

Climate Ready Onkaparinga

Taking climate
action together



Resilient
South

Climate
Ready
Southern
Adelaide

CITY OF
ONKAPARINGA





Climate Ready Onkaparinga

City of Onkaparinga has worked for many years to get on the front foot with climate change.

We have forged strong partnerships across every level of government, the business community, NGOs and community groups.

We are also founding members of Resilient South, which works to strengthen southern Adelaide so that our businesses, communities and environments can tackle the challenges of climate change and make the most of opportunities.

Join us in getting climate ready!

www.resilientsouth.com

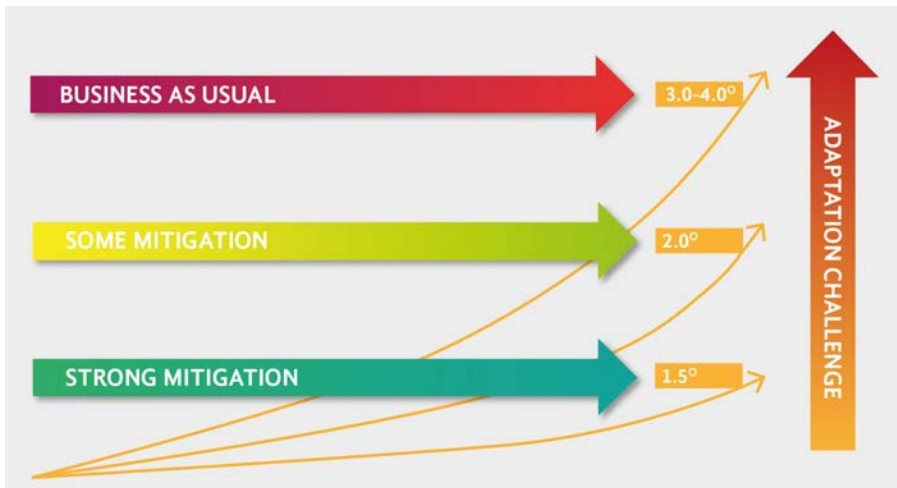
www.onkaparingacity.com



The relationship between mitigation and adaptation

Even if we substantially reduce our greenhouse gas emissions - **mitigation**, some changes to our climate are already locked in. This means that we also need to prepare for and respond to the impacts from a changing climate - **adaptation**.

The greater the temperature increase, the greater the adaptation challenge.



Climate change impacts in southern Adelaide

The impacts of a changing climate are already being felt within the City of Onkaparinga.



More frequent, long-running and intense heat-waves



More extreme fire danger days



Less rain overall but more intense storms and flooding



Changed growing conditions



Sea-level rise, more coastal erosion, and storm surges

These localised climate impacts present a challenge to our health, natural environments, assets and infrastructure, economy, energy systems, water availability, food security and ability to bounce back after natural disasters.

That's why we need to do everything we can to reduce emissions, build our resilience and get climate ready.



Our climate change survey

In late 2017, we developed a public survey to understand community attitudes, knowledge and behaviours relating to climate change so that we can deliver services aligned with community needs.

Survey questions were adapted from the CSIRO Attitudes to Climate Change Survey conducted annually for five years between 2010 and 2014. This allows us to benchmark results against national averages and to track changes within Onkaparinga over time.

“We know what to do. All we need to do is do it...Twenty years ago, we thought that if we got the science right and told people loudly enough, that would be enough. But it wasn’t. We’re learning that actually, it is people’s values and attitudes that shape responses. We would have done things differently if we had realised that... It will be participation that makes us resilient and adaptive.”

Professor David Griggs, Monash University
2012 NCCARF Conference



What people told us...

We asked our community for their thoughts on climate change.

Over **630** people responded!

Here's what they said...

84% believe they have already experienced the effects of climate change



96% expect to be impacted in the future

66% would like more support and information about how to prepare and respond to climate change



81% are personally willing to take action on climate change



28% say they have already taken action



94% believe City of Onkaparinga should take some responsibility for responding to climate change



61% don't know what City of Onkaparinga is doing





City of Onkaparinga climate change action

Our community told us they want us to take action on climate change but many don't know what we're doing.

