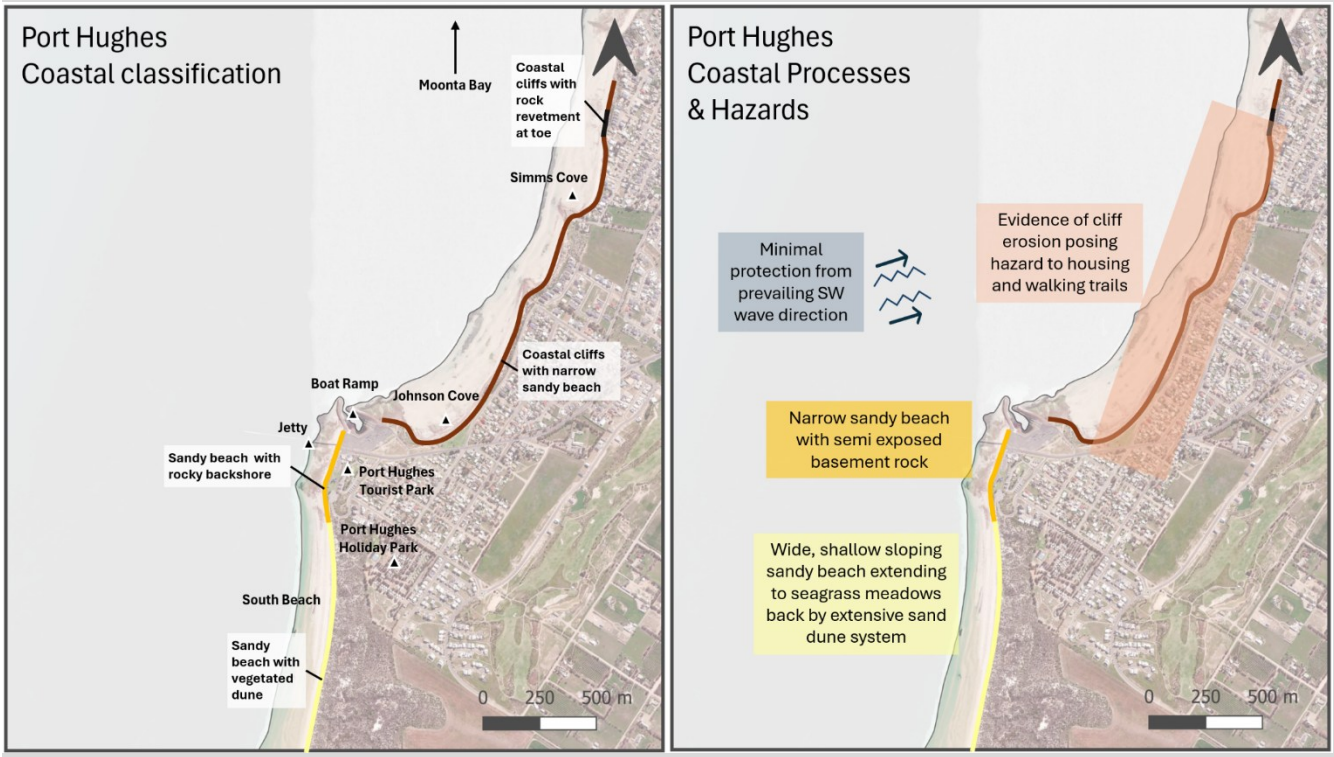
Review, updates and additional investigations supporting existing CHAPs

Council	Project Title	Funding
District Council of Robe	Hoopers Beach Adaption Options Assessment	$100,000
Kingston District Council	Review and update Coastal Adaptation Plan	$62,000
District Council Tumby Bay	Community Focused Foreshore Alignment Study	$75,000
City of Marion	Coastal Monitoring Program	$55,000
City of Onkaparinga	Piloting Coastal Monitoring for the South Australian Coastline	$210,500
City of Onkaparinga	Coastal Process Modelling at the Port Noarlunga Estuary	$43,000
City of Victor Harbor Council	Hindmarsh River to Inman River coastal masterplan	$98,500

Case Study – Copper Coast Council CHAP

The Copper Coast Council is located along the eastern side of Spencer Gulf in South Australia and includes the coastal townships of Wallaroo, Moonta Bay, and Port Hughes. The coastline is ~45km long, comprised of sandy beaches and cliffs.

Copper Coast Council used CRC to prepare its first Coastal Hazard Adaptation Plan to provide clarity on implementation priorities. Council had already undertaken several technical studies (e.g. cliff erosion assessments, stormwater management plans), each of which recommends actions based on high-risk issues. What was needed is transparency around how these recommendations compare in priority across different settlements.



