

Regional Climate Action Plan 2025-2030





















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Acknowledgements

The Resilient Hills & Coasts Steering Committee thanks all partner organisations for their ongoing support for and commitment to this regional climate partnership. This is important work. With your valued contributions, we can keep making a significant difference for our region.

This Regional Climate Action Plan was funded under the Disaster Risk Reduction Grants Program funded by the Australian Government and the South Australian Government. Views and findings are expressed independently and do not necessarily represent the views of State and Commonwealth funding bodies. The plan was developed by BRM Advisory for the Resilient Hills & Coasts Steering Committee.

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Source: Pixabay

agreement 2009 (https://www.environment.sa.gov.au/about-us/first-nations-partnerships/agreements-and-protocols). Ngarrindjeri Climate Yarning 2023 (https://sadroughthub.com.au/wp-content/uploads/2024/02/Climate-Change-Yarning-Circles-2023-Report-FINAL.pdf

Foreword from our partners

We established Resilient Hills & Coasts in 2014 to start taking joint climate action. We knew at the time that climate change would present significant challenges to the communities, economies and natural environments of our region, and there was much to be gained by working together. A decade later, our partnership continues to advance this important work for the benefit of current and future generations.

Resilient Hills & Coasts has a strong track record for driving practical climate action and advocacy for the benefit of our region. The partnership accelerates climate action by raising capability, streamlining effort, influencing change, and addressing shared challenges together.

Project highlights include the delivery of climate risk governance assessments and coastal adaptation plans; enhancing the evidence base about climate resilient housing; demonstrating how to balance biodiversity conversation with bushfire mitigation; and building

capability on water sensitive urban design.

Much has changed since 2014 and we now have a much better understanding of what climate change means to our region and each of our partners. Our partner organisations are now taking an increasing level of climate action, but there's a lot that we can and should do together, especially where we can reduce costs and duplication, and address challenges that are too complex for one partner to address alone.

This Regional Climate Action
Plan cements the purpose of our
partnership as to connect, influence
and deliver, and identifies five focus
areas where we will concentrate our
efforts. The plan is evidence driven,
has been shaped by contributions
from our partners, and provides
a clear roadmap for action that
will contribute to a more resilient
Adelaide Hills, Fleurieu Peninsula
and Kangaroo Island region.

As we move into our third Regional Climate Action Plan, we invite you to join us in taking positive and practical action on climate change.

Plan on a page

This is Resilient Hills & Coast's roadmap for the next five years. It describes why we exist (Purpose), how we work together (Approach), and what we will work together on (Focus Areas).

This Plan is underpinned by research, investigations and consultations summarised in our:

Backcast Report, which contains the background, context and evidence base for the plan

Engagement Report, which summarises feedback from more than 117 people from our partner organisations, and other stakeholders.

Purpose

Resilient Hills & Coasts brings together partners to accelerate climate action in the Adelaide Hills, Fleurieu Peninsula and Kangaroo Island region. Our aim is to:



CONNECT

Build capability, avoid duplication and accelerate action through shared learning and support.



INFLUENCE

Provide a united and trusted voice on climate matters impacting our region, and constructively shape the direction of policy and programs.



DELIVER

Deliver projects, activities and capacity building that saves time and money, and addresses shared priorities.

Approach

Building resilience requires a dynamic and flexible approach, which means we are intentional about when and how we work together.

We lead collaborative regional action when it adds value, and also support our partners to lead their own action. Some projects involve all our partners, and others may only involve a few of us.

We also work with a wider range of stakeholders, including the other Regional Climate Partnerships around the state, when interests align, and there are opportunities to leverage collective impact.

Our work adds value to what's already happening in our region, and we help to roll-out and scale up effective approaches. We attract new funding, and generously share resources, knowledge and

experience through our active network to save time, money and effort.

We are committed to taking action in our five focus areas, and develop annual activity plans that are adjusted based on evolving needs. A commitment to continually improving how we achieve our purpose means we may need to revise our plans over time.

