



WACRA Presentation

Jeremy Miller - AdaptWest Regional Coordinator

AdaptWest

- Some background to AdaptWest
- What we have been doing – some highlights
- What is coming up early 2021:
 - Red Cross Climate Champions
 - Community Survey – knowledge and actions
- But first, some headlines.....

Methane discharge 'cracking permafrost' in Arctic

threatens SA
change
warmest

By 9News Staff | 3:18pm Nov 23, 2020

Stopping the momentum of climate change by acting on climate

By Imogen Dewey | 11:45pm Nov 17

Architects call for action over rising urban temperatures caused by cutting down trees for in-fill

By Freya Noble • Senior Producer | 1:28pm Sep 17, 2020

The Arctic is getting hotter, greener and less icy much faster than expected: report

By 9News Staff | 7:37am Dec 9, 2020

More than 60,000 koalas among three billion animals impacted during Australia's 'Black Summer'

By Raffaella Ciccarelli • Producer | 1:01pm Dec 7, 2020

Adelaide Is Now Officially Hottest Capital

Iceberg twice the size of NSW Hunter region
thunderstorms

Atlantic Ocean warmest it has been for 3000 years, scientists say

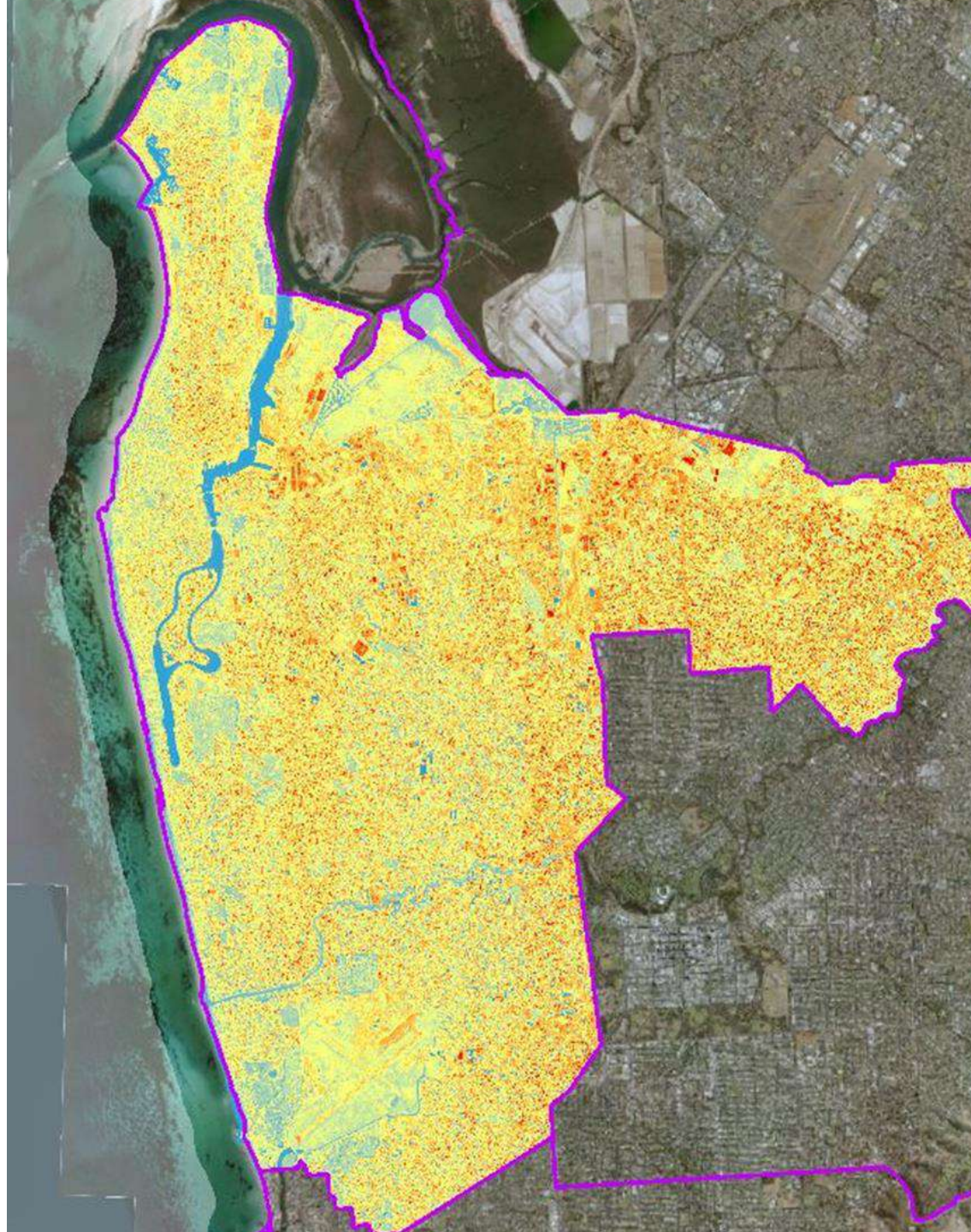
By Sarah Swain | 11:01am Oct 14, 2020

By 9News Staff | 4:58pm Oct 23, 2020



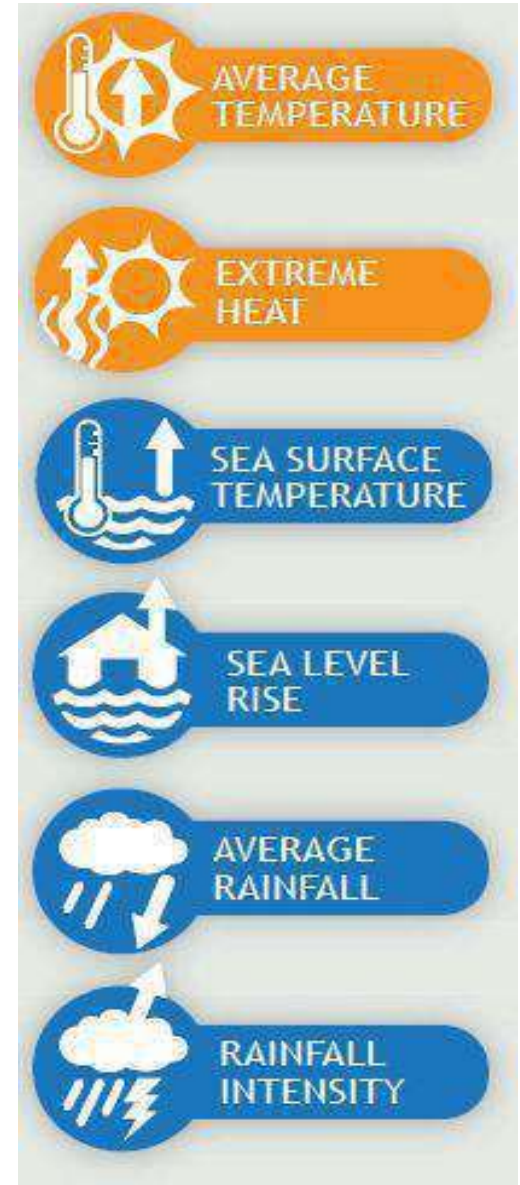
What's in the region?

