



Association of Public Service Superannuants

Brenton Grear, Director Green Adelaide

Acknowledgement of Country

We acknowledge and respect the native title holders and traditional owners of the Green Adelaide region – the Kaurna Miyurna (Kaurna people) – and pay homage to their ancestors who maintained the natural processes of the land we are on and whose spirits still dwell on Yarta (Country).



Contents



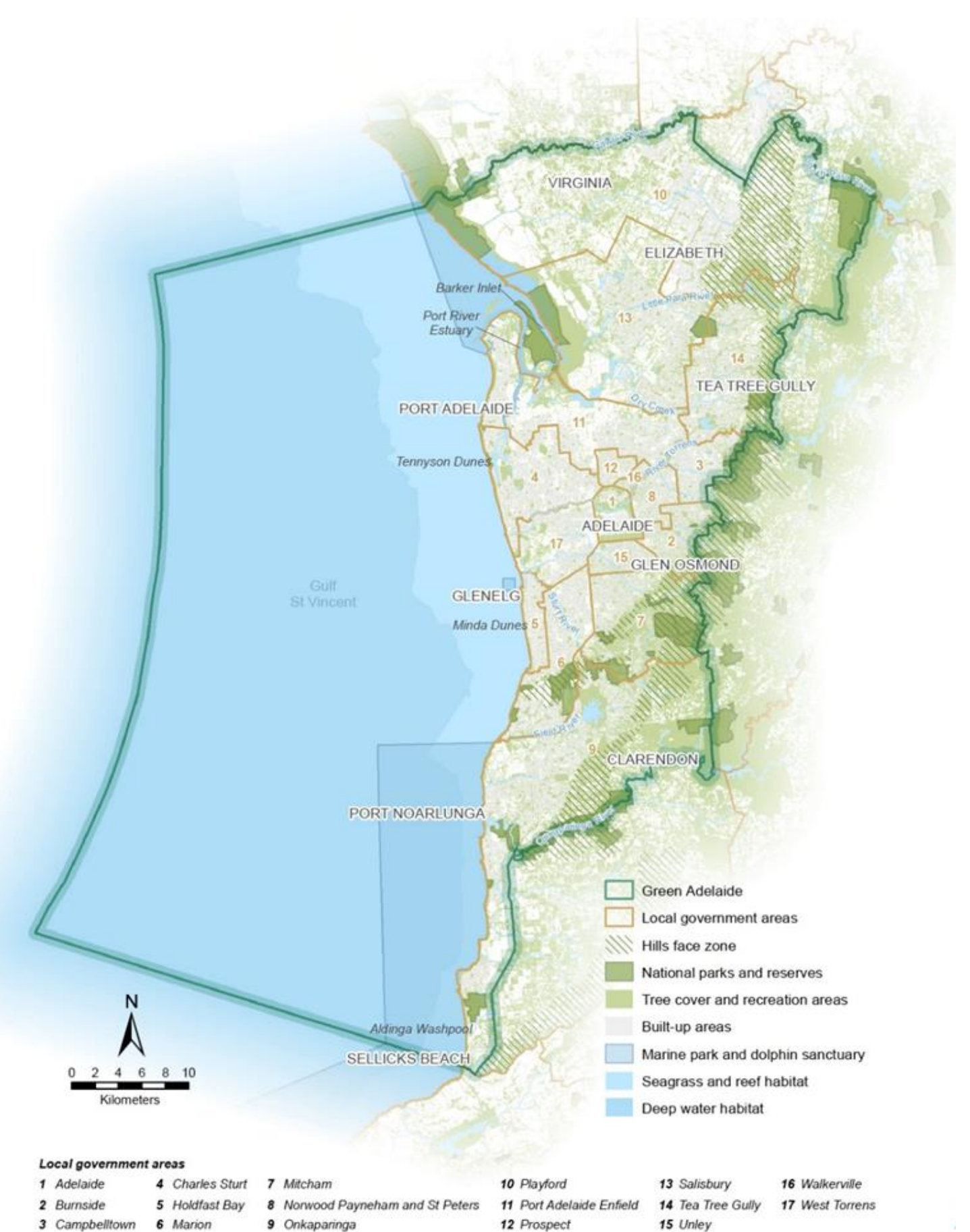
Brenton Grear

- Geographer
- Career – locations, roles
- Drivers – conservation, people, collaboration
- More?



