Resilient Asset Management Project



Our climate is changing



and hotter heatwaves



More days of extreme fire danger



Less rainfall overall but more intense storms and flooding



Sea level rise and more coastal erosion

Resilient South councils maintain

\$5.3bn

931 buildings worth \$544m

2,444km of sealed roads **1,200km** of stormwater pipes



Climate change and resilience

Damage to roads, coastal assets and stormwater infrastructure from climate change and extreme weather has had significant and costly impacts across South Australia. Our climate will continue to change, meaning we need to be smarter about how we build and maintain community infrastructure.

Embedding climate resilience means we prepare for, cope with and recover from the impacts of climate change to stay productive, connected and strong. Council assets like roads, stormwater pipes and jetties support community resilience by facilitating transport, flood mitigation and community connection.

Resilient assets will continue to function effectively and benefit their communities as the climate changes.

Resilient Asset Management Project (RAMP)

Building and maintaining infrastructure is a major cost for councils, so it is vital to factor the impacts of climate change into our asset management. Where opportunities to build resilience have been identified, it has been difficult to secure the investment required.

The Resilient Asset Management Project will support councils to:

- Recognise how asset management decisions can either build or decrease regional resilience
- Quantify the magnitude of climate change risks to selected asset classes and the functions they provide

- Identify risk mitigation options
- · Understand how to make our assets climate-ready

By sharing the RAMP approach with councils outside our region, the RAMP will help lift standards for asset management across local government.

RAMP progress - October 2022

Phases one and two of the RAMP have delivered:

- A Research and Recommendations report that describes the project context, a summary of asset management systems and processes within our councils, a summary of barriers to change, a description of potential tools and approaches for to assess risks to assets and recommendations for the RAMP pilot project (available from resilientsouth.com/ramp).
- A tool to assess asset management maturity with a climate resilience focus, based on existing asset maturity assessment frameworks to test with the four councils and share with other councils.
- Development of a pilot project to assess risks to selected asset classes, identify mitigation options, understand the costs and benefits of action compared to inaction and develop information to support investment decision making.











Resilient Asset Management Project

RAMP pilot

The RAMP pilot commenced in September 2022 with Aurecon engaged as the RAMP Delivery Partner. The pilot will develop an approach to assess different asset classes at different scales. Proposed asset classes for analysis in the pilot comprise council roads (for all four councils), major buildings (City of Marion), bridges (City of Mitcham), open space and coastal assets (City of Holdfast Bay) and stormwater (City of Onkaparinga). Mapping resilience pathways for different asset classes will allow councils to understand the different risk and opportunities that each asset class presents.

The pilot will partner with CSIRO and Value Advisory Partners to use their Enabling Resilience Investment (ERI) pathways to identify the best opportunities for climate adaptation. The ERI approach has been developed to speed-up and scale-up coordinated and collaborative efforts to address the systemic barriers to climate and disaster risk reduction and resilience investments.

RAMP deliverables

The RAMP will deliver new data, tools and systems that allow us to maintain service levels in the face of increased climate risks. The project will deliver:

- a shared vision and plan for transitioning for a resilient southern Adelaide
- a spatial database to be used by council staff to understand physical risks to assets under different climate scenarios
- a risk database to explore non-physical risks to assets (e.g. risks from transitioning to a low carbon economy)
- a documented assessment approach that can be replicated by other councils and for additional assets in the future or as new climate data becomes available
- a plan for how increased investment in climate-resilient assets can be funded
- capacity building for councils and key stakeholders to improve our capacity to effectively manage our assets.

For more information, contact: hello@resilientsouth.com

Benefits of resilient assets

By effectively managing the climate risks to our assets, Resilient South councils will:

- · optimise council expenditure
- promote assets' and infrastructure's contribution to regional resilience
- provide resilient assets to support communities, business and industry, and contribute to southern Adelaide's economic prosperity
- reduce infrastructure repair and replacement costs by building assets that have been designed to function effectively in the future climate and are fit for purpose
- progress emissions reduction towards net zero.

The RAMP is a great example of how our councils are collaborating with state and federal government, other regions and industry leaders to improve service delivery and community resilience across southern Adelaide and beyond.

It's all about making smart decisions with the best available data, improving the skills and capacity of our organisations, fostering a strong community of practice around resilient assets and building the case for resilience investments.

Funding partners

The RAMP has received financial support from the Resilient South councils, CSIRO, the LGA SA Research and Development Scheme, and the Disaster Risk Reduction Grants Program funded by the Australian Government and the South Australian Government*.







* Views and findings associated with this project are expressed independently and do not necessarily represent the views of the State and Commonwealth funding bodies.



Resilient South is a partnership between the South Australian government and the Cities of Holdfast Bay, Marion, Mitcham and Onkaparinga. Resilient South is focused on climate change adaptation and mitigation projects that ensure our region meets the challenges of climate change, continuing to thrive and prosper.