Source: Copper Coast CHAP Summary Report prepared by CAPE Advisory

The CHAP brings the recommendations together, addresses technical gaps with new hazard assessments, and includes a risk assessment that considers social, cultural and natural assets, as well as physical assets. It creates transparency about which actions matter most across different settlements.

Aside from this integration, this project also demonstrates the value of community stakeholder engagement at different touch points, from identification of social and cultural values to informing the risk assessment and criteria for adaptation options assessment. The project leveraged an existing Community Reference Group and also engaged with Narrunga representatives to integrate a First Nations perspective.

Independent review through the Expert Panel for Coastal Adaptation at the end of Stage Three confirmed the technical accuracy of the work, and suggestions for moving forward.

Case Study – City of Onkaparinga Coastal Monitoring Program

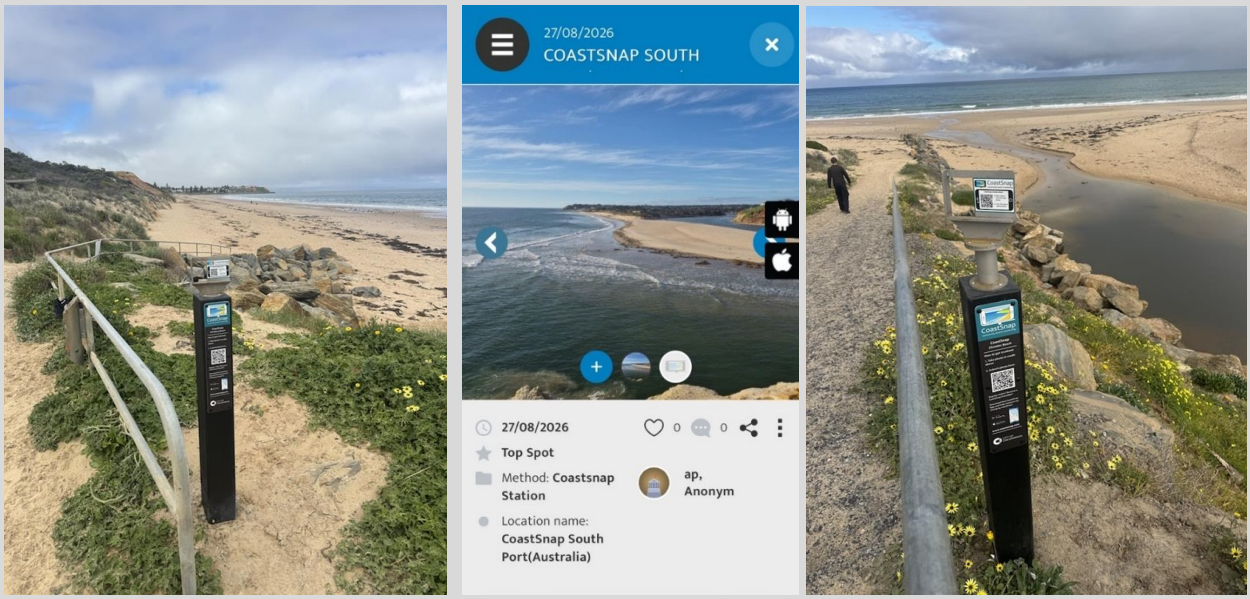
The City of Onkaparinga (Onkaparinga) is located across Adelaide's southern suburbs and peri-urban fringe and is South Australia's largest council by population. Onkaparinga's 31 kilometres of coastline is highly valued by the local community, is of cultural significance to the Kaurna people, supports the regional economy and contains significant environmental assets.

In 2024, Onkaparinga adopted its first Coastal Adaptation Plan as the outcome of several years of investigations and community engagement. A priority action in the plan was to establish a Coastal Monitoring Program to support adaptive decision making in relation to its coast.

Onkaparinga sought grant funding through Climate Ready Coasts to establish its monitoring program, and share lessons with other councils around the impact and effectiveness of monitoring in coastal adaptation. The Council has worked closely with CRC program partners to refine the monitoring program to focus on monitoring activities that are aligned with, and can integrate into, Onkaparinga's risk management, asset management and other coastal decisions.

This program included the local implementation of Coast Snap, a worldwide program encouraging community members to become citizen scientists by taking photos of beaches using snap stations at designated sites, to help monitor shorelines and coastal change over time. The stations are built to be permanent so that consistent data can be collected.