Focus Areas

Over the next five years, we will focus on:



Resilient and biodiverse landscapes



Climate ready housing



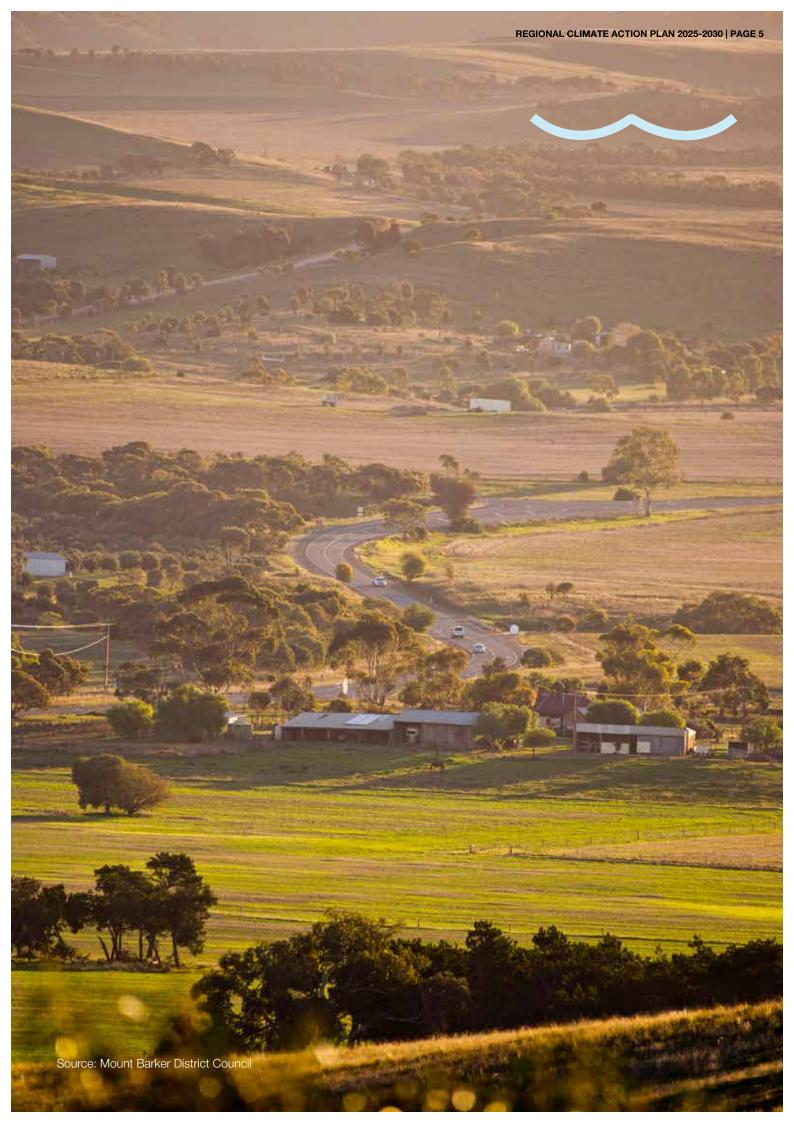
Community resilience



Climate risk management



Telling the story





About Resilient Hills & Coasts

Resilient Hills & Coasts is one of South Australia's Regional Climate Partnerships.

Our partners comprise:

- Adelaide Hills Council
- Alexandrina Council
- Kangaroo Island Council
- Mount Barker District Council
- City of Victor Harbor
- District Council of Yankalilla

- Hills & Fleurieu Landscape Board
- Kangaroo Island Landscape Board
- Regional Development Australia (RDA) Adelaide Hills, Fleurieu and Kangaroo Island
- Department for Environment and Water

Through our work, we regularly connect with a wide range of stakeholders across the community, business, government and not-for-profit sectors who want to work with us to drive practical climate action in our region.



Our governance and funding

Resilient Hills & Coasts is not its own organisation. It is a partnership that is formally established under a Regional Sector Agreement, which is a statutory instrument under the *Climate Change and Greenhouse Emissions Reduction Act 2007*, and is signed every five years by heads of partner organisations and the Minister for Climate Change.

The Resilient Hills & Coasts Steering Committee oversees,

enables and drives our partnership. The Steering Committee is made up of representatives from each partner organisation, and operates according to its Terms of Reference. The Steering Committee is supported by a Coordinator who works to identify and pursue funding opportunities, facilitate knowledge sharing, support strategic projects, and undertake advocacy and engagement.

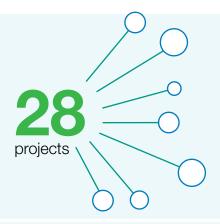
We operate on a lean budget, enabled by significant in-kind contributions from all our partners and a modest operational budget which funds the Coordinator. Funding for projects is raised separately via partnerships, grants, and specific funding requests within partner organisations: every \$1 spent by our partners has attracted \$4 in external project funding - \$1.2M in total.



Our track record

Working together has allowed us to achieve so much more than we could have achieved alone, and our work has been widely recognised and awarded.