So, here's a snapshot of some of our work strengthening the region so that we can remain vibrant, productive and resilient...

*I think
climate change is one
of the most important
issues our local, national
and global community is
currently facing...
It is good to see that the
Onkaparinga council has
it on their agenda.*

Survey Respondent



Resilient
South



Resilient South

In 2011, we became founding partners of Resilient South - a partnership between councils in southern Adelaide (Onkaparinga, Marion, Mitcham and Holdfast Bay) and state government, building the strength and resilience of our beautiful region.

We have developed a Resilient South Regional Climate Change Adaptation Plan as well as local implementation plans for each council area. These, and loads of other useful and informative resources, can be downloaded from our website - www.resilientsouth.com.

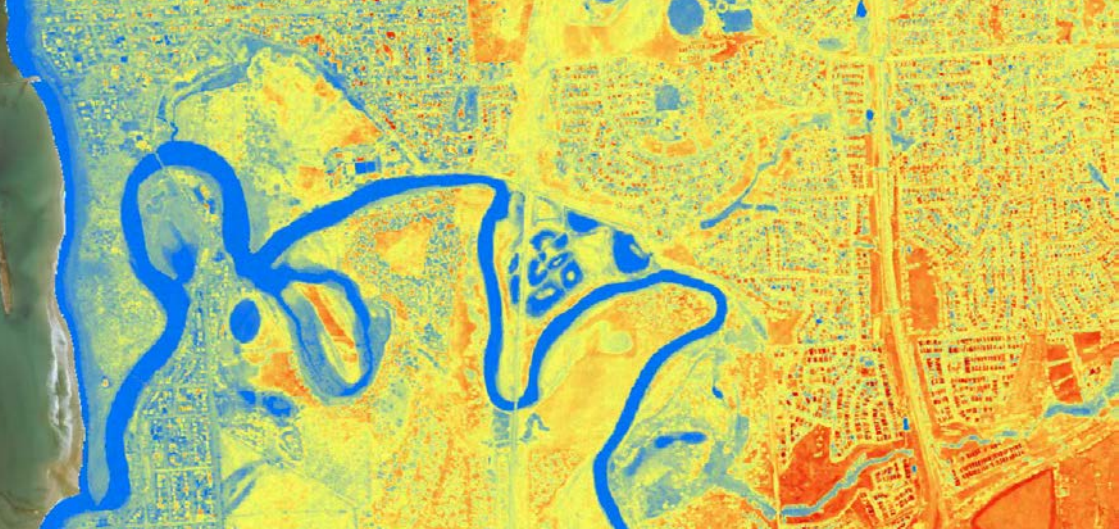
We have been widely recognised for our work with Resilient South.

- 2014 Local Government Climate Adaptation Champion, National Climate Change Adaptation Research Facility
- 2015 Best Planning Ideas Award, Planning Institute of Australia
- 2018 Minister For Health And Wellbeing - Excellence In Public Health Award, Government of SA
- 2018 Resilient Australia Government Award, Government of SA, Australian Government, Australian Institute for Disaster Resilience



Government of
South Australia





Heat mapping

Did you know that heatwaves kill more people than any other natural disaster including flooding, bushfires and cyclones?

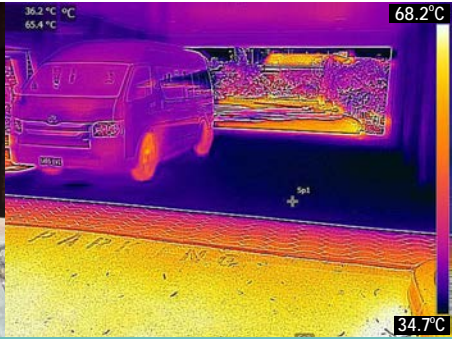
In 2016, we mapped the heat of our residential areas to identify the places most at risk from heat stress. You can check out how heat-exposed your home, business or school is by going to the climate change page on the City of Onkaparinga website and entering your address into the search function of our interactive map.