Ten sites along Onkaparinga's coastline have been included in the program.



Onkaparinga's Sustainability Officer, Ben Moulton said "What excites me most about these projects is seeing how community participation can lead to better environmental outcomes. A single photo takes just seconds to capture, but when thousands are collected over many years, they become a powerful scientific record. Through CoastSnap, residents are making a valuable contribution to the council's broader coastal monitoring project, helping us to track changes along the coastline and better understand and respond to future coastal risks."

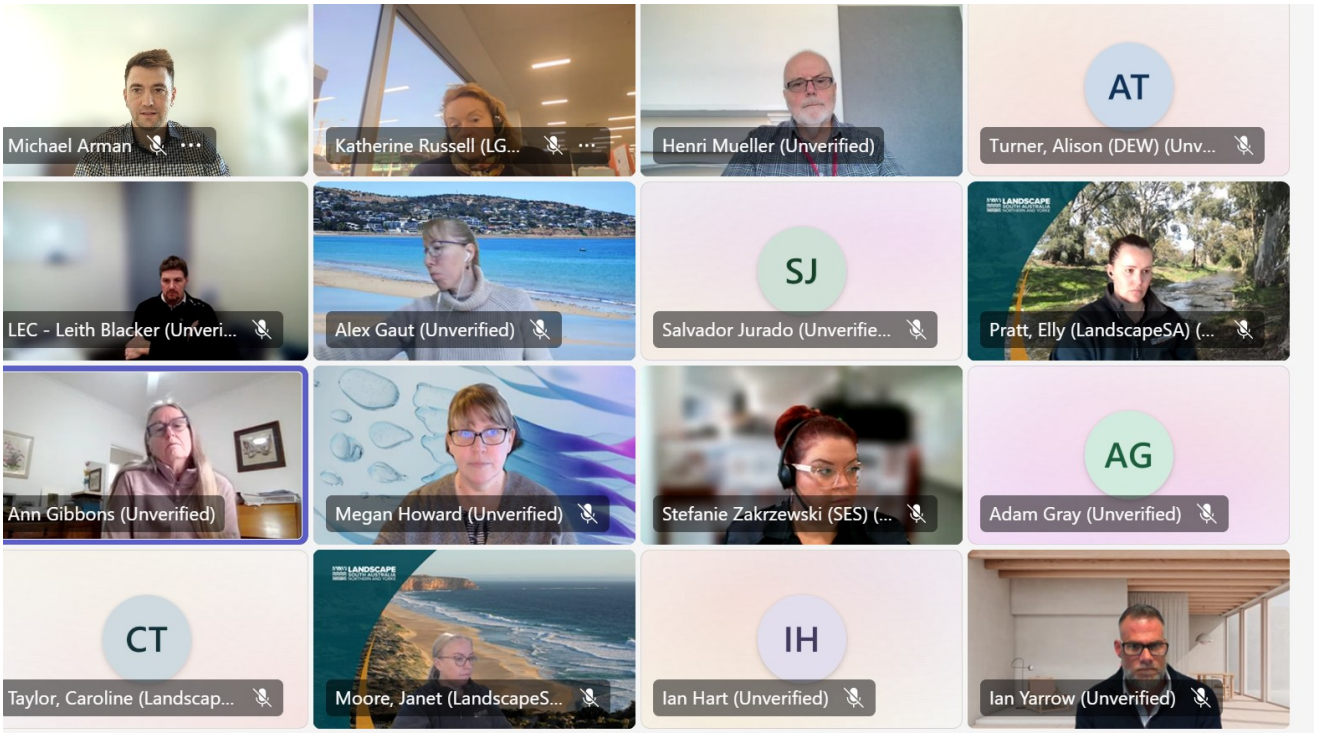
Capacity Building

Capacity building has occurred through a range of formal and informal means. Early project workshops, while initiated to help the co-design of the CHAP Guidelines and Implementation Model, provided an important vehicle for practitioners to learn from each other around coastal adaptation. Program webinars also provided learning opportunities for stakeholders from state and local government to learn about the program, about the CHAP process and to be kept informed of this fast-paced program.



Workshop delivered in Port Lincoln as part of the CRC Foundations.

In the later phases of the program, capacity building has happened as councils lead their coastal hazard adaptation planning projects, supported by the grants, and the CRC program partners. The Coastal Adaptation Community of Practice created an opt-in forum for practitioners to share current work, test ideas and learn from peers. It has met quarterly for the past eighteen months.



Online Community of Practice meeting.