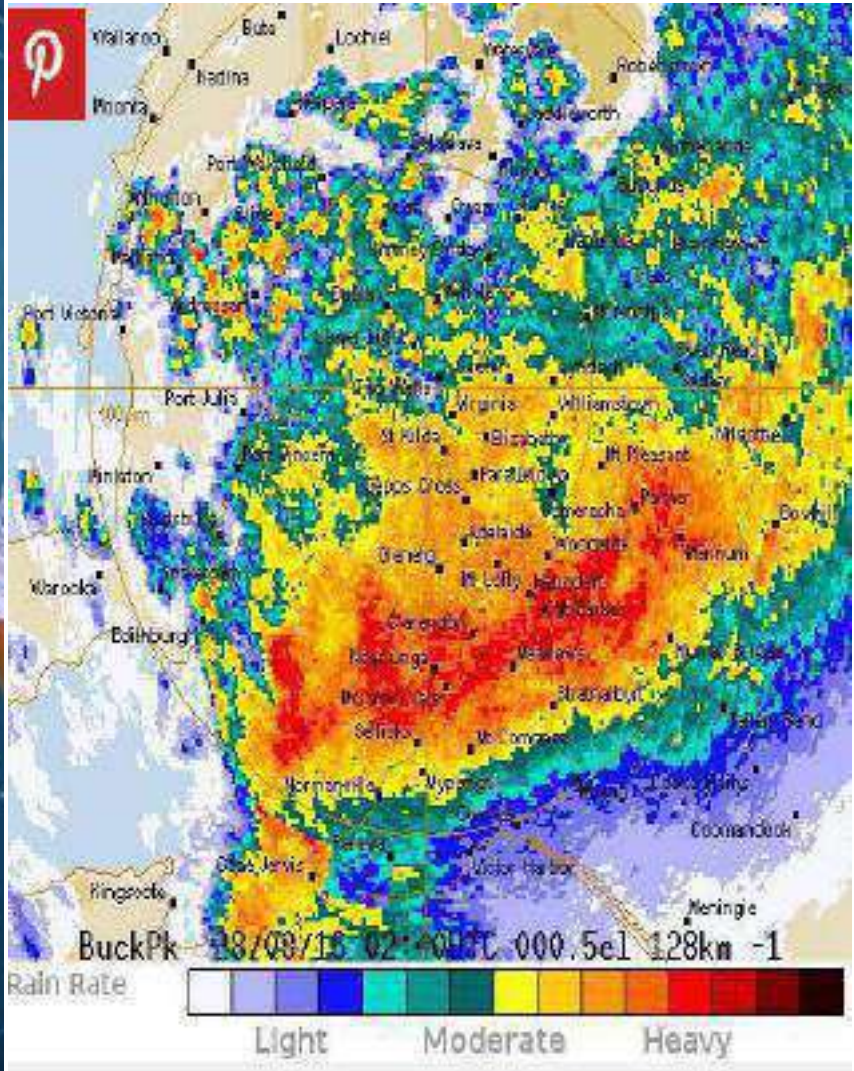
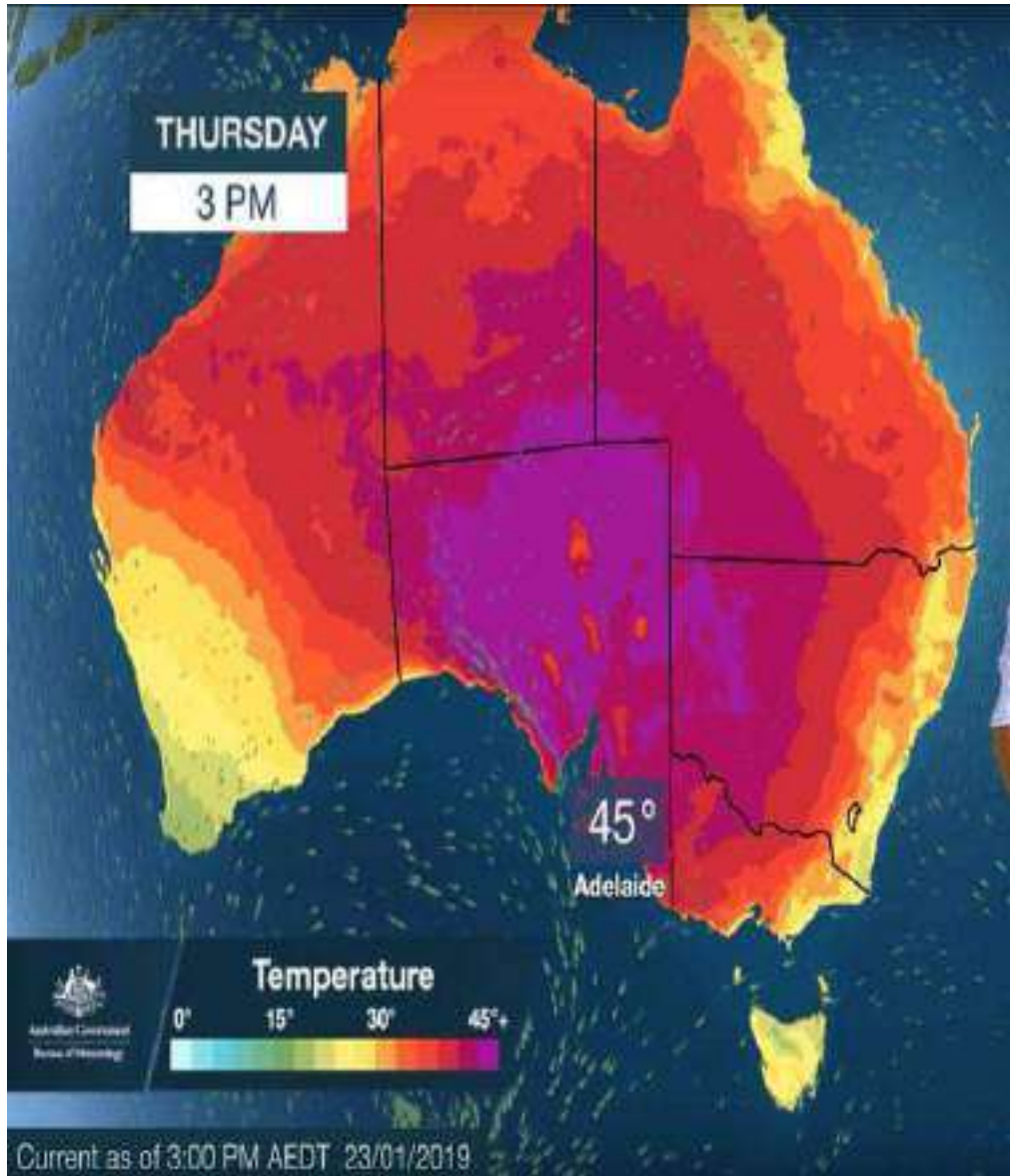
- Defence Industries
- Freight Terminal
- Waste Water treatment plant
- Major urban developments
 - Port Adelaide
 - Lightsview
 - Bowden
 - West
 - Kilburn Blair Athol Renewal
- Adelaide's Beaches
- State strategic energy infrastructure
- Mangroves and Dolphins
- River Torrens linear park
- Adelaide Airport
- 7 x Breweries
- Transport hubs
- The Entertainment Centre
- The Governor Hindmarsh
- The Wheatsheaf
- Semaphore
- 3 x Hospitals
- Train, tram, cycling and walking
- West Lakes
- **~ 22% of Adelaide's population**