Green Adelaide

- Focused on **metropolitan Adelaide**.
- 10 community-based board members, chosen based on **individual expertise**.
- Staffed by Green Adelaide Branch, Department for Environment and Water who have responsibility to support Board
- Landscape Levy – everyone is a beneficiary and contributor to our unique environment.



Vision

A cooler, greener, wilder
and climate resilient
Adelaide that celebrates
our unique culture.



Illustration by Allan
Sumner

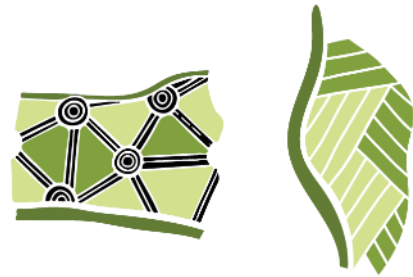
Priorities



Coastal management



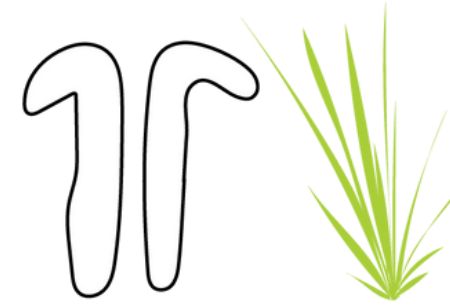
Water resources
and wetlands