Our highlights include:







A decade of action

2014	Started working together
2016	Regional climate change adaptation plan launched
2019	Climate risk forum and governance assessments
2019	Coastal hazard adaptation planning commenced
2020	Accelerated uptake of water sensitive urban design
2020	Where We Build What We Build project
2021	First of two Climate Smart Farming Forums
2022	First Fleurieu Youth Climate Summit (now annual)
2022	Bushfire and Biodiversity project
2022	Council Carbon Credits pre-feasibility initiated
2023	Winner of National Growth Areas Alliance Award for building connections
2023	Sustainable Homes Expert Webinar series
2023	First Fleurieu AgFest
2023	Homes for Tomorrow project commenced
2024	Secured funding for statewide Carbon Farming Outreach Program

Project highlights



Bushfire and biodiversity

Recognising the tensions between bushfire risk reduction and biodiversity protection, this project sought to better understand the latest knowledge and best practice, and outline future steps to build a balance between bushfire and biodiversity resilience in our region. This project brought together regional stakeholders across local councils, landscape boards and state government agencies to exchange perspectives in a way that had not previously occurred.

Coastal hazard adaptation

Resilient Hills & Coast has supported Kangaroo Island Council to undertake mapping of projected coastal hazards (including erosion, inundation and storm surge), share maps with communities to help them understand the evolving risks, and develop adaptation strategies. This work informed approaches to coastal hazard adaptation in other parts of the region and the state.



Water sensitive urban design

Resilient Hills & Coasts has helped drive the increased uptake of water sensitive urban design in our region. We developed guidelines to retrofit stormwater detention basins into WSUD assets (in partnership with Resilient South), ran two rounds of training for practitioners, delivered four on ground WSUD projects, and an Urban Growth and Catchment Health in the Eastern Mount Lofty Ranges forum.



Where We Build What We Build

We mapped exposure of existing housing to flood, heat and bushfire risks, categorised its sensitivity to those risks, and analysed the economics of building or retrofitting climate-ready homes in the region. We found that immediately retrofitting the 3,000 hazard exposed homes in the region to a climate-ready standard would deliver a net benefit of \$72 million to the community (in 2020 terms). This project led to a range of advocacy activities and the initiation of the Homes of Tomorrow project.

Climate Risk Governance Assessments

Resilient Hills & Coasts partnered with Resilient South to deliver a Climate Risks for Councils workshop in October 2018, followed by the first South Australian pilot of a Climate Risk Governance Assessment pilot (using Climate Planning's Informed.City tool). Five councils in our region have now baselined their performance and started to improve climate risk management. This initiative has helped to shift organisational understanding of climate change as a risk management issue.

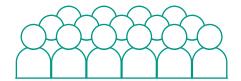




Low Carbon Transition

Landscape Boards are upskilling to assist land managers to generate carbon credits, and have secured funding for a twoyear Carbon Farming Outreach program commencing 2024. Since 2016, councils are leading the transition to a low carbon future through co-designing and collaborating on the Council Carbon Offsets project, joining the Cities Power Partnership, accounting for and reducing emissions, developing Carbon Management plans or Carbon Neutral Plan, installing solar generation on council facilities, and transitioning to LEDs and electric vehicle fleets.

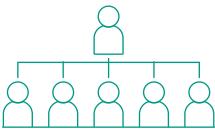
About our region



Population 142,556



8752 square km



42,590 jobs



Annual economic output of \$13.131 billion



Strong primary production sector

- 25% of SA's dairy cattle
- 64% of SA's apples
- 92% of SA's cherries

Growing population underpinned by

- Ability to work from home / commute to Adelaide
- Rapid urban development, especially in Mount Barker, Victor Harbor and Goolwa

Growing tourism underpinned by

- 5 wine regions
- Premium food destination supporting value-adding industries
- Historic townships Hahndorf, Strathalbyn, Goolwa and Port Elliot
- SA's premier coastal region for seasonal tourism
- Festivals

Source: 2023 REMPLAN Economy data prepared for RDA Adelaide Hills, Fleurieu and Kangaroo Island

Our region's emissions

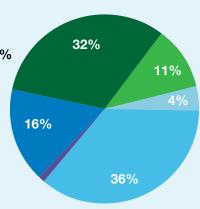
5% of South Australia's emissions 1,236,000 t CO2e

Top emitters

Transport Agriculture

36%

Agriculture 32%
Industrial Processes 11%
Waste 4%
Transport 36%
Gas 1%
Electricity 16%



Community emissions profile for the Resilient Hills & Coasts region, for the 2021/22 financial year. Source: Snapshot Climate, 2024

Climate change in our region

Climate change is creating a different climate in the Adelaide Hills, Fleurieu Peninsula and Kangaroo Island region. We can expect:



Warmer temperatures overall, with longer, more frequent and intense heatwaves



Less rainfall overall, but more frequent and intense high rainfall events



More time spent in drought



Changing agricultural conditions, including more evaporation from soil and dams, and fewer frosts



Longer fire danger seasons, and more days of extreme fire danger



Ongoing sea level rise, more frequent storm surges and increased coastal erosion

More detailed climate projections for our region are provided in Appendix A.

