



Regional Climate Change Adaptation Plan

EVALUATING OUR PROGRESS

Endorsed by Steering Committee on 27 May 2020

1. Background

Resilient Hills & Coasts (RH&C) is a partnership between six Councils (Adelaide Hills, Alexandrina, Kangaroo Island, Mount Barker, Victor Harbor and Yankalilla), the Southern & Hills Local Government Association, two Natural Resources Management Boards (Adelaide & Mount Lofty Ranges and Kangaroo Island) and the South Australian Government. Our shared goal is to strengthen the climate resilience of our communities, economies and natural and built environments.

The partnership came together in 2014 under the State Government's *Prospering in a Changing Climate* initiative, as one of eleven of such Regional Climate Partnerships across South Australia. The partners developed a Regional Climate Change Adaptation Plan (the Plan), which was endorsed in late 2016, and have been implementing it since then, guided by the RH&C Steering Committee.

The Committee has undertaken to evaluate our progress in implementing the Plan, in order to guide a new multi-year action plan and inform renewal of our Regional Sector Agreement.

2. Developing the Plan

The Regional Climate Change Adaptation Plan provides a foundation for a coordinated and collaborative regional response to the risks and opportunities presented by the changing climate.

Development of the Plan commenced in 2014 and was completed on 30 September 2016. All RH&C partners (which at the time included RDA Adelaide Hills, Fleurieu and Kangaroo Island) were involved, with input from community, business, government, industry and academia. The process included a knowledge audit, review of regional climate projections, mapping of community values, assessment of the vulnerability of those values to climate risks, and identification and prioritisation of adaptation options.

The Plan includes priorities that are the responsibility of one or more partners, but specific implementation actions are not identified.

3. Commitment to Implement the Plan

The Plan was approved by then Minister for Climate Change in late 2016, then published with a joint foreword and signed endorsements by Mayors of the six partner Councils. The foreword includes commitments to work together to implement regional priorities through tangible actions, and to embed climate change considerations into everyday decision-making.

On 5 June 2017, partners signed a Regional Sector Agreement¹, agreeing to keep working together to implement the Plan. The Agreement is signed by Mayors of the six partner Councils, Presiding Members of the two partner Natural Resource Management Boards, President of the Southern & Hills Local Government Association, and then Minister for Climate Change.

The RH&C Steering Committee is responsible for guiding implementation of the Plan. At its 10 April 2019 meeting, the Committee gave in-principle commitment to continue the partnership beyond expiry of the current Regional Sector Agreement on 30 June 2020.

¹ Under Section 16 of South Australia's *Climate Change and Greenhouse Emissions Reduction Act 2007*

4. Key Achievements

4.1. Coastal Hazard Mapping & Adaptation Strategies

Kangaroo Island and Alexandrina are two of the first Councils in South Australia (following the award-winning lead of Wattle Range) 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 co-develop adaptation strategies. This initiative has been highly effective at engaging the community to help them understand the risks, responsibilities and costs of adapting to a change climate.

4.2. Water Sensitive Urban Design

RH&C laid a solid foundation of initiatives to increase uptake of water sensitive urban design in our region, enabled by a strong relationship with the Adelaide and Mount Lofty Ranges NRM Board, and access to a dedicated funding pool. This included a number of discreet and tangible projects, like the guidelines for retrofitting stormwater detention basins into WSUD assets (in partnership with Resilient South), two rounds of training for public and private regional practitioners in planning, constructing and maintaining WSUD assets (in partnership with Water Sensitive SA), four on-ground WSUD projects (including streetscape upgrades), and the Urban Growth and Catchment Health in the Eastern Mount Lofty Ranges forum.

4.3. Where We Build What We Build

This innovative project represents the most comprehensive assessment ever undertaken of the climate resilience of a region's housing stock in South Australia. It involved mapping the exposure of the region's existing housing to flood, heat and bushfire risks, categorising the sensitivity of the region's existing housing to those risks, and analysing the economics of building or retrofitting climate-ready homes in the region. It was jointly funded by the Commonwealth and South Australian Governments under the South Australian Disaster Resilience Grant Program, and the Insurance Council of Australia. The project established RH&C as a leader in climate-ready development, and laid the groundwork for further initiatives and partnerships in this space.

4.4. Climate Risk Governance Assessments

RH&C 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 RH&C Councils have now baselined their performance and started to improve climate risk management through the award-winning methodology and a community of practice approach. This initiative has done more than any other to shift organisational understanding of climate change as a risk management issue (not solely an environmental issue), and to embed climate action across Council business.

4.5. Low Carbon Transition and Community Energy

Partner Councils are leading the transition to a low carbon future, for example through joining the Cities Power Partnership, developing Carbon Management Plans, installing solar generation on Council facilities, and transitioning to LED streetlights and electric vehicle fleets. Although not ultimately implemented, the Community Energy Program was an innovative program that explored opportunities to support businesses and households to transition to energy that is clean, secure and affordable – and it will be useful in informing other regions and communities how to do so.

5. Key Reflections

The Resilient Hills & Coasts partnership has been a success. It has a strong foundation, credibility with partners, and good momentum. Steady progress has been made towards our goal of building the resilience of our regional community.

Signs of success have included securing funding for project outcomes from internal and external stakeholders (including leveraging \$4 external funding for every internal \$1 spent on the Regional Coordinator), and seeing climate change become more embedded across partner business.

There is strength in the partnership, providing peer-to-peer networked learning, the impetus to get things done, as well as independence from partner-specific politics. The Committee has also benefited from learning from and collaborating with other Regional Climate Partnerships.

A strong, passionate, and influential committee with support from a Regional Coordinator has been critical to RH&C success. Committee members have the capability and credibility in their organisations to drive localised action, which has been supported by continuity of membership. Deferral of Coordinator funding in 2020/21 due to COVID-related budget uncertainties is a major risk to delivering joint projects and maintaining momentum.