Green streets and
flourishing parklands



Biodiversity sensitive
and water
sensitive urban design



Controlling pest
plants and animals



Nature education



Fauna, flora and
ecosystem health



Green Adelaide board



Professor Chris Daniels



Claire Boan



Adrian Skull



Trixie Smith



Dena Vassallo



Tobias Turner



Melanie Ford



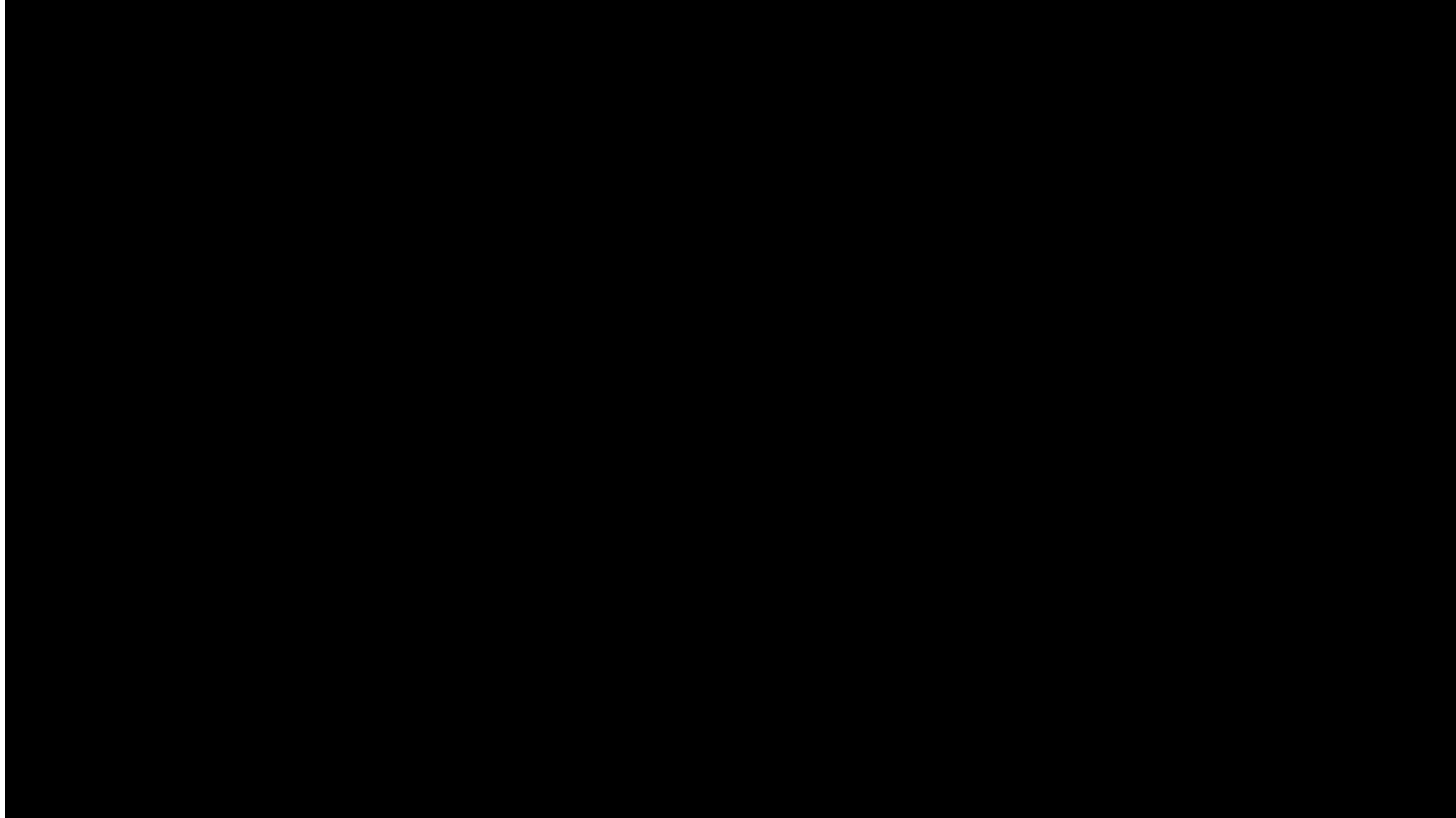
Sarah Sutter



Natasha Davis



Tiahni Adamson



Adelaide National Park City



Nature connection



Biodiverse cities

Diverse range of natural environments





Protecting our threatened species



Are our urban environments **wild**?