As temperatures continue to rise, there are lots of things we can do to cool our homes, streets and public spaces.

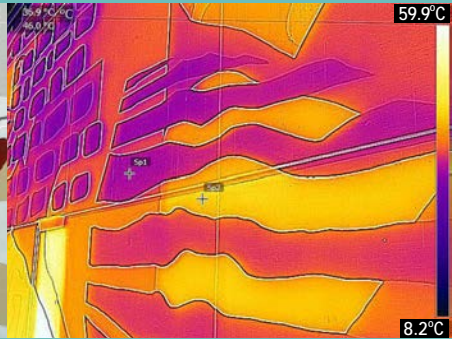
The heat mapping shows us that water and vegetation have a cooling effect. Coastal areas are also cooler than inland areas. We can't all move to the coast, but we can introduce water and vegetation into our local environments.

By identifying hot-spots we can better inform our management decisions relating to tree plantings, urban planning and the health and well-being of our community.

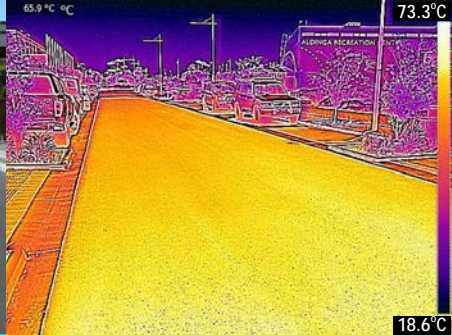
www.onkaparingacity.com/sustainableonkaparinga



Shade is cool!



Lighter colours are much cooler than darker colours



Small trees provide cooling... but large trees are even better!



Trees are cool!

One of the best ways to cool urban hot-spots is to add trees, vegetation and water.

In 2017, we committed to a 20% increase in canopy cover and vegetation by 2045, which means we'll be planting 100,000 extra trees or 5000 per year.

We're already well on track to meeting our target, with staff and community volunteers responsible for growing and planting 19,000 trees in the first two years!

Despite our best efforts to increase canopy cover on council land; with property sizes shrinking, large canopied trees in backyards are under threat. You can reverse this trend by retaining and planting shade trees and vegetation to cool your home and street.

Check out the Botanic Gardens' Plant Selector for ideas for your suburb.