During the initial implementation phase, progressing local action and embedding climate resilience within partner Councils has been more of a focus. The maturity of the partnership and the social acceptance of climate change have both progressed, opening the door for the Committee to focus more on strengthening engagement, partnerships and 'brand awareness' with other stakeholders. RDA Adelaide Hills, Fleurieu and Kangaroo Island, and the Kangaroo Island and Hills & Fleurieu Landscape Boards, will be critical partners.

Moving forward, the project needs to be more realistic about what it can achieve, especially without a Regional Coordinator. The Committee will need to prioritise efforts, while remaining nimble so it can take up opportunities as they arise.

6. Future Focus

Based on this evaluation, it is recommended the Resilient Hills & Coasts Committee focuses on three priority action areas, operating under four guiding principles.

6.1. Future priority action areas

Climate-ready development	Leverage our leadership and networks to encourage residential and infrastructure development that avoids natural hazards, is built to maximise resilience, and is energy efficient and water sensitive
Disaster risk reduction	Support partners and communities to map, understand, plan for and adapt to coastal, bushfire and urban heat hazards
Resilient agriculture	Build on and spread regional best practice in enabling agriculture that is regenerative, water smart, resilient to a variable climate, and supports carbon farming as part of a zero emissions pathway

6.2. Future guiding principles

Advocate and lead	Demonstrate our leadership through commitment, local and regional action, and advocacy to the LGA, State Government and other stakeholders
Share knowledge	Generously share tools, resources and knowledge with each other and beyond
Keep collaborating	Continue working with each other, other Regional Climate Partnerships, and external partners to leverage collective impact and reduce the load
Go where the energy is	Leverage local priorities, existing initiatives and networks to sustain and build momentum

7. Evaluation Approach

Evaluation commenced on 13 February 2020, with a facilitated RH&C Steering Committee workshop (Workshop Report attached). The workshop aimed to:

- Identify and celebrate what has gone well for RH&C to date
- Reflect on and identify any challenges or obstacles
- Identify where the partnership wants to be in the next four years and the actions, governance arrangements and partners to help get it there.

At the workshop, evaluating our progress against the Adaptation Plan and developing a multi-year action plan were identified as key actions.

The following approach has been taken to evaluate our progress:

- A tabular evaluation has been undertaken against each of the Plan priorities, including the following components:
 - Status and achievements of any actions taken
 - Reflections on successes, challenges and context
 - Recommendations on next steps
- The Plan included ten regional priorities for action, two strategic themes, three regional opportunities, and five functional priorities. For the purpose of this evaluation:
 - The 'opportunities' are covered by the 'priorities for action' so have not been separately addressed
 - The 'strategic themes' are a summary of the 'priorities for action' so have not been separately addressed
 - The 'functional priorities' relate to the governance of RH&C, rather than its priorities for action, and have been addressed
- Note that the Plan included priorities for the region, not necessarily for the Committee. Some single Committee actions address multiple priorities, and vice versa. In these cases, comments are aligned with the best-fit priority.
- The Regional Coordinator produced the draft evaluation, and Committee members provided feedback. The Committee will be asked to endorse the final version.
- Recommendations from the evaluation will form the basis of a proposed action plan. The Committee will be asked for feedback on the draft, and to endorse the final version.

8. Evaluation of Priority Actions

Status / Achievements	Reflections	Recommendations
Adaptively manage protected areas on public lands <i>Responsibility: DEW, Councils</i>		
<ul style="list-style-type: none"> • The State Fire Hazard Leader is SA CFS, and DEW is actively involved in managing protected areas on public lands. • In April 2013, DEW published <i>Ecological Fire Management Guidelines</i> to inform prescribed burning in conservation zones. • In February 2020, the State Bushfire Coordination Committee updated its <i>Fire Management Zone Standard & Guidance for Use</i>. • Partner Councils are actively engaged in the LGA Council Ready program, to lift emergency management preparedness. • Partners are actively involved in the Zone Emergency Management Committee and Bushfire Management Committees. • The Committee has been planning a Bushfire Roundtable in partnership with the Climate Council and is currently exploring virtual delivery modes. 	<ul style="list-style-type: none"> • This priority has not been a major focus to date. • During 2016, the Adelaide Hills had a significant fire event (Sampson Flat). During 2019/20, the Adelaide Hills and Kangaroo Island were severely affected by bushfire. • During and since the latest bushfires, there has been significant debate on the effectiveness of fuel load management as a bushfire risk reduction measure in the current conditions. • The recent bushfires have increased tensions between native vegetation management and bushfire risk management in the region. • Involvement in LGA Council Ready has demonstrably lifted bushfire response preparedness – including supporting spread of best practice and integration of climate risk concepts. • This priority may need to be revised in light of recent fire conditions, fire behaviour, and bushfire risk reduction research. 	<ul style="list-style-type: none"> • Play a more active role in managing tensions between bushfire risk and native vegetation management. • Potential Actions: <ul style="list-style-type: none"> ○ Continue to engage in regional Committees and LGA Council Ready ○ Leverage links between Climate Risk Governance Assessments and LGA Council Ready ○ Hold Virtual Bushfire Roundtable
Improve management of native vegetation on private properties <i>Responsibility: NRM Boards, DEW</i>		
<ul style="list-style-type: none"> • Kangaroo Island NRM Board is running one of two South Australian Biodiverse Carbon Planting pilot projects. • AMLR NRM Board provides advice, training and publications related to biodiversity conservation and revegetation. • DEW manages native vegetation clearance, Significant Environmental Benefit offsets and Heritage Agreements. A new SEB offset grant program is being trialled. The Heritage Agreements program is being reviewed. 	<ul style="list-style-type: none"> • This priority has not been a major focus to date. • The focus of this priority is on rural land, but the identified opportunity of green infrastructure on residential properties could also be included. • Findings from the Biodiverse Carbon Plantings pilot indicate that carbon credits should be aggregated at a regional scale – this may be an opportunity for the new Landscape Boards. • There may be limited value in increasing involvement in this area, which is core business of Landscape Boards and DEW. 	<ul style="list-style-type: none"> • Maintain limited focus in this area, with attention on crossover priorities like carbon capture, urban heat and bushfire risk. • Potential Actions: <ul style="list-style-type: none"> ○ Share Biodiverse Carbon Plantings findings with other regions and Landscape Boards ○ Pursue canopy cover mapping in residential areas