Source: DEW Climate Projections Guide, 2022.

Regional climate vulnerabilities

When we developed our original Climate Change Adaptation Plan between 2016, we prepared Integrated Vulnerability Assessments for the Hills & Fleurieu region, and for Kangaroo Island. The key findings of these two assessments were then summarised into ten climate vulnerabilities for our region. While important work has progressed, these ten areas continue to inform where we focus our efforts.

Agriculture: Maintaining agricultural productivity and water security, particularly for horticulture, viticulture and dryland grazing, in the context of projected rainfall decline and increasing temperatures.

Water-dependent Ecosystems:

Protecting water-dependent ecosystems from the impacts of projected rainfall decline, increasing temperatures, and heightened fire risk.

Natural Landscapes: Sustaining natural landscapes and their biodiversity (plains, flanks, and uplands) in the context of projected rainfall decline, rising temperatures, and elevated fire risk.

Coastal Ecosystems: Maintaining the condition and extent of sedimentary coastal ecosystems and their biodiversity given projected increases in sea levels.

Public Coastal Assets: Maintaining public coastal assets from threats presented by projected rises in sea levels.

Vulnerable Members of the Community: Enhancing the health, safety, and wellbeing of vulnerable members of the community from the impacts of projected increases in extreme events such as fire, extreme heat, and flooding resulting from intense rainfall and rising sea levels.

Emergency Management:

Managing increases in demand for emergency management services due to projected increases in the frequency and intensity of extreme events such as fire, extreme heat, and flooding caused by rainfall intensity and sea level rise. Community Facilities and Open Space Areas: Maintaining and expanding community facilities and open spaces to meet growing demands associated with projected rainfall decline, increases in temperatures, and fire risk, which will be compounded by growing population pressures and urban development.

Infrastructure Assets: Maintaining and expanding infrastructure assets, including roads and energy networks, in the context of projected rainfall decline, rising temperatures, and increased fire risk.

Homes and Buildings: Maintaining the condition of homes and buildings, and enhance their operations, from the threats presented by projected increases in fire, extreme heat, and flooding driven by rainfall intensity and sea level rise.

Our Roadmap for action

The Resilient Hills & Coast roadmap for action has three components:



Approach how and when we work together

Focus areas what we will collaborate on.

Purpose Statement

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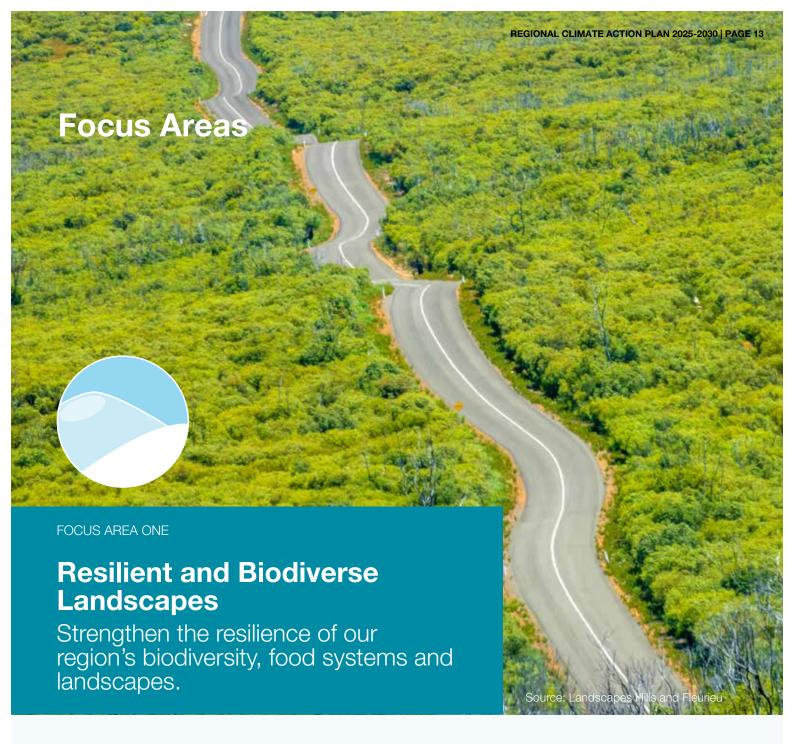
Our work adds value to what's already happening in our region, and we help to roll-out and scale up effective approaches. We attract new funding, and generously share resources, knowledge and

experience through our active network to save time, money and effort.