<http://plantselector.botanicgardens.sa.gov.au/>

WE ARE PLANTING 100,000 TREES

2037

100,000

90,000

80,000

70,000

60,000

50,000

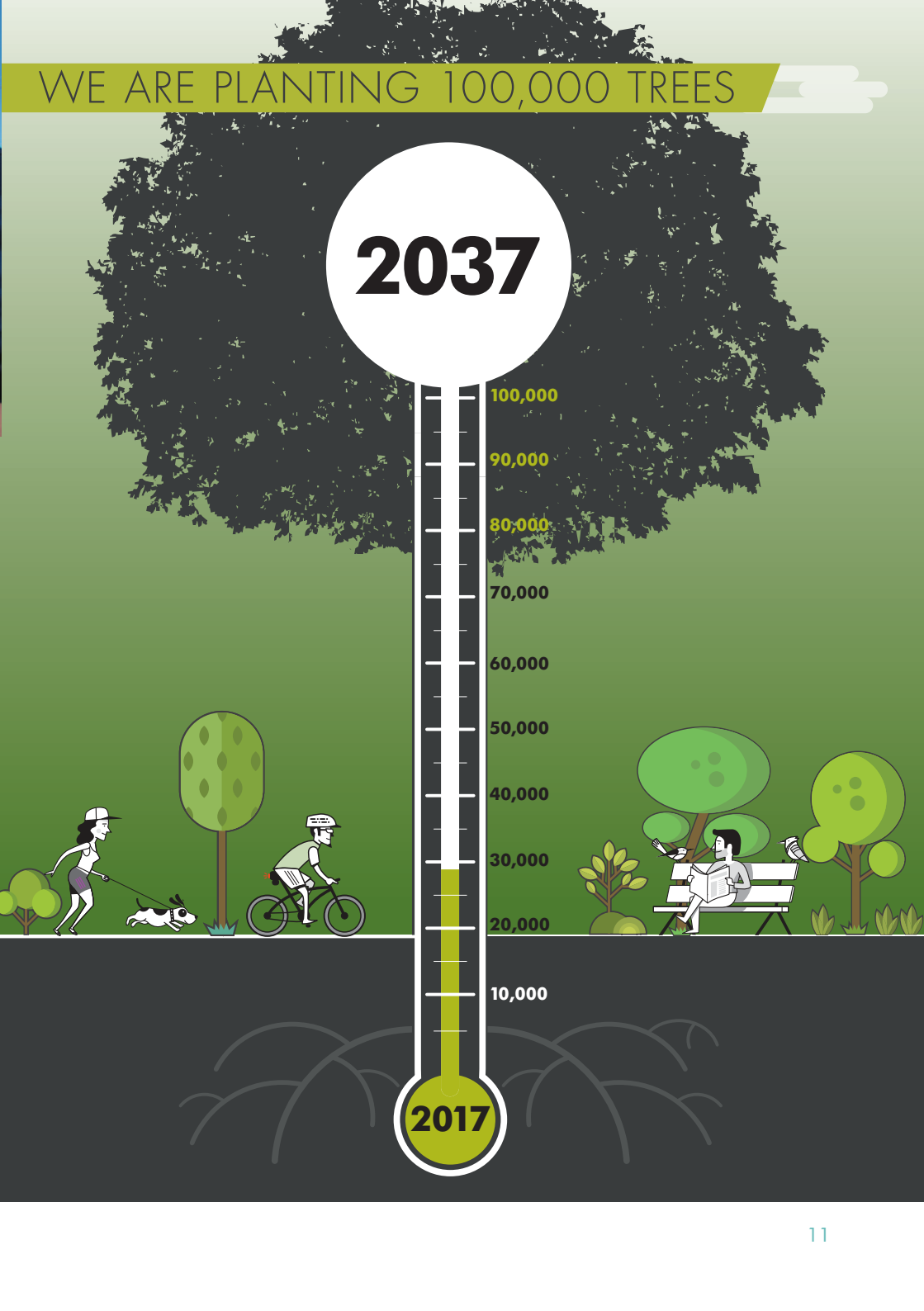
40,000

30,000

20,000

10,000

2017





Conserving our natural areas

Conserving our natural areas is essential for mitigating and adapting to the effects of climate change.

Healthy native vegetation communities contribute to the region's environmental health, resilience and economic prosperity. They provide habitat for our native species, store large amounts of carbon and provide critical ecosystem services such as the cleansing of air and water. They also deliver protection from sun, wind, soil erosion and extreme temperatures.

You can help conserve our natural areas by getting involved in council's Nature Network Community Program. Check out the Sustainable Onkaparinga Calendar on our website for details of events involving bush regeneration, planting of native species and other educational activities.

www.onkaparingacity.com/sustainableonkaparinga



Coastal climate change risk management

Since 2007, we have been actively monitoring coastal climate change risks including sea level rise, storm surge, and biodiversity impacts. These, combined with extreme temperatures, drier conditions and the impacts of increased population and foot traffic; are all contributing to coastal erosion.

Detailed 3D mapping allows us to monitor erosion in vulnerable areas, and citizen scientists help by photographing the impacts of coastal storms. This enables us to work with our communities to take timely action.

Native vegetation management within council's coastal dune and cliff habitats plays an essential role in protecting the coastline from erosion and enhancing our biodiversity.

You can help by keeping to designated paths and getting involved in our community planting days via the Nature Network Community Program.

To participate as a coastal citizen scientist, email resilientsouth@onkaparinga.sa.gov.au





Water sensitive urban design

Water Sensitive Urban Design (WSUD) promotes the sustainable use of water in urban development.