Adelaide climate

- Depends on the scenario...
 - More energy in the system...
 - Increase in average temp...
 - Intensity of events...
 - Longer. Hotter summers...
 - Flooding. Inundation...
 - Retreat...
 - Physical and psychological implications...





AdaptWest

Regional Priorities
for the Western
Adelaide Region

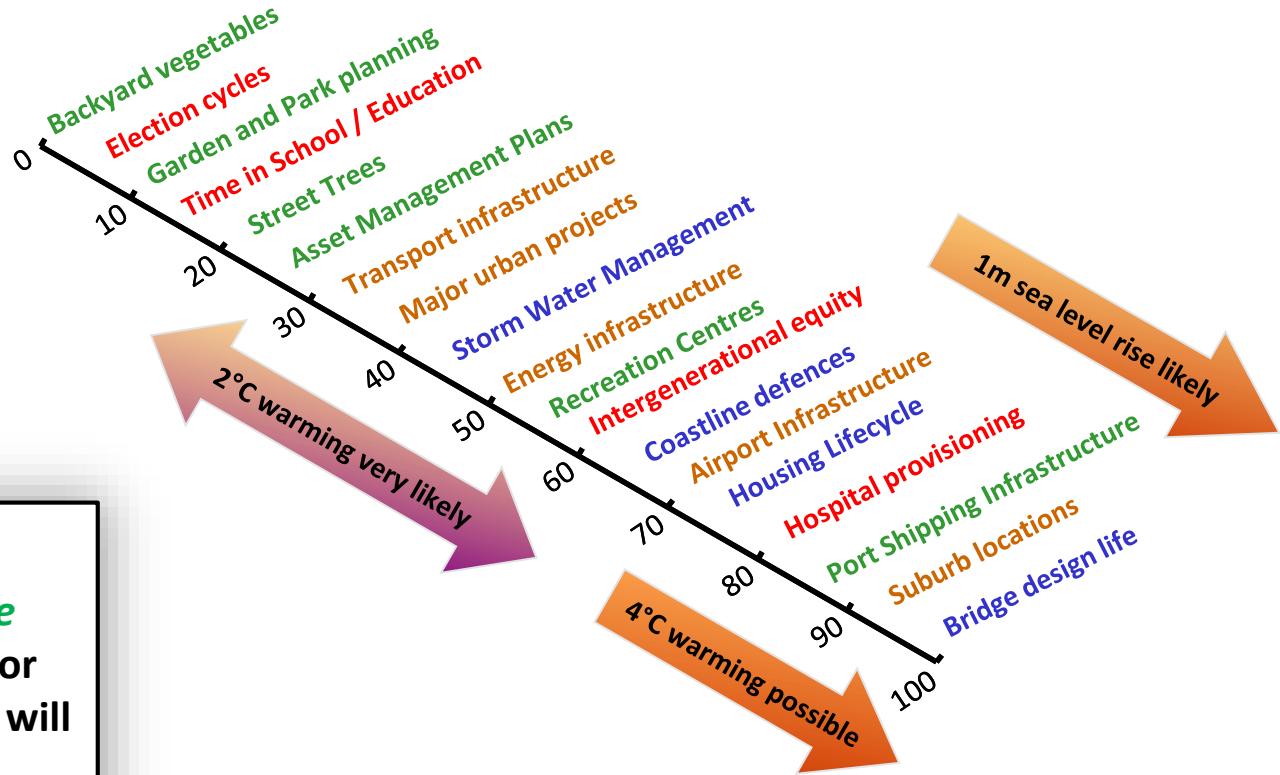


Key Areas of Decision Making

- Business and Industry
- Community Resilience
- Estuarine Waters
- Natural Landscapes (coastal)
- Open and Green Space
- Public coastal built assets
- Stormwater management infrastructure
- Transport and Essential services
- Urban Living
- West Lakes

DECISION LIFETIMES

DECISION LIFETIMES...
the *decisions WE make*
today MUST account for
how long their effects will
be felt...