We are committed to taking action in our five focus areas, and develop annual activity plans that are adjusted based on evolving needs. A commitment to continually improving how we achieve our purpose means we may need to revise our plans over time.

To help us determine how and when we work together, we consider the following framework:

1	How does this address a core climate risk for our region and our partners?
2	Why would a collaborative approach lead to a better outcome?
3	Is Resilient Hills & Coasts best placed to progress collaborative action?
4	How will this add value to what our partners are doing?
5	Is there energy, opportunity and resourcing to support the success of this action?



We know that our region's natural landscapes are highly valued by our Traditional Owners, as well as for their intrinsic ecological values and how they underpin much of our region's economy and way of life. Landscapes that are well cared for can better adapt to a changing climate, and can also help absorb and store carbon, further reducing climate impacts.

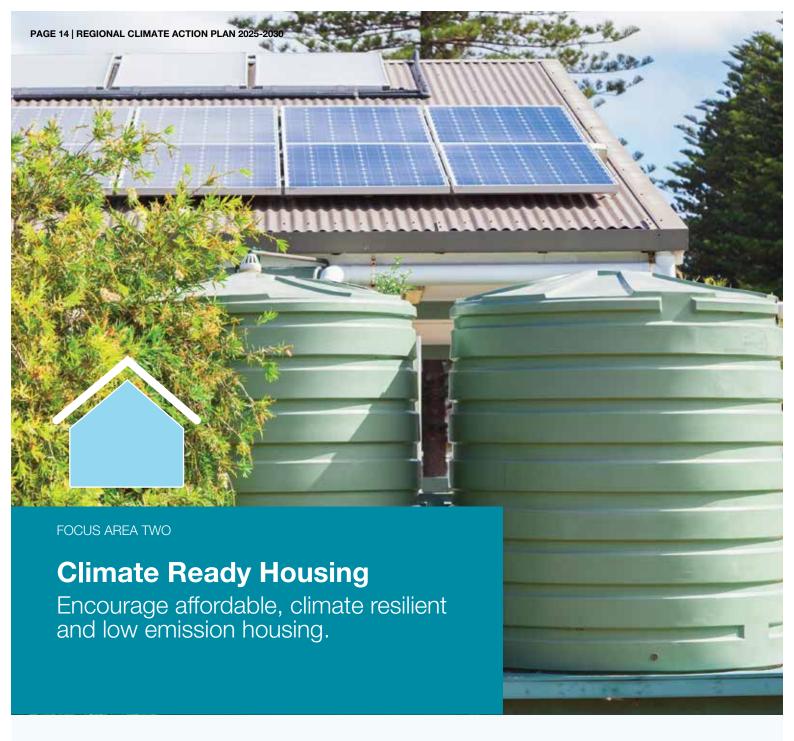
A warmer and drier climate, and more frequent extreme weather and fires, has the potential to impact our region's landscapes from an ecological, food system and social perspective. It also presents unique water management and water security threats.

Nearly a third of our region's emissions come from agriculture and thus this sector has an important role to play in the region's overall emission reduction efforts. These challenges may also present opportunities to shift towards more holistic and integrated approaches to land use planning, and management, at the landscape scale.

How Resilient Hills and Coast will accelerate action?

Resilient Hills and Coasts will support efforts to strengthen the resilience of our landscapes by:

- 1. coordinating efforts (connecting the dots) between our partners who are each working within their own areas of responsibility
- 2. exploring opportunities to partner with First Nations to use traditional knowledge and approaches as part of climate change actions, and protect cultural values from the impacts of a changing climate
- 3. engaging with existing partnerships, such as the Hills and Fleurieu Local Food Futures Project, to widen the reach and impact of their work
- 4. initiating new collaborative projects to lead action where there are gaps and opportunities
- 5. seeking to drive systemic change through targeted advocacy on legislative and policy change.



Our region is experiencing significant urban development which will continue over coming years and decades.

There is a great opportunity to ensure we do not put more homes in harm's way by ensuring new development avoids the most hazard prone areas. We also can improve quality of life, contribute to emissions reduction, and deliver long term economic savings to residents if we carefully consider how we design, build, retrofit and run our homes.

How Resilient Hills and Coast will accelerate action?