Case Study – Coastal Resilience Short Course

In April 2026, CRC partnered with Griffith University and Apter to deliver the Coastal Resilience Short Course in South Australia. The course was developed in response to strong demand from local practitioners and was designed to build capability and confidence in coastal adaptation in both local and state government.

The three-day course was attended by 30 local and state government employees from across South Australia. The program combined theoretical learning with practical application, featuring presentations from local and national experts, interactive workshops and field-based site visits.

Participants reported that the course increased their understanding and confidence in coastal adaptation and provided valuable opportunities to connect with peers facing similar challenges. The course achieved an average participant rating of 4.3 out of 5 for its effectiveness in building understanding and confidence.

Participant feedback included

"Speakers were excellent, the bus trip gave us the opportunity to visualise what we were discussing. It was important and good that small regional examples were provided"

"I really enjoyed that the course included both local and global perspectives"

"Another highlight was the importance of consultation management and the need for stakeholders to be heard, even if their ideas/issues may not be supported by the science/economics"

Many participants also noted that the course directly supported their CHAP projects and would have been beneficial earlier in their project journey.



Value adds

The program responded to evolving needs, and learnings from program delivery in real time. This meant it reprioritised efforts and secured new investment to undertake additional activities above and beyond the original program plan. Value-adds have included:

Expert Panel on Coastal Adaptation	Securing CPB funding to establish and operate the Expert Panel on Coastal Adaptation. This provides independent peer review of CHAPs, and has strengthened quality, technical confidence, and confidence in the work, and is helping councils apply the CHAP Guidelines consistently.
Adaptation Support	The CRC Program Manager and a full time dedicated resource within DEW are providing assistance to councils on the delivery of their CHAP projects. This includes project scoping support, steering-group participation and direction, and technical, project related and stakeholder engagement advice.
Resource Library	Four compendiums and a suite of templates were developed in response to consultation feedback, and help practitioners apply the CHAP Guidelines.
Adaptation Maturity Database	Developed in consultation with councils, this provides an assessment of where council are at in the adaptation planning cycle, and helped councils identify where data and planning efforts were most needed, and how the CRC partners can best help.
Prioritisation Framework	Prototype prioritisation framework developed to provide a statewide picture of known, costed and ranked adaptation actions arising from CHAPs.

Independent Evaluation

The program was independently evaluated in early 2026 to assess impact and effectiveness, and identify lessons to inform future planning.

The summary finding of the evaluation was that:

> *Overall, the evaluation found that the CRC program has made a significant and positive contribution to progressing its intended outcomes of improving coordination, strengthening understanding of coastal risk, building sector capacity and knowledge, and supporting more evidence-based coastal planning and decision-making across South Australia. While program outcomes continue to emerge at different rates amongst councils due to differences in coastal adaptation maturity levels and resourcing, the program has successfully laid the foundations for more consistent, strategic and defensible coastal hazard adaptation over time.*
>
> *The successful extension of Commonwealth funding to 2029 enhances the program's continuity, provides the opportunity for gradual embedding and refinement of resources, expansion of council CHAP adoption, and is reflective of the sustained effort required to manage climate-driven coastal hazards.*

Understanding success factors

The evaluation included a number of quotes from participants and stakeholders which illustrate its overall findings:

"The program design has been flexible enough that I can engage with it where we are at in the process. The Community of Practice approach really suits this subject matter and the nature of the SA local government network"

"Having local and state government in a room together, with leaders and experts, is a positive in itself"

"The real value I find is the networking and sharing of projects and information across stakeholders which increases shared knowledge and willingness to work together across boundaries to deliver projects"

"Updated coastal hazard mapping, erosion modelling, inundation assessments, and asset condition data has provided us the evidence-base needed to make informed decisions. Reliable data reduces uncertainty and allows us to confidently contribute to planning discussions"

The evaluation provided 10 recommendations for the future.