Status / Achievements	Reflections	Recommendations
<i>Responsibility: Farming systems groups, industry associations, PIRSA, RDA</i>		
<p>Diversify agricultural activities</p> <ul style="list-style-type: none"> • Kangaroo Island NRM Board is progressing their Resilient Agriculture program, including bringing experts to the region to educate farmers about regenerative agriculture. • AMLR NRM Board provides advice on sustainable agriculture. • PIRSA provides information to farmers about risk management and climate variability. 	<ul style="list-style-type: none"> • The Committee identified climate resilient agriculture as a key gap in our current scope. • Potential actions identified include exploring more adaptation support for farmers, and to support carbon farming as part of a zero emissions pathway. • There is potential to encourage spread of best practice programs like KI's Resilient Agriculture. • There is potential to partner with PIRSA and the RDA to identify a suitable initiative for the committee. 	<ul style="list-style-type: none"> • Play a more active role in supporting resilient agriculture. • Potential Actions: <ul style="list-style-type: none"> ○ See above re carbon farming. ○ Work with newly formed Landscape Boards to retain a focus on climate resilient agriculture ○ Invite PIRSA and the RDA to present on their climate resilience agriculture initiatives and identify opportunities for regional collaboration
<i>Responsibility: Councils, NRM Boards, Water Sensitive SA</i>		
<p>Increase stormwater harvesting to improve water quantity and quality management</p> <ul style="list-style-type: none"> • The Committee successfully secured AMLR NRM Board Water Sustainability Grants for a number of initiatives, including: <ul style="list-style-type: none"> ○ WSUD Asset Audit ○ Guidelines for retrofitting stormwater detention basins into WSUD assets (partnership with Resilient South) ○ Two rounds of training for regional practitioners (public and private) in planning, constructing and maintaining WSUD assets (partnership with Water Sensitive SA) ○ Four on-ground WSUD projects, including streetscape upgrades ○ Integrated stormwater/biodiversity management plan for Crockery Creek ○ Two rounds of Regional Coordinator co-funding. • In October 2019 the Ranges to River NRM group organised an Urban Growth and Catchment Health in the Eastern Mount Lofty Ranges forum. The forum considered the state of the catchment and the impacts of poor catchment health on the community. A paper was produced to inform future action. 	<ul style="list-style-type: none"> • The Committee identified WSUD initiatives, particularly training for regional practitioners, as one of our successes. • This success was enabled by a strong relationship with the AMLR NRM Board, partnering with Water Sensitive SA, and availability of a dedicated funding pool. These are all at risk due to Landscape Reform boundary adjustments. • Specifically, the Landscape Reforms will exclude the region from the dedicated WSUD funding pool, so alternative funding mechanisms would need to be pursued. • The Urban Growth and Catchment Health forum was a good opportunity to share cross-regional challenges and potential solutions, and should be repeated. Landscape Boards will be well-placed to lead this. 	<ul style="list-style-type: none"> • Leverage solid foundation of existing work in this space. • Identify and pursue alternative funding mechanisms, including partnerships with other regions. • Potential Actions: <ul style="list-style-type: none"> ○ Complete the WSUD training for regional practitioners (funded) ○ Investigate research partnership options (eg. Goyder re decision framework for stormwater interventions, Space Down Under re TreeNet inlet systems) ○ Support follow-up Urban Growth and Catchment Health forum ○ Identify further opportunities for regional and cross-regional collaboration

Status / Achievements	Reflections	Recommendations
<ul style="list-style-type: none"> Partner Councils continue to pursue local action to embed WSUD and stormwater detention, retention and reuse initiatives into business as usual. 		
Develop climate-ready guidelines for public realm and green infrastructure management <i>Responsibility: Councils</i>		
<ul style="list-style-type: none"> The Committee partnered with Resilient South to develop guidelines for retrofitting stormwater detention basins into WSUD assets, with funding from AMLR NRM Board. The Committee partnered with SA Water to host Smart Irrigation and Air Temperature trial sites in the region. The Committee secured State Government funding to undertake an urban greening project at a pocket park in Strathalbyn. The Committee made three submissions to the Planning Reforms, including regarding green infrastructure improvements. Partner Councils continue to pursue local actions to improve public realm and green infrastructure management. 	<ul style="list-style-type: none"> Some guidelines are already available via Water Sensitive SA, and others may be developed by metropolitan regions in partnership with Green Adelaide. For example, the Central Coordinator is pitching initiatives to: <ul style="list-style-type: none"> Audit resilience of existing tree stocks Improve guidelines for planting near utilities and other infrastructure Create decision-support tools for choosing streetscape heat management treatments. Guidelines are generally applicable across regions. Their development is a more suitable activity for better-resourced regions or industry bodies Implementing guidelines locally should remain a priority of RH&C. Developing guidelines should be deprioritised. 	<ul style="list-style-type: none"> De-prioritise leading development of guidelines for public realm and green infrastructure. Maintain implementation of climate-resilient green infrastructure and public realm as a priority. Potential Actions: <ul style="list-style-type: none"> Partner with SA Water to expand Smart Irrigation and Air Temperature trials Continue to advocate for green infrastructure improvements in state planning policy Investigate research partnership options Consider becoming a member of Water Sensitive SA Engage across regions and with Green Adelaide to advocate for guidelines to be developed Support sharing and local implementation of relevant guidelines
Incorporate infrastructure design allowances for increases in extreme events <i>Responsibility: Councils, DPTI, RDA</i>		
<ul style="list-style-type: none"> Partner Councils continue to reduce operational emissions – including through LED streetlight upgrades, installing solar generation, and including electric vehicles in fleets. Partner Councils continue to pursue local action to embed WSUD and stormwater detention, retention and reuse initiatives into business as usual. 	<ul style="list-style-type: none"> Infrastructure was one of six focus areas of the 2018-19 Action Plan, however no initiatives have eventuated. Incorporating climate risk considerations into assets and infrastructure is a focus for a number of Regional Climate Partnerships. Pilot projects are 	<ul style="list-style-type: none"> Maintain implementation of climate-ready infrastructure guidelines as a priority, noting that this is an evolving area and best practice is not yet established Potential Actions:

Status / Achievements	Reflections	Recommendations
<ul style="list-style-type: none"> It is understood the State Government has an interest in embedding climate risk considerations in asset and infrastructure planning and development. The Cross-Agency Climate Change Strategy may indicate intent and opportunities to engage when it is released (post EOFY 2020). The LGA is currently updating its Asset Management Planning templates and guidance, however it is not yet clear how well these will consider climate risks. The Committee has advocated to the LGA and State Government for further support in this space, including by strengthening hazard data through a joined-up framework and by updating Asset Management Planning guidance. The Office for Design and Architecture SA has recently commissioned initial scoping work as a first step towards developing Climate-Smart Design Guidelines for the Built Environment. 	<p>being pursued using several tools and providers (eg. Edge, XDI and UNHARMED).</p> <ul style="list-style-type: none"> This area is evolving. IPWEA recently released new guidelines on considering climate risks in useful asset life reviews. Early indications are that proposed ODASA Guidelines could provide improved guidance on this priority. At this point in the innovation cycle, best value involvement in this space may be limited to local implementation (eg. adopting guidelines) and influencing others better placed to take action. 	<ul style="list-style-type: none"> Continue to advocate to the LGA, State Government and industry bodies to develop best practice Keep abreast of best practice, and consider opportunities to improve knowledge, capability and implementation as they arise Work with S&HLGA to embed climate risk considerations in the regional infrastructure plan Ensure partner Council Asset Management Plans refer to climate risk management and implementation of best practice guides (eg. IPWEA Guide 12.1).
Restrict development in hazard prone areas <i>Responsibility: Councils, DPTI, Coast Protection Board</i>		
<ul style="list-style-type: none"> The Committee undertook the Kangaroo Island Coastal Hazard Mapping project, as an early adopter of the Wattle Range model for mapping coastal erosion, inundation and storm surge risks and engaging with the community to co-develop an adaptation strategy. Learning from this project has informed other Councils and regions. Alexandrina Council has since undertaken coastal hazard mapping and is in the process of community engagement. Partner Councils are members of the SA Coastal Councils Alliance. The Committee partnered with the Natural Disaster Resilience Program and Insurance Council of Australia to undertake the \$168K project Where We Build, What We Build (WWBW). The project aims to encourage more climate resilient development, including by understanding where hazards are and how sensitive our housing stock is to those hazards, and by proposing a climate-ready house archetype and demonstrating 	<ul style="list-style-type: none"> Development was one of six key focus areas in the 2018-19 Action Plan. This has been a major focus of the Committee, in line with the plan's strategic themes Where We Build and What We Build. The Planning Reforms may limit the region's ability to influence this priority via the planning system. The WWBW project generated significant interest in other Regional Climate Partnerships, the LGA and State Government, particularly with the emergency management and planning sectors. There are opportunities to further leverage this work and build on RH&C's leadership in this space. There are particular opportunities to further promote the region's leadership in coastal management, share findings with other regions, and advocate for more funding to be targeted at coastal 	<ul style="list-style-type: none"> Leverage and continue to build on the solid foundation of existing work in this space Expand focus (from coastal) to include bushfire and urban heat, as opportunities and resourcing allow Potential Actions: <ul style="list-style-type: none"> Continue to engage in Planning Reforms, including Gen 2 policy and development of hazard overlays for coasts, bushfire and flooding Share coastal hazard management learning with other regions Work with the Coastal Councils Alliance to advocate for State and Federal investment in coastal adaptation planning and action.