Resilient Hills and Coasts will encourage climate resilient and low emission housing by:

- 1. continuing to build and share the evidence-base around climate ready housing, and climate hazard data and mapping
- 2. seeking to drive systemic change by advocating for evidence-based changes to the State Planning Policy, and the National Construction Code, and funding models to support the retrofitting of existing homes
- 3. exploring opportunities to educate council staff, developers, builders and housing providers around the benefits of exceeding minimum standards
- 4. delivering projects that address known gaps, such as the Homes for Tomorrow project.



Building a climate ready region is a shared responsibility across all sectors of the community. Governments alone cannot do it all, and it is important that communities are informed and equipped to adapt to known climate risks, and supported to take practical steps to reduce emissions.

While there is often a willingness to act at the community level, community resilience programs need to have a strong action-orientation beyond one-way education programs if they are to be effective in the long run.

Our region has a strong track record for programs that educate and empower, across both the natural resource management and disaster resilience sectors. There are important lessons to be learnt about the most effective way to support long term and sustainable capacity building at the community level. There are also opportunities to leverage and extend proven models to achieve wider impact across our region.

How Resilient Hills and Coast will accelerate action?

Resilient Hills and Coasts will support community resilience efforts by:

- 1. continuing to share data and information that builds community understanding of climate risks and promote where and how people can take action
- 2. supporting the delivery of events such as the annual Fleurieu Youth Climate Summit
- exploring opportunities to scale up the implementation of successful community programs across the region, such as the successful community led disaster resilience pilot projects that emerged following the 2019/20 bushfires.



Climate change will increase physical risks to functions and services delivered by our partners, which in turn will likely increase demand for services, and maintenance, repair and renewal costs.

Our partners also need to manage social, legal, financial and transition risks to be well-equipped and prepared to support our local communities and economies through major disruption and shocks.

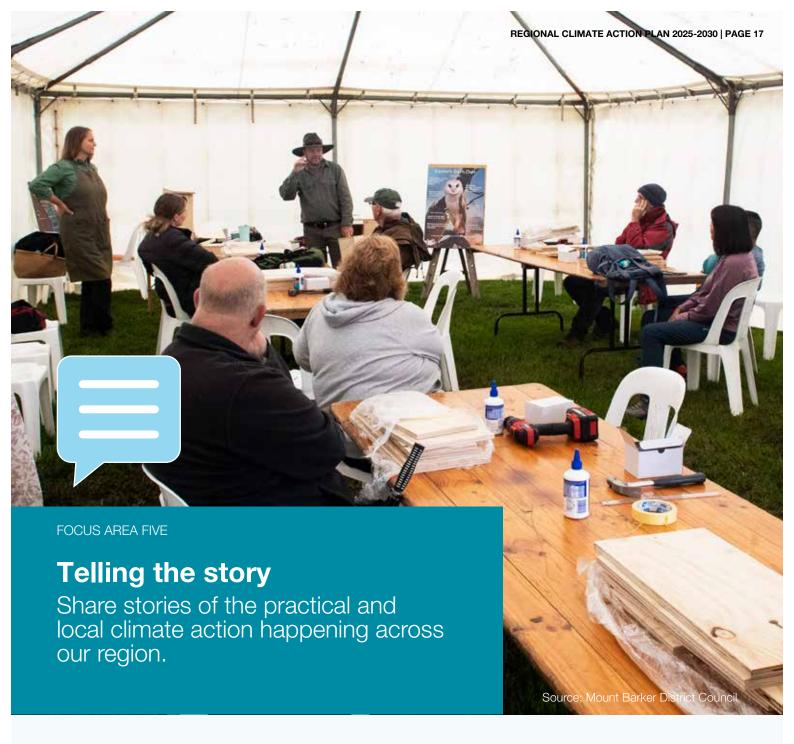
Reducing climate risk requires a whole-of-organisation approach, with climate change considerations embedded into all processes and accounted for in all decisions.

How Resilient Hills and Coast will accelerate action?

Resilient Hills and Coasts will support its partners with climate risk management by:

- 1. exploring the potential to deliver the LGA's climate risk management training consistently across the six councils in the region
- 2. facilitating the sharing of knowledge, evidence and approaches in climate risk management amongst RH&C partners
- 3. identifying what other support our partners need in managing their climate risks, and helping connect them with the right resources and support
- reviewing the learnings of the Resilient Asset
 Management Project (by Resilient South) to determine
 any lessons about the integration of climate risks
 into asset management that may be applicable to
 our region.





Action is taking place across our region that is strengthening the resilience of our landscapes, communities and economies to a changing climate, and reducing emissions. This work is practical and local, and often unseen.