CITY OF CHARLES STURT

HEBARTH

UNDERDALE

TORRENSVILLE

LOCKEYS

MILE END

PULHAM

BROOKLYN PARK

COWANDILLA

HILTON

ST BEACH

ADELAIDE AIRPORT

RICHMOND

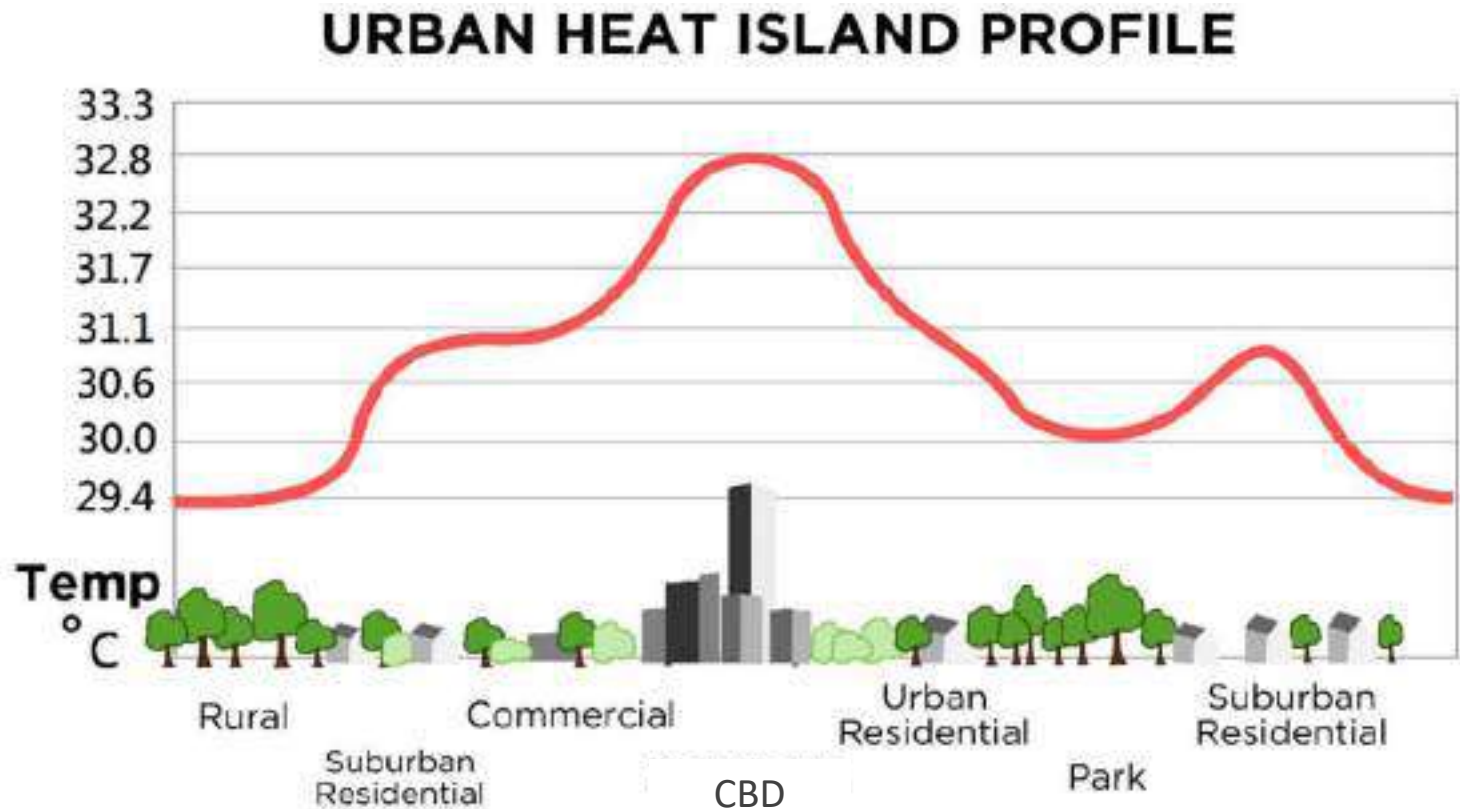
MILLER

NETLEY

MARLESTON

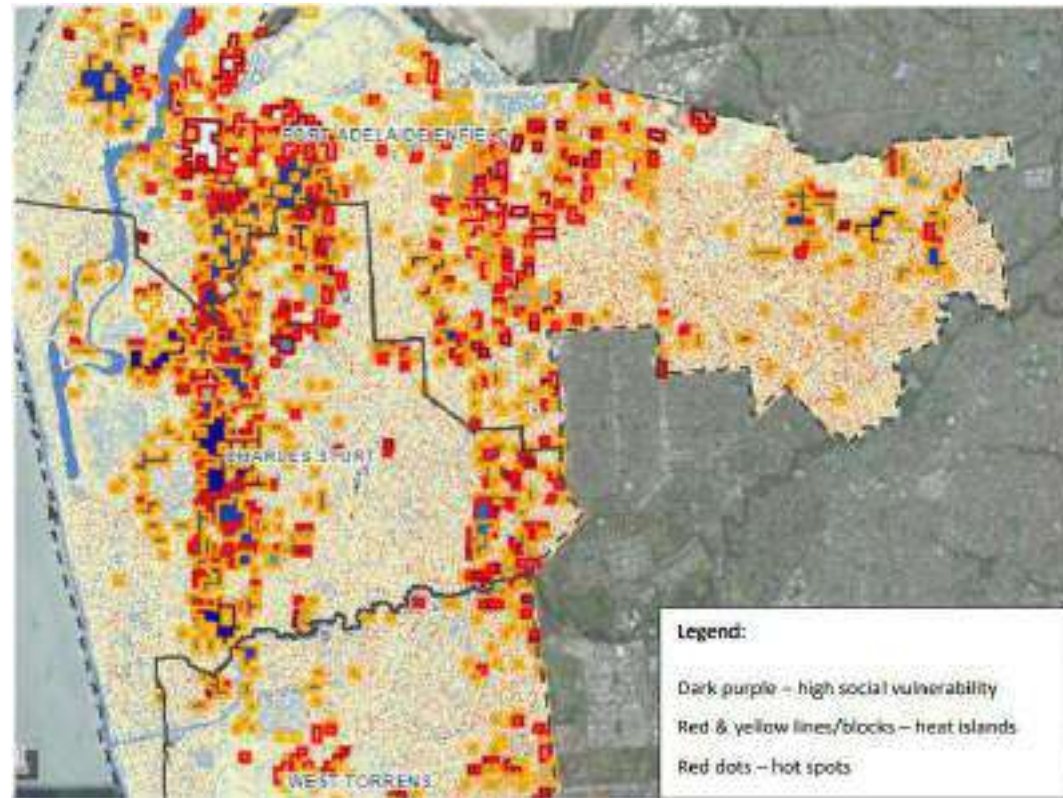
What is the Urban Heat Island Effect?

An urban heat island is a city or metropolitan area that is warmer than surrounding less developed areas due to human activities.