Status / Achievements	Reflections	Recommendations
<p>that both building and retrofitting to climate-ready has a positive ROI.</p>	<p>hazard mapping, adaptation planning, and adaptation actions via the Coastal Councils Alliance.</p> <ul style="list-style-type: none"> Given the severe bushfire impacts experienced by the region in recent years, bushfire hazards should also be a focus. The Committee identified a potential action to undertake heat mapping and consider cooling initiatives. Urban heat mitigation has good crossover with other priorities (eg. WSUD and energy efficient housing), and may present more opportunities for discreet local and regional action. 	
<p>Build more energy efficient housing</p>		<p><i>Responsibility: Councils, RDA</i></p>
<ul style="list-style-type: none"> The Committee undertook a Community Energy Program to explore options for encouraging the entire community to transition to renewable energy (not just those with the means to install rooftop solar). This involved a exploring the options based on best practice and new opportunities, testing community and Council appetite to invest in a recommended model, and developing a toolkit for use by other Councils and the broader community. Partner Councils decided not to progress with a Community Energy Foundation in the region, but some are exploring alternative options informed by the research. The Committee hosted a series of community workshops, including on energy efficiency, community energy and Passive House building, reaching over 200 people across the region. The Where We Build What We Build project (see above) also provided cost-benefit analysis demonstrating that building energy efficient housing has a positive ROI. The Committee recently commenced a House of Tomorrow project, led by DC Mount Barker, to explore how Councils can best enable building more climate-ready housing, including a potential demonstration site or display village. 	<ul style="list-style-type: none"> Development and Energy were two of six key focus areas in the 2018-19 Action Plan. While the region ultimately decided not to progress with establishing a Foundation, the Community Energy Project did deliver innovative research of utility to the energy and LG sectors, raised the profile of RH&C, and helped to expand the scope of RH&C from climate adaptation to climate resilience. There is value in pursuing innovative projects, even if they may not deliver the expected outcome. There is strong community interest in this space, demonstrated by over 200 people attending related workshops. The Committee identified a potential action to explore other opportunities to leverage WWBWWB, such as annual data updates/reviews and a House of Tomorrow display village. Given that construction and infrastructure are likely to be a strong focus of economic stimulus for COVID-19 recovery, there may be funding opportunities for projects that leverage our solid base in this space. 	<ul style="list-style-type: none"> Leverage and continue to build on the solid foundation of existing work Engage with the development sector to progress future opportunities Potential Actions: <ul style="list-style-type: none"> Continue to develop House of Tomorrow and explore options for regional collaboration Explore opportunities to annually review and/or expand on WWBWWB, including further partnerships with the Insurance Council of Australia Continue to host relevant community workshops Work with the RDA and others to promote the region as climate resilient Explore and pursue economic stimulus opportunities in the construction sector.

Status / Achievements	Reflections	Recommendations
Anticipatory monitoring & evaluation <i>Responsibility: State Government, Councils, DPTI, RDA</i>		
<ul style="list-style-type: none"> • The Committee partnered with Resilient South to deliver the first South Australian trial of Climate Risk Governance Assessments, using the Informed.City tool. Five of the partner Councils have now undertaken the assessment to understand how well their organisations are factoring climate risks into their governance. Recommended changes are being adopted. • The Committee has advocated strongly for a centrally coordinated, jointly resourced hazard mapping framework, to ensure baseline hazard information is available. • The WWBWWB project has played an important role in raising awareness of the need for a joined-up hazard mapping framework and has greatly assisted in progressing this conversation with the State Government and LGA. • Partners have actively progressed coastal hazard monitoring, assessment, and planning initiatives. Partners have also engaged in bushfire and flood mapping initiatives, including those led by DEW and DPTI. • A cross-regional initiative, including investment from two Partner Councils, is procuring Snapshot community emissions profiles for all SA municipalities. 	<ul style="list-style-type: none"> • Risk & Governance was one of six key focus areas in the 2018-19 Action Plan. • The Climate Risk Governance Assessments have proved invaluable in engaging Council executives across the business in climate risk management (including legal, financial, and reputational risks). This initiative has lifted awareness of climate risks, measured a baseline of how they are considered now, and provided an action pathway to improve their consideration. Repeat assessments in several years could enable Councils to evaluate their progress. • Centrally coordinated and jointly resourced hazard mapping would make anticipatory monitoring and evaluation of physical climate risks more cost effective for the region. • Once delivered, Snapshot community emissions profiles will provide opportunities to target interventions with community and business. 	<ul style="list-style-type: none"> • Potential Actions: <ul style="list-style-type: none"> ○ Undertake Climate Risk Governance Assessment reviews on a 5-year cycle ○ Continue to share progress on local actions taken to improve climate governance ○ Continue engaging with the State Government to support a joined-up hazard mapping framework ○ Scope and pitch proposals for co-investment in hazard mapping projects ○ Explore options to provide targeted assistance to community and business to reduce emissions (including by using Snapshot profiles)
Education & awareness raising <i>Responsibility: State Government, Councils, DPTI, RDA</i>		
<ul style="list-style-type: none"> • The Committee partnered with Resilient South to deliver an Executive Briefing and Staff Workshop to raise awareness of Climate Risks for Councils. • The Committee has continuously engaged with State Government and the Local Government Association to raise awareness of our priorities and what action is needed, including: <ul style="list-style-type: none"> ○ Successful motion to April 2019 LGA OGM to enhance local government leadership in climate risk management ○ Informal input to DEW policy, plans and strategies: <ul style="list-style-type: none"> ▪ Climate Science & Knowledge Plan ▪ Across Agency Climate Change Strategy ○ Submission to the Landscape Reforms 	<ul style="list-style-type: none"> • The Committee identified RH&C brand awareness as a key gap. Substantial engagement activity has been undertaken with stakeholders, but this could be expanded and better leveraged. • The Committee identified four potential education and awareness raising actions: <ul style="list-style-type: none"> ○ Do more with business, eg. a business resilience planning initiative (note: DIS is proposing to pursue this – RH&C could promote itself as a pilot region to support bushfire response) ○ Assist in setting aspirational emissions targets for the region (note: there is a GAROC proposal 	<ul style="list-style-type: none"> • Gain more from any engagement activities by building a more solid foundation of brand awareness • Potential Actions: <ul style="list-style-type: none"> ○ Include the RDA in the next Regional Sector Agreement ○ Engage with the Department for Innovation and Skills and Business SA to pursue a business resilience planning initiative in the region ○ Engage in LGA’s proposed carbon emissions reductions target position