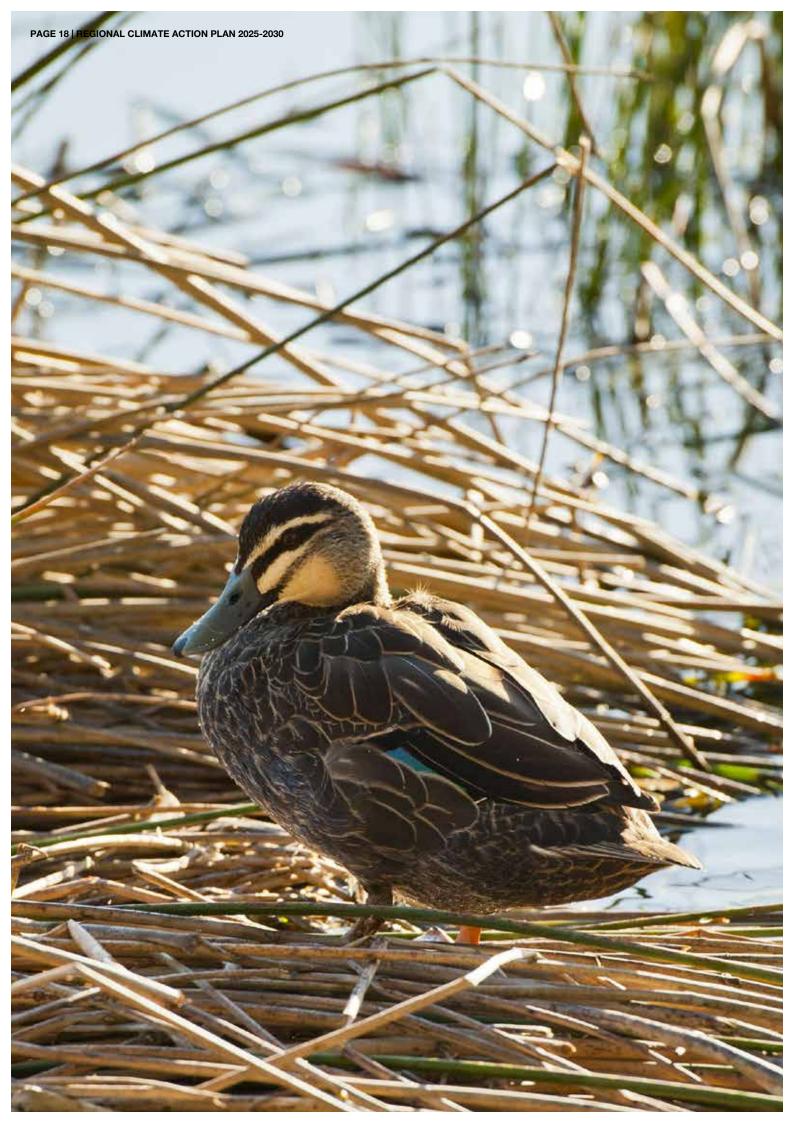
Action is happening across all parts of the community, from initiatives of individual households and small business, to changes across entire sectors of the regional economy, as well as through projects and programs led by councils and government.

It is important to tell these stories to raise awareness of positive efforts, inspire hope, motivate further action, and convey how climate action is a shared responsibility and is being addressed collectively across our region.

How Resilient Hills and Coast will accelerate action?

Resilient Hills and Coasts will tell the story of the collective climate action happening in our region by:

- 1. capturing and sharing stories of positive, practical, and local action on climate change
- 2. leveraging the collective communication channels of all our partners to achieve wider reach in communication efforts
- 3. clearly communicating the role that our partnership plays in accelerating climate action across the region.





Implementation, monitoring and review

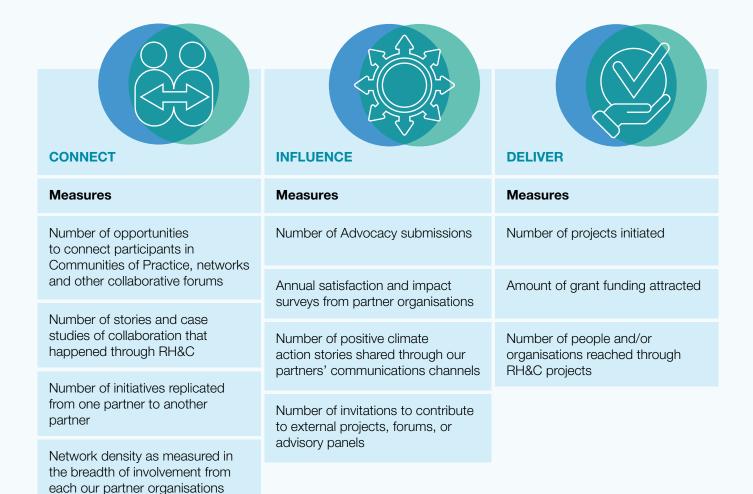
The Resilient Hills & Coasts Steering Committee has primary responsibility for the implementation of this plan.