NDRP - Residential Building Retrofit for Climate Adaptation

- Report looks at detailed scoping & evaluation
- Built on investment in heat mapping data
- <https://www.adaptwest.com.au/sites/adaptwest/media/pdf/adaptwest-report---residential-building-retrofit-for-climate-adaptation.pdf>

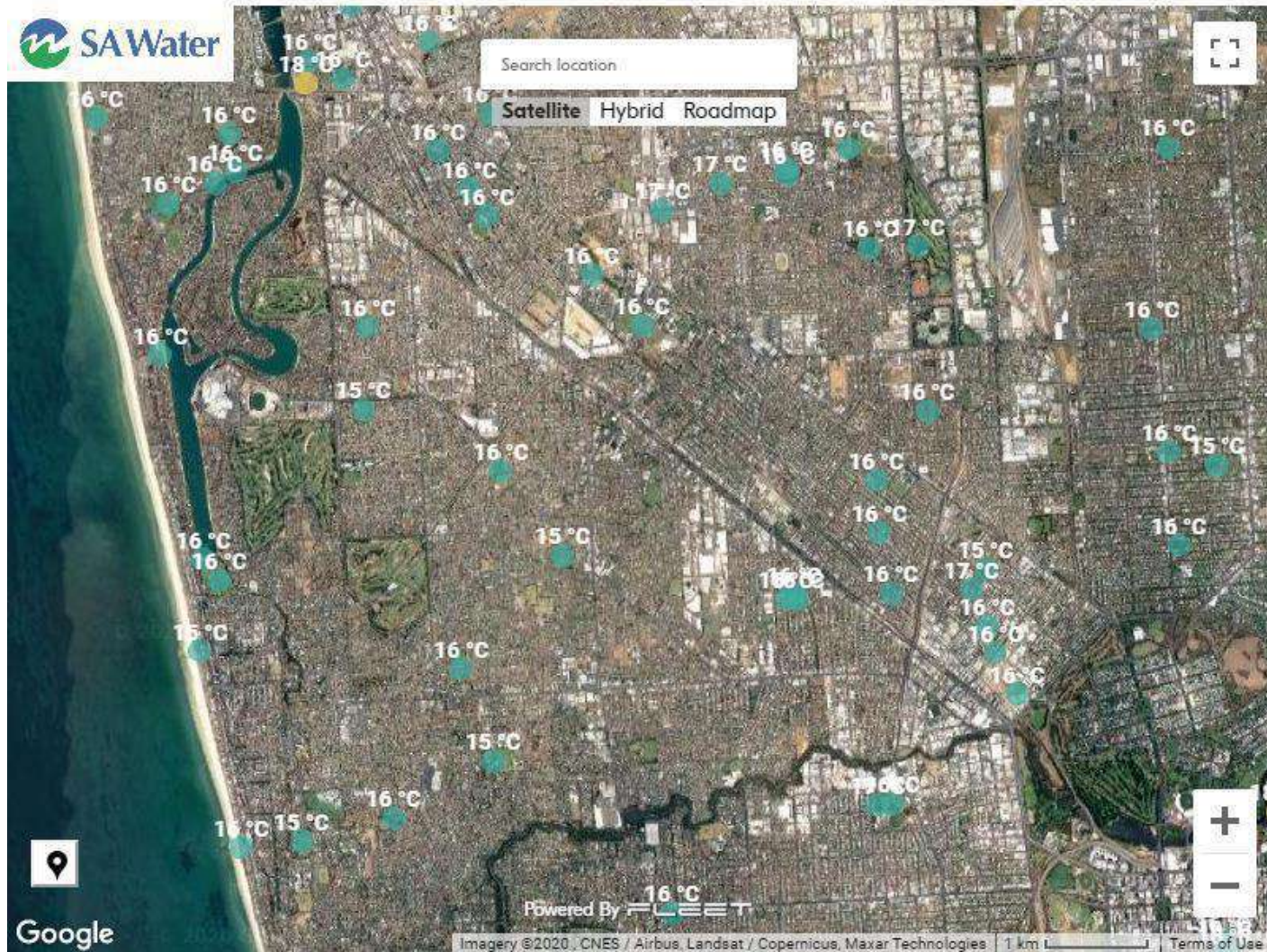


AdaptWest in Action – Smart irrigation

- Smart irrigation ahead of days with forecast extreme heat vs. unirrigated
- Temp. sensors and moisture probes
- Confirm duration and spread of cooling effect
- <https://www.sawater.com.au/education-and-community/community-and-events/cooling-the-community>