Wild and metro





Changing
landscapes



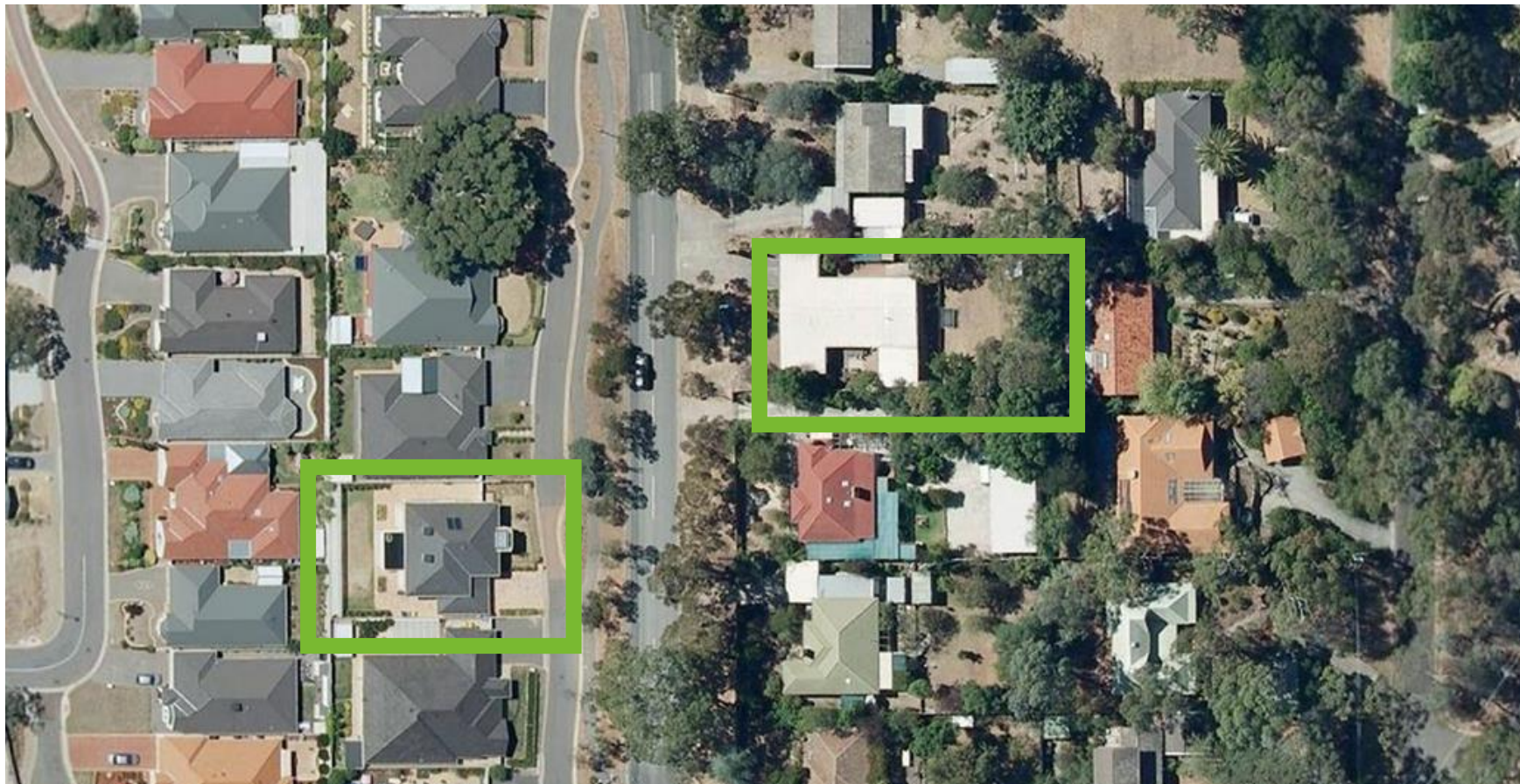
Climate
change



Urban heat and
tree canopy

Changing landscapes

Housing - the loss of the backyard.
Development & urban infill.