Status / Achievements	Reflections	Recommendations
<ul style="list-style-type: none"> ○ Submissions to the Planning Reforms: <ul style="list-style-type: none"> ▪ State Planning Policies ▪ Productive Economies Discussion Paper ▪ Planning & Design Code ● The Committee hosted a series of community workshops, including on energy efficiency, community energy and Passive House building, reaching over 200 people across the region. ● The Committee partnered with Red Cross to deliver two Climate Ready Communities programs, training 42 people to become self-directed champions for climate action in their communities. ● Five partner Councils became members of the Cities Power Partnership, involving Council motions committing to the partnership and to undertake five pledges each. This initiative has demonstrated climate leadership in the local community and enabled promotion of Council initiatives to reduce emissions. ● Four partner Councils declared a Climate Emergency through Council motions, including committing to a range of implementation actions. 	<p>for the LGA to develop a carbon emissions reductions target position paper in 2020/21)</p> <ul style="list-style-type: none"> ○ Do more to engage the community ○ Build and promote the RH&C brand. 	<p>paper, including development and implementation</p> <ul style="list-style-type: none"> ○ Update RH&C web content ○ Host more RH&C branded community workshops ○ Consider expanding the Climate Ready Communities partnership and/or pursue other delivery partners for community engagement (eg. NRM Education) ○ Consider co-branding all climate-related initiatives by Partners ○ Introduce annual reporting to RSA signatories ○ Continue engaging with stakeholders to raise awareness of RH&C, our priorities and our actions

9. Evaluation of Functional Priorities

Achievements	Reflections	Recommendations
Maintaining momentum		
<ul style="list-style-type: none"> • Six Steering Committee meetings every year • Good continuity in Steering Committee membership • Regional Sector Agreement active, and will seek to be renewed • Regular items on S&HLGA agenda • Continued co-investment in Regional Coordinator from partner Councils • Two AMLR NRM Board grants towards Regional Coordinator • Grant funding secured for a series of flagship, RH&C branded projects, completed or in progress 	<ul style="list-style-type: none"> • A strong, passionate, and influential committee with support from a Regional Coordinator has been critical to RH&C success. • Regional Coordinator funding has been deferred by the S&HLGA Board, with the Board noting this does not in any way lessen their commitment, and that reduced momentum is expected. • Existing Regional Coordinator funding was impacted by Landscape Board boundary realignments and COVID-19 recovery. Efforts to encourage State Government reinvestment have not yet borne fruit. • Committee meeting format and frequency is working well and should be continued, with virtual options added to improve accessibility and reduce carbon footprint. • Mayors and CEOs have a high awareness of RH&C, supported by internal engagement and S&HLGA. • Formalised regular reporting to all signatories would help to build buy-in and perceived value. • The partnership provides peer pressure for local decision-making as well as credibility to support successful grant applications and advocacy work. • A dip in focus from State Government and the LGA on climate change has hampered progress somewhat. 	<ul style="list-style-type: none"> • Continue to build on our strong foundation, including Committee membership and format • Continue to advocate for state and regional funding support and explore alternative funding sources to reinstate a Regional Coordinator • Actively include virtual options to attend committee meetings • Renegotiate and recommit to the Regional Sector Agreement • Develop a 4-year action plan • Strengthen high-level engagement with partner Landscape and RDA Boards • Introduce formal annual reports to all signatories
Localised action by individual partners		
<ul style="list-style-type: none"> • Local Action Plans developed by each partner Council • Substantial internal engagement by Steering Committee members in partner organisations • WSUD focus enabled on-ground action by partner Councils • Partner Councils ramped up efforts to reduce operational emissions 	<ul style="list-style-type: none"> • Committee members have the capability and credibility in their organisations to drive localised action, which has been supported by continuity of membership. • Networking between partner Councils is strong – Councils don't 'feel alone' in their region or efforts. • Initiatives that actively supported Committee members to reach out in their organisations (eg. WSUD training, Climate Risk Governance Assessments, WWBWWB) have supported embedding climate risk management across the business. This should be a focus going forward. 	<ul style="list-style-type: none"> • Review Local Action Plan template and process (consider local actions being within shared RH&C action plan instead), remove from RSA • Strengthen ability for Committee members to drive localised action, including through shared key messages and shared reporting processes and templates • Prioritise projects that actively support Committee members to

Achievements	Reflections	Recommendations
<ul style="list-style-type: none"> • Climate Risk Governance Assessments strengthened awareness and action across partner Council business • Climate change is shifting from a fringe consideration to a mainstream risk to be managed across organisations and programs • Five partner Councils became members of the Cities Power Partnership • Four partner Councils declared a Climate Emergency 	<ul style="list-style-type: none"> • Local Action Plans have had varying degrees of utility for partner Councils. There is currently no mechanism for accountability to the Committee. A simpler approach with greater alignment to the Adaptation Plan could increase their utility. 	<p>reach out in their organisations, especially to aligned functions (assets & infrastructure, greening, risk & audit etc)</p>
Responsive project management and governance to reflect learning from this partnership and similar partnerships		
<ul style="list-style-type: none"> • Regular guest presentations from partners and stakeholders to facilitate learning • Members are actively involved in the Adaptation Practitioners Network / Central Coordination • Some projects were informed by other Partnerships, particularly the collaboration with Resilient South to deliver Climate Risks for Councils workshops and the Climate Risk Governance Assessments 	<ul style="list-style-type: none"> • Networked peer-to-peer learning is a strength of the Regional Climate Partnerships, particularly when there is central coordination support. • Many hands have made light work – shared information and resources enhance our ability to act with agility. • The Committee should more regularly invite Regional Coordinators of other regions to present at meetings and inform our project management and governance. • Regular monitoring and evaluation have not been a focus of the Committee to date. This is the first formal evaluation. • The Committee has recognised its tendency to ‘bite off more than they can chew’, and that there is a need for project management to enable more realistic expectations of capacity and delivery timeframes. 	<ul style="list-style-type: none"> • Continue engaging in APN / Central Coordination for peer-to-peer learning • Regularly invite other Regional Coordinators to Committee meetings • Evaluate progress against the Adaptation Plan and action plans biennially • Use evaluation and action planning processes to set more realistic goals
Strengthening engagement and partnerships between partners and with community, industry, business, education, and government sectors		
<ul style="list-style-type: none"> • WWBWWB partnership with Natural Disaster Resilience Program and Insurance Council of Australia • Climate Ready Communities partnership with the Red Cross • Community workshops attracting over 200 participants • Community engagement via the Community Energy Program 	<ul style="list-style-type: none"> • During the initial implementation phase, progressing local action and embedding climate resilience within partner organisations has been more of a focus than reaching out to other stakeholders. • The maturity of the partnership and the social acceptance of climate change have both progressed, opening the door for the Committee to focus more on strengthening engagement and partnerships with other stakeholders. • An initial focus could be to engage with organisations that have an existing relationship with the Regional Climate Partnerships. 	<ul style="list-style-type: none"> • Expand stakeholder partnerships, with an initial focus on those already engaged with Regional Climate Partnerships • Expand community engagement activities • Maintain a priority on local action and engagement to keep partner organisations resilient and support for RH&C strong