In addition to the many liveability and environmental benefits of WSUD, it's also one of the best ways to cool our cities by retaining trees, vegetation and water in the landscape via green technologies such as wetlands, bio-filters, raingardens, grassed swales, rainwater tanks and permeable paving.

We work closely with developers to encourage them to consider WSUD principles and technologies in the design of new housing developments. We also incorporate WSUD when we upgrade our streets, parks and public spaces.

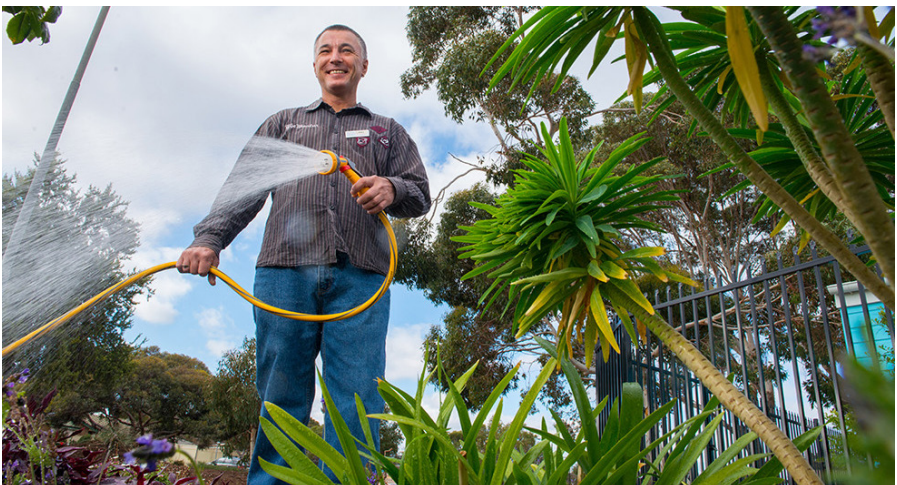
You can incorporate WSUD into your own home and garden. To learn how, visit Water Sensitive SA, www.watersensitivesa.com, of which we are a proud partner.





Waterproofing the south

Drier conditions under climate change means we need to find alternative water sources. As part of our commitment to WSUD, our Waterproofing the South initiative provides an affordable fit-for-purpose alternative to mains water by supplying recycled water and stormwater for the irrigation of parks and reserves, schools and sports fields as well as meeting commercial, agricultural, industrial, construction and municipal demands.





Green Buildings Program

We have supported clubs and community groups by installing solar panels on community buildings. We have more panels planned at some of our larger sites to further reduce our corporate emissions. We're also reviewing energy and water consumption in council owned buildings (including community buildings and sporting clubs) to make sure that we're making the most of solar power, energy efficiency, passive solar design, water and wastewater.

LED street lighting

In 2018, we changed over approximately 12,250 street lights to LED technology. The new LED lights use a fraction of the power at only 14 watts. We anticipate that this will deliver annual savings of over \$500,000 and cut 2,000 tonnes of greenhouse gas emissions. You may also notice less 'skyglow,' as LEDs only illuminate the road and footpath in front of them, rather than spilling light to the sky. With less wasted light, we can now see the stars more clearly!



Strategic planning for climate change

We take our climate change response seriously. Since 2005, we have undertaken a number of scientifically informed climate change impact assessments and developed a range of plans and policies to help guide and prioritise council's climate change activities. Check out the climate change section of our website to learn more.

Corporate emissions reduction

Since 2010/11, we have reduced our corporate emissions by 38%!

www.onkaparingacity.com/sustainableonkaparinga



Cities Power Partnership

In 2017, the City of Onkaparinga became the first South Australian council to join the Climate Council's Cities Power Partnership - a network of Australian councils committed to tackling climate change.

Represented by Tim Flannery, the partnership aims to highlight the work that councils are doing to reduce their emissions, switch to cleaner energy and build greener, efficient and more resilient communities. There are now more than 100 local governments on board, representing over 10 million Australians.

www.citiespowerpartnership.org.au



**CLIMATE
COUNCIL**



**CITIES POWER
PARTNERSHIP**



Emergency management

Extreme events such as bushfires, storms, heatwaves and flooding are all increasing in frequency, duration and intensity under climate change.