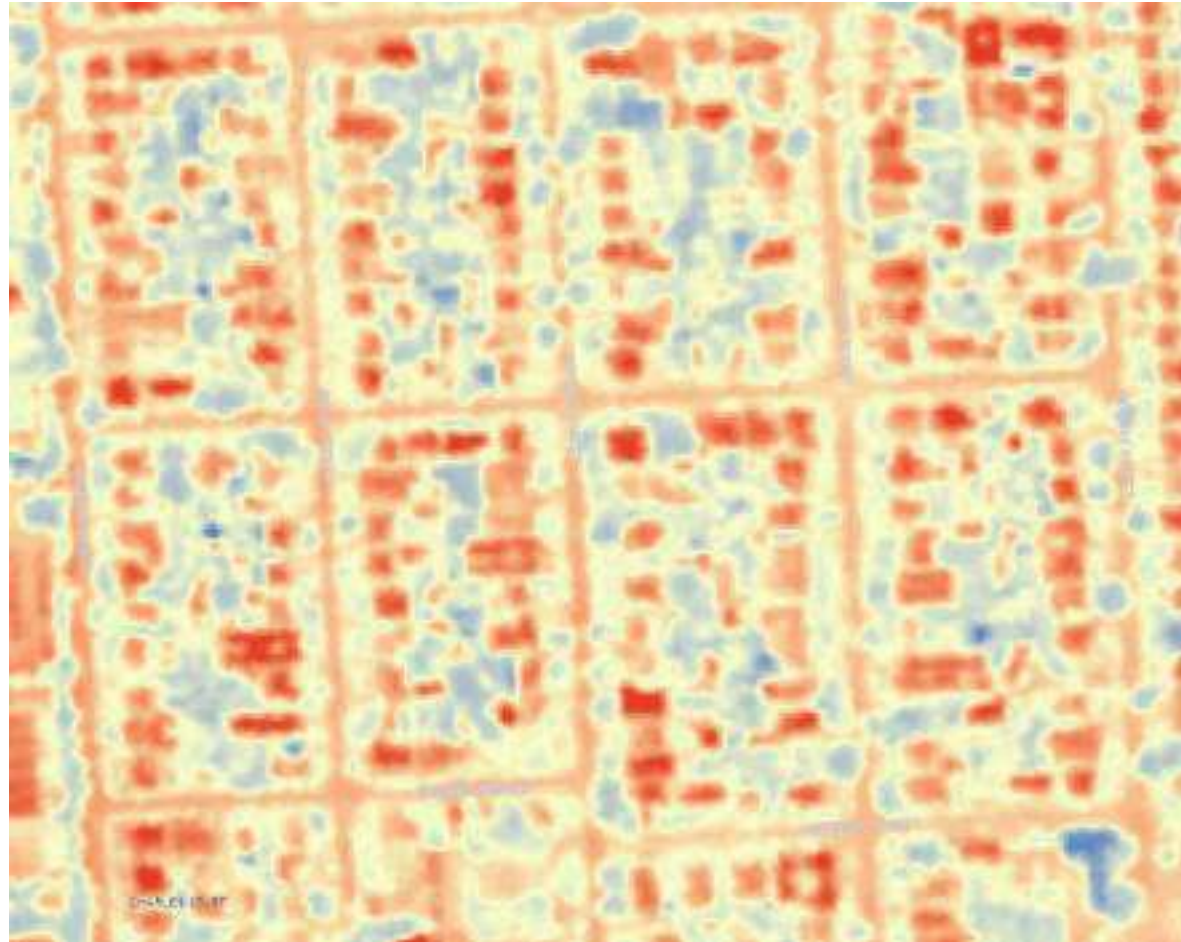


Cooling the community interactive map



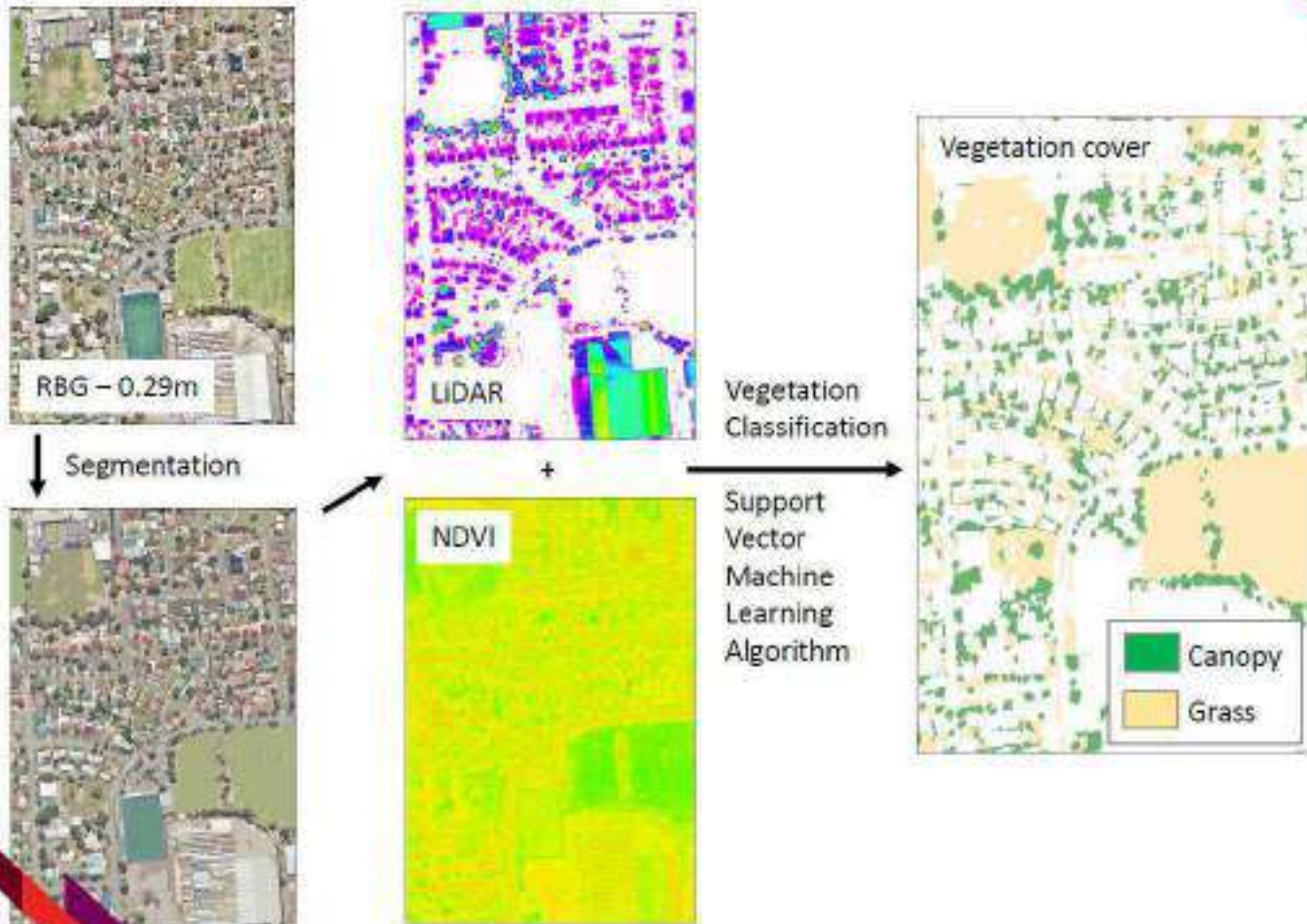
AdaptWest in Action – using yards and trees to mitigate urban heat

- Macquarie University researchers
- Analyzed heat island mapping with 2008 LiDAR
- Studied role of front and back yards in reducing urban heat
- Species and genetic diversity