Achievements	Reflections	Recommendations
<ul style="list-style-type: none"> • LGR&D Scheme grant to produce Community Energy toolkit for the LG sector, industry and community • Five Councils committing to the Cities Power Partnership • Successful motion to the 2019 LGA OGM • Advocacy to the LGA and State Government • Partnerships with Resilient South to deliver Climate Risk for Councils briefings, Climate Risk Governance Assessments, and Guidelines for Retrofitting Stormwater Basins into WSUD Assets 	<ul style="list-style-type: none"> • Support and capacity for stakeholder engagement will be strengthened if resourcing for an ongoing Central Coordinator can be secured. 	<ul style="list-style-type: none"> • Enhance engagement with Landscape Boards • Formally bring the RDA back into the partnership via the RSA • Advocate to the State Government, LGA, Landscape Boards and other stakeholder to support continued Central Coordination
A flexible and responsive approach to new information that emerges about the rate and magnitude of climate change risks		
<ul style="list-style-type: none"> • Proactively pursued opportunities to explore, raise awareness of and act on emerging legal, financial, insurance and transitional climate risks, despite these not being contemplated in the Adaptation Plan • Proactively expanded remit to include mitigation and other resilience actions, despite these not being explicit in the Adaptation Plan • Proactively pursued coastal hazard mapping and adaptation planning initiatives • Proactively advocated for a joined-up hazard mapping framework 	<ul style="list-style-type: none"> • Expanding the remit of the Committee to include emerging climate risk management issues and mitigation initiatives has enabled us to ‘go where the energy is’, build momentum and buy-in, and be innovative. • The latest IPCC reporting indicates actual global heating is tracking at the higher end of modelled scenarios. This suggests the regional science backing the Adaptation Plan should be revised. • Given the expected heating scenario has changed in only a few years, a more adaptive approach to understanding and responding to the rate and magnitude of risks may be required. A tool to enable this may be in the remit of CSIRO or BOM. • The State Government is now actively considering a joined-up hazard mapping framework, which may include an ability to project hazards under different scenarios and timescales. 	<ul style="list-style-type: none"> • Maintain flexibility to respond to emerging climate risk types, even if not contemplated in the Adaptation Plan • Continue to engage with the State Government to request a joined-up hazard mapping framework • Engage with the State and Federal Governments to request updated regional climate projections, and/or a more agile regionalised hazard projection tool

10. Priorities Identified in the Adaptation Plan

10.1. Regional Priorities for Action

The regional adaptation priorities identified in the Plan are, in no particular order:

Adaptively manage protected areas

Adaptive management of protected areas on public lands will focus on managing fuel loads in close proximity to towns and private land. The emphasis on fuel loads will become increasingly important as fire risk increases and the community seeks to balance maintenance of environmental values and ecosystem services with public health and safety concerns.

Responsibility: DEW, Councils

Improve management of native vegetation on private properties

Landholders managing native vegetation on private properties will be supported, where possible, through the use of well-funded incentives.

Responsibility: NRM Boards, DEW

Diversify agricultural activities

Diversification of agricultural activities will focus on investigating and encouraging the use of different varieties and types of crops and pasture, and livestock management practices, from warmer and drier parts of the State, and nationally. This will build adaptive capacity to future warmer and drier conditions and more intense rainfall which will reduce soil moisture and increase erosion risk respectively.

Responsibility: Farming systems groups, industry associations, PIRSA, RDA

Increase stormwater harvesting to improve water quantity and quality management

With rainfall seasonality, quantity and intensity projected to change, greater emphasis is required on water quality management, especially in relation to stormwater. Water quality improvement will require continued investment in water sensitive urban design, stormwater retention areas and water recycling.

Responsibility: Councils, NRM Boards, Water Sensitive SA

Develop climate-ready guidelines for public realm and green infrastructure management

Preparing and commencing implementation of 'climate-ready' guidelines for public realm and green infrastructure management will include appropriate material and tree species selection,

shade coverings, inclusion of water sensitive urban design features, and opportunities for misting infrastructure.

Responsibility: Councils

Incorporate infrastructure design allowances for increases in extreme events

Governments, local government in particular, will ensure that new and renewed infrastructure is designed to allow for increases in extreme events, such as greater fire risk and flooding induced by more intense rainfall events.

Responsibility: Councils, DPTI, RDA

Restrict development in hazard prone areas

Development in hazard prone areas will be prevented or restricted, such as areas at risk from sea level rise along the coast, bushfires inland and infrastructure and dwellings at risk from flooding following intense rainfall events. While this response may take some time to gain community support, in the long term it will avoid impacts on people and reduce the costs (e.g. insurance) associated with protecting or relocating assets and people, and recovering post-disaster.

Responsibility: Councils, DPTI, Coast Protection Board

Build more energy efficient housing

Focussing on building more energy efficient housing will require installation (and potentially development) of energy efficient building materials and fixtures. This will be supported through government incentives and local government advocating development of such materials, working with the development industry (e.g. builders, developers, manufacturers) and research institutes.