We work closely with state government agencies, the emergency services, other councils and NGOs, such as the Red Cross; to prevent, prepare, respond and recover from emergencies in our region.





Communities getting climate ready

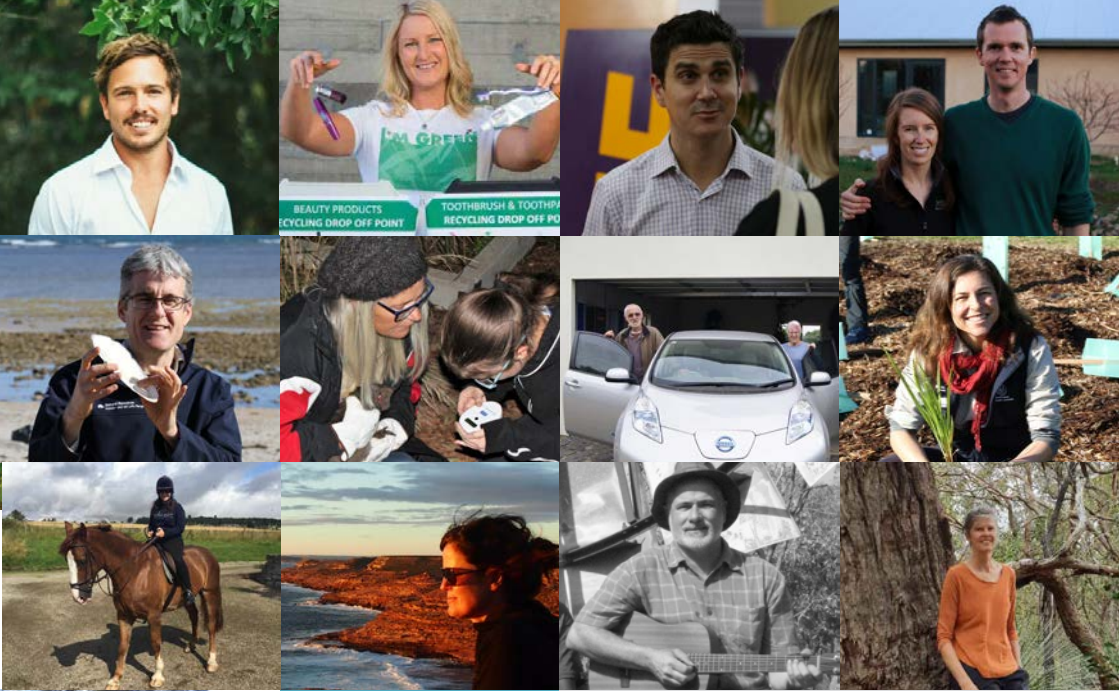
It can be easy to feel overwhelmed by climate change. But there's so much that you can do.

In fact, many of the things that you already do to save money, improve safety and enhance comfort are also having a positive climate impact.

Here are some of the climate ready actions our survey respondents have told us they're doing...

- I have utilised passive-solar design principles in my home (47%)
- I have changed my gardening practices (e.g. growing food/ planting times) (56%)
- I have installed a rainwater tank (63%)
- I have installed insulation, blinds and awnings (86%)
- I have planted trees and green space around my home (84%)
- I have prepared a bushfire response plan (39%)
- I have prepared a heatwave response plan (26%)
- I have reduced my gas and electricity use (79%)
- Where possible, I buy local products (81%)

For more tips on getting climate ready, check out www.resilientsouth.com or, sign up for one of the Sustainable Onkaparinga or Climate Ready programs outlined in the following pages.