Changing
landscapes



Climate
change

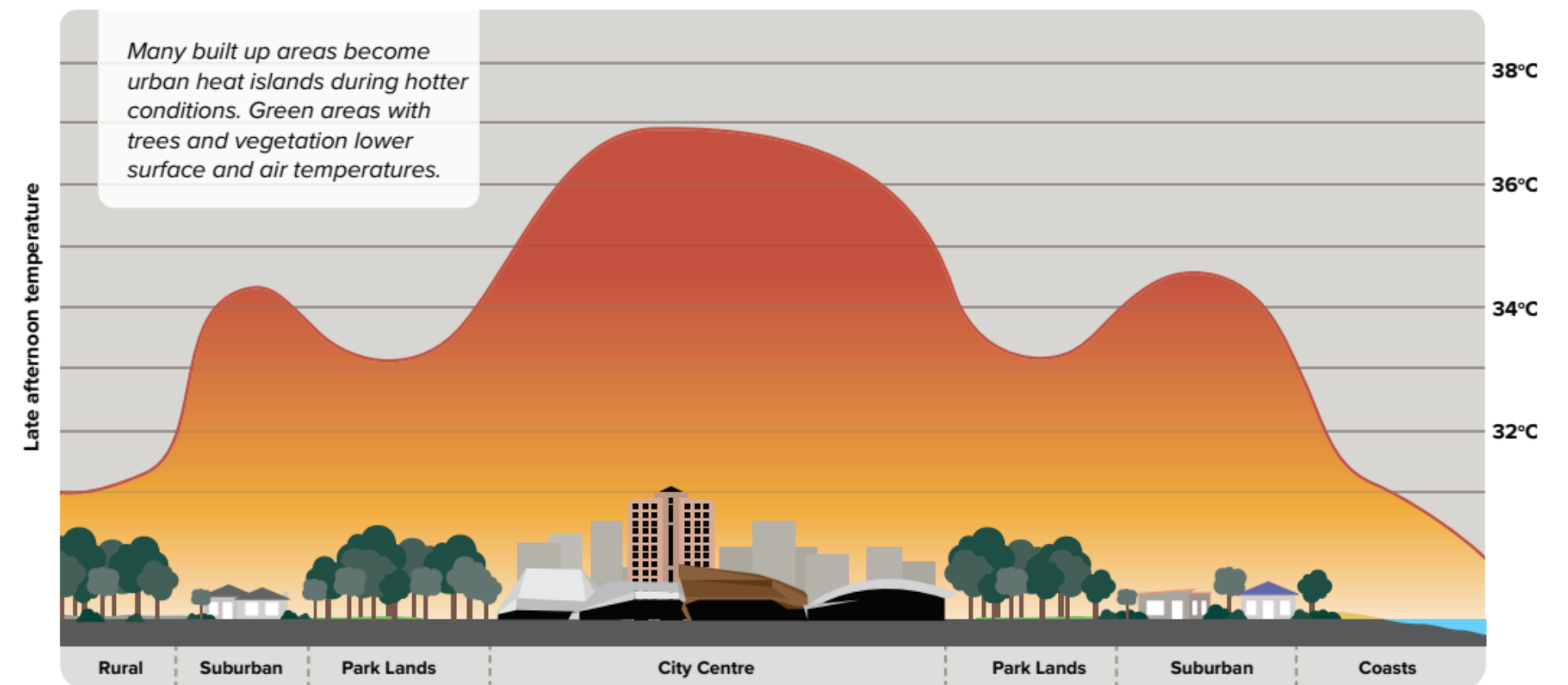


Urban heat and
tree canopy

Urban heat island effect

Urban populations in denser areas are **disproportionately impacted** by climate impacts.

Trees and other vegetation have been shown to **reduce land surface** temperatures by between 5 and 6 degrees **during heatwaves**.



SA Government Climate Change Action Plan 2021-25



Changing
landscapes



Climate
change



Urban heat and
tree canopy



Air
quality

Metro Adelaide has a changing climate

Projections:

- Mean daily maximum temperature **+1.1°C by 2030**, +1.6°C by 2050.
- Mean annual rainfall -6% by 2030, -**10% by 2050**.
- Days over 40 (baseline 1.1/year) increase to 1.6/year by 2030, **3.0/year by 2050**.

(Baseline: 1986-2005)



Urban heat & tree canopy mapping purpose

- Form a **monitoring baseline**
- Establish a **shared point of truth** on which to detect trends
- Undertake further analysis to:
 - Maximise the impact of greening investments.
 - Better understand the relationship between urban greening and urban heat, and how these factors impact health and behavior.
 - Allow us to make informed operational decisions.