Responsibility: Councils, RDA

And the ongoing priorities of:

- **Anticipatory monitoring & evaluation** to detect likely climate impacts and develop action triggers to inform decision-making.
- **Education & awareness raising** about climate change impacts and response options.

Responsibility: State Government, Councils, DPTI, RDA

10.2. Strategic Themes

The Plan summarised the above-listed priorities under two ‘strategic themes’:

- **What We Build** – provide leadership in climate-ready development
- **Where We Build** – improve development planning and management in high risk areas.

10.3. Regional Opportunities

The Plan also identified that the region may be better placed than others in the State to face the challenges of a changing climate, due to its naturally cooler climate and diverse industries. It identified that a preferable climate, combined with an increasing population, could stimulate business activity and lead to opportunities such as:

- encouraging the development of **low carbon communities** with housing that is energy and water efficient and resilient to climate change
- incorporating ‘**climate-ready**’ **design principles** into new buildings and essential services infrastructure
- increasing interest in **green infrastructure** for residential developments.

10.4. Functional Priorities

The Plan identified that successful implementation would require:

- **maintaining momentum**
- **localised action** by individual project partners
- **responsive project management and governance** to reflect learning from the partnership and similar projects
- **strengthening engagement and partnerships** between partners and with community, industry, business, education and government sectors
- **a flexible and responsive approach to new information** that emerges about the rate and magnitude of climate change risks.

11. Alternative Functional Priorities

The below four principles for action were identified through the Climate Risks for Councils workshops in October 2019, and are considered to be more aligned with our approach, and more suitable for guiding the partnership in future.

Advocate and lead	Demonstrate our leadership through commitment, action, and advocacy to the LGA, State Government and other stakeholders
Share knowledge	Generously share tools, resources and knowledge with each other and beyond
Keep collaborating	Continue working with each other, other Regional Climate Partnerships, and external partners to leverage collective impact and reduce the load
Go where the energy is	Leverage local priorities, existing initiatives and networks to sustain and build momentum

12. Existing Plans and Evaluation

12.1. Action Plan 2018-2019

The latest Committee Action Plan was for 2018-19, approved and finalised by the Committee on 19 October 2018. The Action Plan included activities in two functional streams:

- **Strategic Projects** – maintaining momentum
- **Advocacy & Engagement** – embedding resilience in everyday decisions

These activities covered six focus areas:

- Development
- Infrastructure
- Energy
- Risk & Governance
- Partner Capability
- Funding

12.2. Evaluation Workshop 13 February 2020

Key actions identified by the Committee at its evaluation workshop on 13 February 2020 were:

- Actions to renew the partnership:
 - Continue to build on our strong foundation, including the Committee and Regional Coordinator
 - Evaluate progress against the Adaptation Plan
 - Renegotiate and recommit to the RSA
 - Bring the RDA back into the partnerships
 - Develop multi-year action plan
- Actions to consider in action planning:
 - Do more with business, eg. a business resilience planning initiative
 - Do more with agribusiness, eg. exploring more adaptation support and carbon farming as part of a zero emissions pathway
 - Explore other opportunities to leverage WWBWWB, eg. annual data updates/reviews and a 'House of Tomorrow' display village
 - Undertake heat mapping of the region and consider cooling initiatives
 - Assist in setting aspirational emissions targets for the region
 - Do more to engage the community
 - Build and promote the RH&C brand

13. What We Have Achieved

13.1. Ongoing or in Progress Initiatives and Activities

- Where We Build What We Build – to be completed by 30 June 2020
- Community Energy Program – to be completed by 30 June 2020
- Climate Risk Governance Assessments – two Councils complete, three in progress
- Climate Ready Communities
- House of Tomorrow
- Alexandrina Coastal Hazard Mapping and Adaptation Strategy

- Kangaroo Island Resilient Agriculture – including building capacity in regenerative agriculture and piloting biodiverse carbon planting
- Integrating climate risk governance into Council governance – including Asset Management Plans, Long Term Financial Plans, Strategic Plans, risk management and disclosure
- Partner Councils continue to reduce operational emissions – including through LED streetlight upgrades, installing solar generation, and including electric vehicles in fleets
- Five Partner Councils joined the Cities Power Partnership and progressed pledges
- All partner Councils are actively engaged in LGA’s Council Ready program to improve emergency management preparedness
- Four Partner Councils implementing responses to their Climate Emergency Declarations – including developing Carbon Management Plans and Environment Strategies
- Two Partner Councils participated in statewide procurement of Snapshot Community Greenhouse Gas Emissions Profiles
- Continued engagement and information sharing:
 - Within and between partner organisations
 - With other Regional Climate Partnerships
 - With the State Government and Local Government Association

13.2. Completed Initiatives and Activities

- Local Action Plans for each Partner Council
- Kangaroo Island Coastal Hazard Mapping and Adaptation Strategy
- Strathalbyn Pocket Park Urban Greening Project
- Enhancing WSUD Capabilities and Investment
 - WSUD Asset Audit
 - Guidelines for retrofitting stormwater detention basins into WSUD assets
 - Training for regional practitioners (public and private) in planning, constructing and maintaining WSUD assets
 - Four on-ground WSUD projects, including streetscape upgrades
- Climate Risk for Councils – Executive Briefing and Staff Workshop
- Community Workshop Series
 - Energy Efficiency
 - Passive House Building
- Engagement with State Government and the Local Government Association
 - Motion to April 2019 LGA OGM to enhance local government leadership in climate risk management (unanimously endorsed)
 - Informal input to DEW policy, plans and strategies:
 - Climate Science & Knowledge Plan
 - Across Agency Climate Change Strategy
 - Submission to the Landscape Reforms
 - Submissions to the Planning Reforms:
 - State Planning Policies
 - Productive Economies Discussion Paper
 - Planning & Design Code