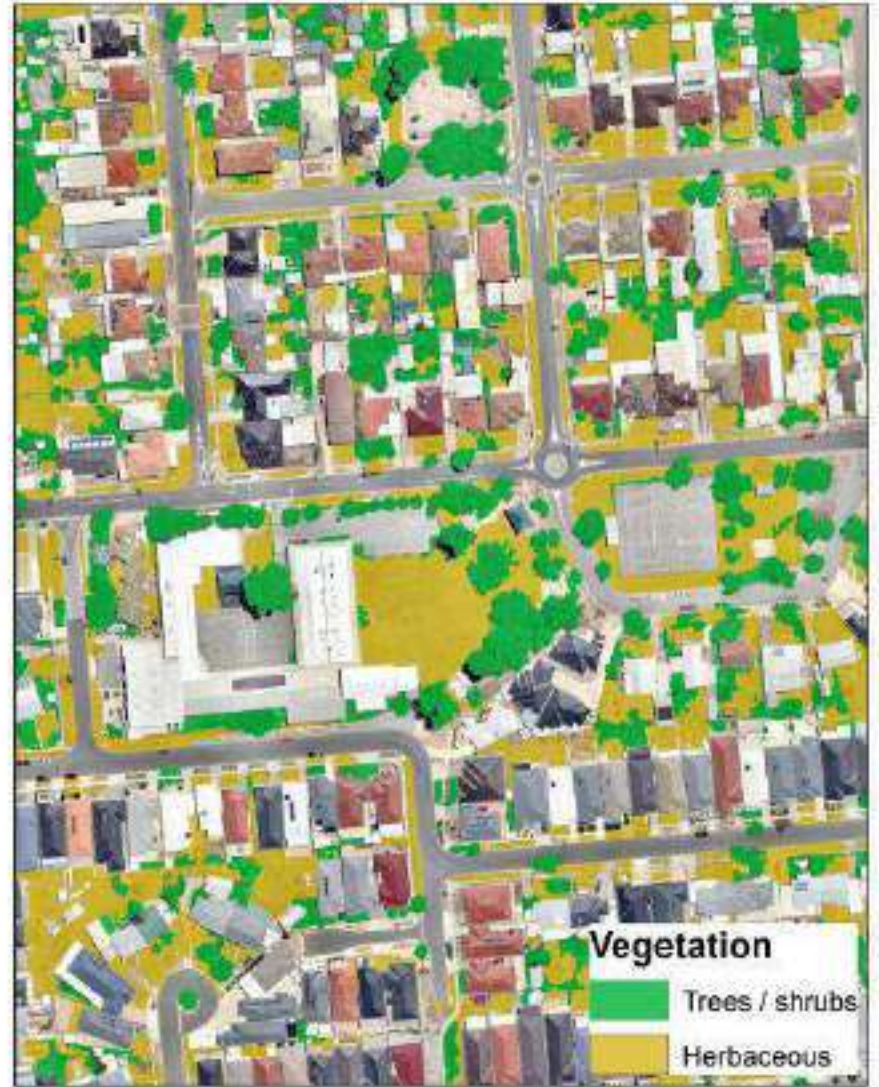


A little bit of science.....

METHODS – vegetation mapping



METHODS



Outcomes

- Important role of Private Open Space – POS (your front or backyard), in *overall* canopy cover and reducing heat islands
- Climatic pressures to increase canopy
- Future opportunities?
 - Advocating / protecting the contribution of your yard to suburban canopy
 - Local ‘cool islands’
 - Town planning and design issues



2018 LiDAR / heat map correlation

- LiDAR captured June 2018 by State Govt.
- Ability to correlate vegetation and canopy structures of a specific location, against heat island mapping data.
- Provide data based evidence why some areas are cooler than others
- Provide insights as to what sort of cooling could be achieved by adding additional green space



- Search Layers... Search
- Administrative Boundaries
 - Cadastrial Information
 - Adapt West Urban Heat Data
 - Resilient East and City of Salisbury Urban Heat Data
 - Resilient South Urban Heat Data
 - Tree Canopy Heights (> 3m) 2018/2019
 - Vegetation Greenness (NDVI) Sept 2018
 - Tree Canopy Boundaries (> 3m) 2018/2019
 - Canopy Coverage by Unit Area 2018/2019
 - Building Footprints 2018/2019
 - Land Use
 - Overlays



Climate Ready in 2021



TRAINING SESSION OUTLINE

PART 1

- Climate Change Overview & Projections
- Adaptation & Mitigation
- Values Based Connections
- Individual & Community Actions

PART 2

- Messaging & Motivating Others to Prepare
- Making A Plan & Next Steps



New CALD outreach for Climate Ready

- Bring voices into the discussion who may be often left out
- Increase reach of climate preparedness information into CALD communities
- Opportunity to clarify climate information
- Create space for sharing and celebrating knowledge and skills from diverse backgrounds
- Improve links between CALD communities, Council and broader community



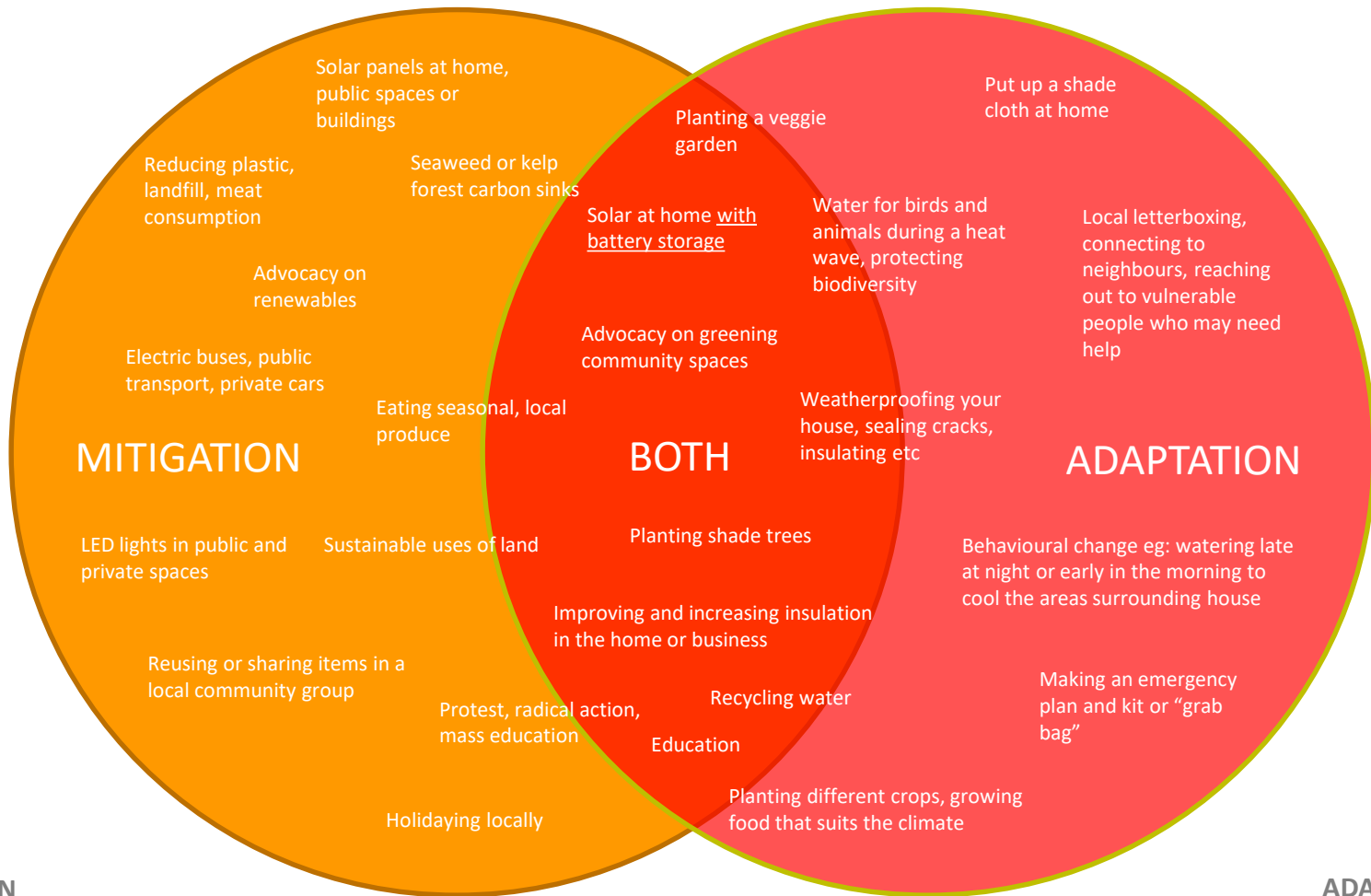
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New things we'd like to equip Champs to do:

- talking with their own CALD networks & community groups about climate
- connect specific CALD groups with established climate focused community groups
- presenting their own workshops online & in person
- celebrating & sharing cultural community skills in adaptation & mitigation
- creating climate preparedness resources in language to share
- advocating to elected members of local council
- reaching out to vulnerable people from CALD communities in emergencies like heatwaves, storms, covid-19 etc
- break down barriers between community & Council, foster more communication

Actions that Climate Ready Champs have identified previously:



MITIGATION
actions to reduce greenhouse gases, to prevent climate change being as bad

redcross.org.au

ADAPTATION
actions to cope with the impacts of inevitable climate change

the power of humanity

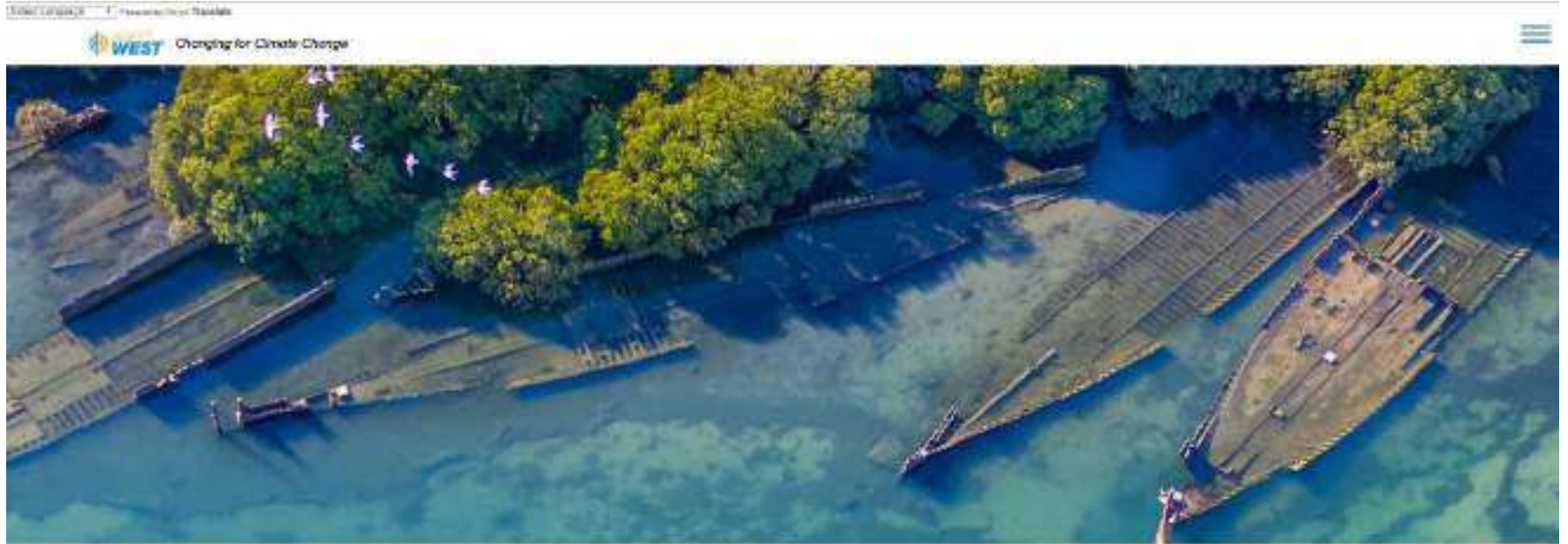
Red Cross Climate Ready Communities

- Launching the AdaptWest program in 2021
- February / March workshops
 - \$15 per person, two-part training sessions, people of all backgrounds encouraged to participate.
 - 11am - 2.30pm Saturday 27th February & 13th March 2021. The Brocas, 111 Woodville Road, St Clair.
- <https://www.eventbrite.com.au/e/climate-ready-communities-training-woodville-2-day-tickets-132750812253>

AdaptWest – Community Survey

- February / March 2021
- Further inform Red Cross work
- Test the values that are in the AdaptWest plan
- Expand on knowledge and actions - individuals and community
- Council Your Say platform

AdaptWest Website



Adapting the western region of
Adelaide for climate change.

Readiness. Response. Resilience.

www.adaptwest.com.au



Mellor Park Reserve

Lysle St Reserve

LOCKLEYS

BROOKLYN PARK

College Grove Park

Linear Park

Lockleys Oval

Helenslea Ave Reserve

Lecon Court Reserve

Lyons St Reserve

ADELAIDE AIRPORT

Britton St Reserve