1. Implement clear succession planning and knowledge-transfer arrangements.
2. Continue to maintain the maturity database, with regular updating of councils' maturity assessment on a set cycle (e.g., annually or at key milestones).
3. Establish a structured learning and continuous improvement approach, including a formal lesson learned log and ongoing engagement with state, national and international coastal adaptation networks.
4. Provide stakeholders with targeted, skills-based training focussed on the practical application of the CHAP Guidelines and associated resources and data, this could be delivered through existing mechanisms such as the CoP forum.
5. CRC program partners provide councils with both targeted project scoping support and a standard RFQ template for CHAP projects in CRC 2.0.
6. DEW to strengthen data communication and capacity building for intended users of the coastal hazard datasets.
7. CRC 2.0 to support councils to build organisation-wide engagement and buy-in for coastal adaptation through tailored guidance and educational resources.
8. CRC partners explore long-term pathways to progressively anchor key coordination and assurance functions within state government coastal governance arrangements, while maintaining the collaborative partnership with local government.
9. CRC partners undertake a sustainability planning process to collaboratively identify and advocate for future funding models that support the implementation of CHAP recommendations, not just planning activities.
10. CRC partners explore mechanisms that will encourage continued uptake, maintenance of CHAPs and use of the Guidelines beyond time-limited program funding.

These recommendations were considered and adopted by the CRC Executive Steering Committee, and have informed the program planning for the next phase of CRC (2026-2029).

Program delivery and governance

CRC's program delivery and governance structure included the following:

Executive Steering Committee Strategic oversight, risk management, project and budget control and a point of escalation.	**Present:** Delfina Lanzilli (LGA) Beverley Clarke (CPB) Matthew Ward (DEW)	**Former:** Nathan Petrus (LGA) Karen Teaha (LGA) Jeff Tate (CPB) Kym Pryde (DEW) Mary-Anne Healy (DEW)
Program Management Group Operational coordination, shape delivery, test emerging products and maintain communication between partners.	**Present:** Katherine Russell (LGA) Michael Arman (LGA)[1] Nicole Pelton (DEW) Annabel Sandery (DEW)[2] Adam Gray (SACCA) Alex Ward (ACCN) Monika Rhodes[3] Rebecca Neumann[3]	**Former:** Murray Townsend (DEW) David Osborn (DEW) Felicity Beswick (DEW) Sharie Detmar (DEW) Ali Turner (DEW) Nina Keath[3] Kelly Mader[3]
Program Manager Accountable for overall program delivery and responsible for program leadership, coordination, communications, stakeholder engagement and day-to-day operations.	Michael Arman (LGA)[1]	
Program Delivery Program delivery happened through direct action by CRC partners, consultancies and grants to councils and DEW	**Delivery partners** LGA DEW	**Consultancies** HATCH Health Q Edge URPS Aither Shape Urban Apter

1 contractor seconded from BRM Advisory

2 contractor seconded from CAPE Advisory

3 council representatives.

Media Releases

- Councils share in extra funding to support coastal adaptation – 18 June 2026
- Federal investment in LGA's Climate Ready Coasts and SA disaster resilience projects – 24 November 2025
- New coastal planning resources for South Australian councils – 22 July 2025
- Grant funding to help councils protect South Australia's coastline – 28 May 2025
- $1.3 million available to councils for coastal hazard adaptation – 22 October 2025
- Statewide consultation workshops seek input on coastal hazard challenges – 2 September 2024
- Consultation on new Coastal Adaptation Guidelines and Implementation Model – 13 August 2024
- New research outlines 7 key steps needed to start future-proofing South Australia's coastline – 5 June 2024
- Regional workshops set to steer SA's first Coastal Adaptation Planning Standards – 27 October 2023
- SA's local government sector awarded nearly $7 million in coastal management funding – 9 November 2022

Next Steps

Building on the foundations established since 2023, the next phase of Climate Ready Coasts (2026-2029) will focus on:

- providing all South Australian coastal councils with the opportunity to develop a Coastal Hazard Adaptation Plan based on a consistent methodology
- implementing a prioritisation framework to evaluate and rank coastal disaster risk reduction projects
- supporting innovation and continuous improvement in coastal hazard adaptation
- strengthening collaborative coastal management between local and State government
- leading the integration of coastal adaptation into business-as-usual practice.

These objectives will be progressed through further council grants, ongoing operations of the Expert Panel, practical project and technical support, and capacity building through the Community of Practice, targeted training and shared resources. The Coastal Adaptation Prioritisation Framework will also be fully operationalised to support transparent, risk-informed investment at regional and statewide levels. A strong focus will be placed on embedding coastal adaptation into risk management, asset management and long-term financial planning, helping

transition this work from standalone projects into coordinated and enduring practice across local and state government.

Further information

Further information, including access to the CHAP Guidelines, support resources and various project reports, is available on the Climate Ready Coasts website:

https://www.lga.sa.gov.au/about/what-we-do/sa-climate-ready-coasts



Kym Pryde (DEW), Michael Arman (CRC Program Manager) and Katherine Russell (LGA) accepting a Planning Institute of Australia national commendation on behalf of the program partners.