Resilient South Wall of Fame

To celebrate the people taking action on climate change in southern Adelaide, we've created a Wall of Fame. Check out their stories and get inspired. Or, even better, add your own profile!

www.resilientsouth.com/wall-of-fame





Sustainable Onkaparinga workshops and events

Environmental education and engagement with our community is a crucial part of what we do and value at council. As part of our commitment to being a Sustainable Onkaparinga, we deliver a wide range of environmental initiatives relevant to climate change, such as workshops on energy efficiency and planting to cool your home, a website packed with tips on how you can save money on your energy bills and reduce your environmental impact, and a quarterly e-newsletter to keep you up to date on projects and opportunities to get involved. Our officers work across the region once a month for your convenience so that you can pop in with your questions.

For more information and to sign up to our newsletter, visit www.onkaparingacity.com/sustainableonkaparinga.



SUSTAINABLE
ONKAPARINGA





Climate Ready Communities

In partnership with the Red Cross and Resilient South, Climate Ready Communities provides training and support to our communities around how to prepare for the impacts of climate change.

If you think we need to get ready as a community for changes in our climate, you can join our group of over 60 trained Climate Ready Champions by emailing resilientsouth@onkaparinga.sa.gov.au.

You can also check out the Climate Ready Communities Guide on the Red Cross website www.redcross.org.au/climate-ready-communities.





Climate Ready Schools

In partnership with Resilient South and the state government's NRM Education Program, Climate Ready Schools uses STE(A)M (science, technology, engineering, arts and maths) and Design Thinking to support students to identify local climate change risks and opportunities for responding within their schools.

Students from local schools have drawn upon council's locally relevant climate change data to develop a range of innovative solutions that they are now putting into practice, including:

- school planting programs to cool hot-spots in the playground
- a Climate Ready cookbook using ingredients that require low water and energy inputs in their production
- energy efficiency audits and education programs for staff and students
- engagement with school leadership around opportunities for installing and maintaining renewable energy systems within the school

Email resilientsouth@onkaparinga.sa.gov.au to register your school's interest in participating.

Resilient South

Climate Ready Southern Adelaide

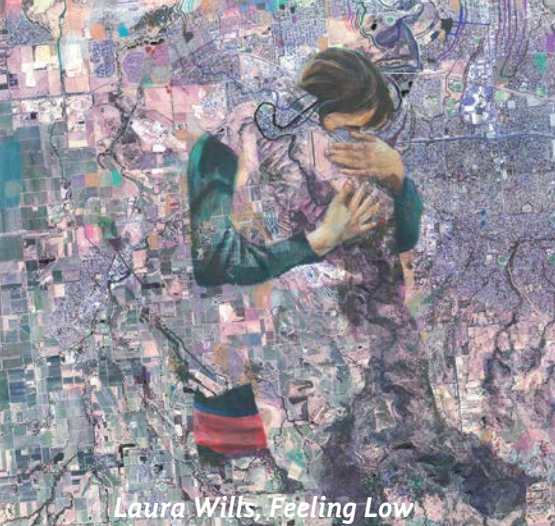


Resilient South



Government of South Australia

Adelaide and Mount Lofty Ranges Natural Resources Management Board



Laura Wills, Feeling Low



Climate is Change - Art Exchange

Art meets science in this unique Resilient South initiative in which artists are offered access to council's climate change data and science to interpret through their art. Artists have collaborated with staff from across the organisation resulting in works that have fostered rich community dialogue around the question of how we should respond to climate change as a community.

Register your interest in participating as an artist by emailing resilientsouth@onkaparinga.sa.gov.au.

Check out the work of previous artists at www.resilientsouth.com/climate-is-change-art-exchange



BEACH

187

~~200m~~



Fleurieu Film Festival

The City of Onkaparinga was proud to sponsor the Fleurieu Film Festival in 2019, partnering on the theme: Climate Change - Hot Topic/ Kool Films. Film makers were given access to council's climate change data, including our 3D coastal mapping that can be used to generate animations.

The festival received hundreds of submissions from local and international filmmakers, each sharing stories of hope, inspiration and action.

The 2021 theme is WILD.

Check out www.fleurieufilmfestival.com.au.





Contact

Phone +61 8 8384 0666

Email resilientsouth@onkaparinga.sa.gov.au

Postal PO Box 1, Noarlunga Centre, SA 5168

Website www.onkaparingacity.com

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