This plan will be delivered using a variety of funding sources, including joint investment from our partners, and State and Federal Government grants. Our track record shows, that working together delivers cost savings from only doing things once, and from sharing costs, resources and staff time across the partners.

Each year, Resilient Hills & Coasts will publish a statement of achievements that will be shared with each partner. This will include a summary of successes and learnings from our collaboration, and an assessment of the overall impact of our efforts.

We will measure how well we deliver on our Purpose Statement through reporting on the following measures based on readily available data and an annual survey.

This plan will be reviewed in 2029, or as required.





Appendix A: Climate projections for the Resilient Hills & Coasts region

Summary of climate scenarios data for the Hills & Fleurieu region (white) and Kangaroo Island (grey) (or surrogate locations where regional data not available, as indicated in sources), for a high emissions scenario (RCP8.5) in 2030, 2050 and 2090, and for a medium emissions scenario (RCP4.5) in 2090.

CLIMATE VARIABLE		BASELINE ¹	EMISSIONS SCENARIO			
		Rain: 1981–2010, Temp: 1986-2005, Sea: 1986–2005	2030 RCP8.5	2050 RCP8.5	2090 RCP8.5	2090 RCP4.5
•••	Annual rainfall decrease (most significant decrease in Spring: -40% H&F and -41% KI in 2090 RCP8.5) *	625 mm	-3%	-9%	-29%	-12%
		564 mm	-4%	-10%	-29%	-12%
**	Extreme rainfall events increase **	0.38 1-in-1000 rainfall events	+58%	+55%	+121%	+87%
			+58%	+55%	+121%	+87%
	Mean daily maximum temperatures increase * (most significant increase in Spring: +4.1°C H&F and +3.7°C KI in 2090 RCP8.5)	18.4°C	+1.0°C	+1.6°C	+3.5°C	+1.9°C
		18.2°C	+1.0°C	+1.5°C	+3.3°C	+1.8°C
	Mean daily minimum temperatures increase *	10.3°C	+0.9°C	+1.4°C	+2.8°C	+1.6°C
		10.6°C	+0.9°C	+1.3°C	+2.7°C	+1.5°C
*	Number hot days over 35°C increase *	7	+2	+4	+12	+5
		1	0	+1	+3	+1
1	Fire weather danger increase ^	4.2 severe fire danger days	+11.9%	-	+64.3%	+26.2%
			+11.9%	-	+64.3%	+26.2%
	Evapotranspiration increase ~ (evaporation and water stress to vegetation)	-	+3.1%	+5.2%	+9.9%	+5.1%
		-	+2.4%	+4.1%	+8.4%	+4.2%
<u></u>	Sea level rise increase #	-	+13cm	+24cm	+60cm	+45cm
		-	+13cm	+24cm	+60cm	+45cm

Data Sources, Locations & Confidence

- * Hills & Fleurieu and Kangaroo Island regional data for rainfall and temperature from the second generation of NARCliM projections released in 2021 (NARCliM 1.5), South Australian climate projections viewer. Very high confidence in temperature projections, high confidence in rainfall projections.
- ** Table 4-2 Projected change in climate variables for **Adelaide** RCP8.5 (extreme rainfall events only). High confidence in rainfall projections, low confidence in magnitude of
- increase in extreme rainfall events. Guide to Climate Projections for Risk Assessment and Planning in South Australia (Department for Environment and Water, 2022).
- ^ Table 10-2 Number of severe fire danger days (FFDI > 50) (Southern and South Western Flatlands). High confidence in frequency, low confidence in magnitude (strongly dependent on summer rainfall projection). Guide to Climate Projections for Risk Assessment and Planning in South Australia (Department for Environment and Water, 2022).
- ~ Table 8-1 Change in annual potential evapotranspiration (Hills & Fleurieu and Kangaroo Island). Guide to Climate Projections for Risk Assessment and Planning in South Australia (Department for Environment and Water, 2022).
- # Table 11-2 Projected change in sea level rise relative to 1986–2005 (m) (Victor Harbor). Very high confidence. Guide to Climate Projections for Risk Assessment and Planning in South Australia (Department for Environment and Water, 2022).