Changing
landscapes



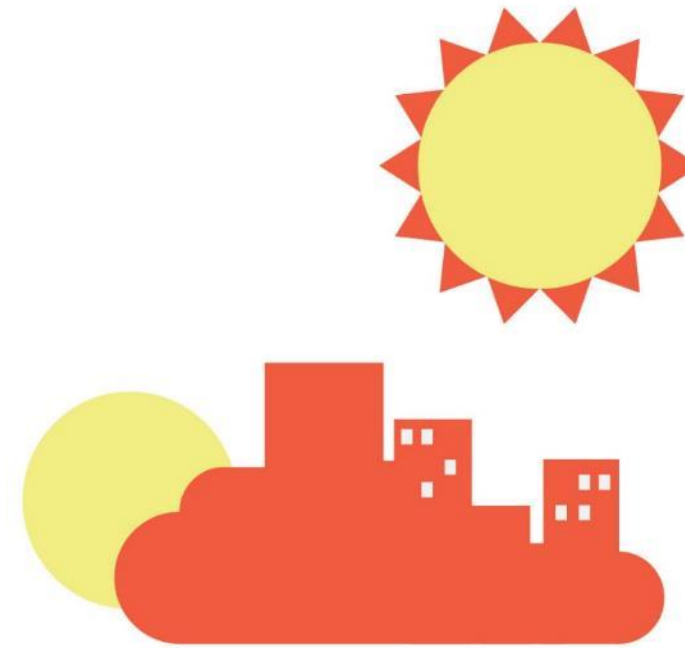
Climate
change



Urban heat and
tree canopy

Trees and greenery help mitigate urban heat

Every **10% increase** in **tree cover** can reduce ground temperature by between **0.5°C and 1°C**.



By 2050 the number of days per year above 35°C is projected to increase by more than 40%¹.



Despite our hot, dry climate, we can mitigate the urban heat island effect by growing our urban tree canopy and retaining water in urban landscapes.

Detection of tree loss/gain

Tree loss



2018

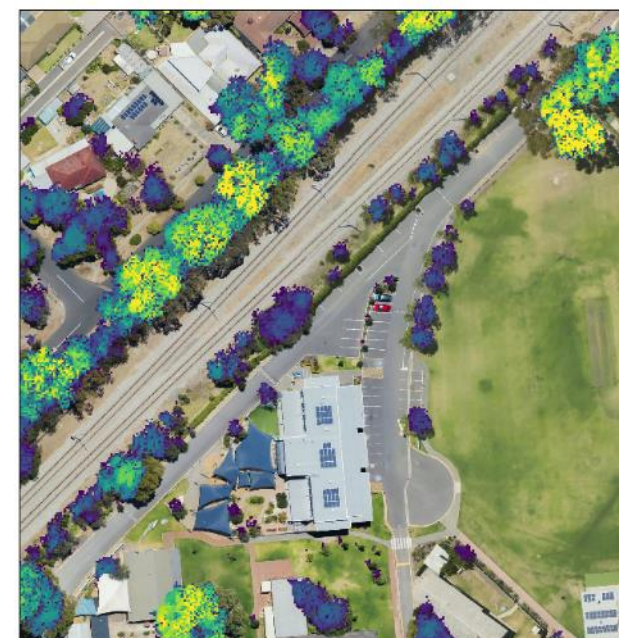
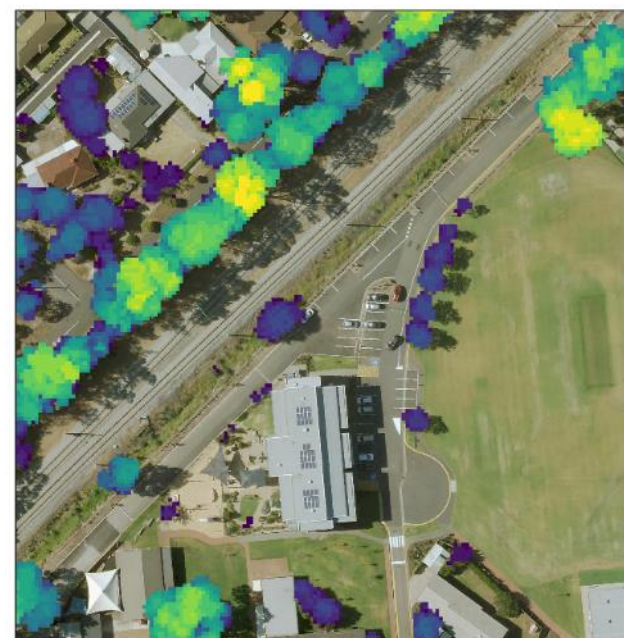


2022



Change Detection

Tree gain



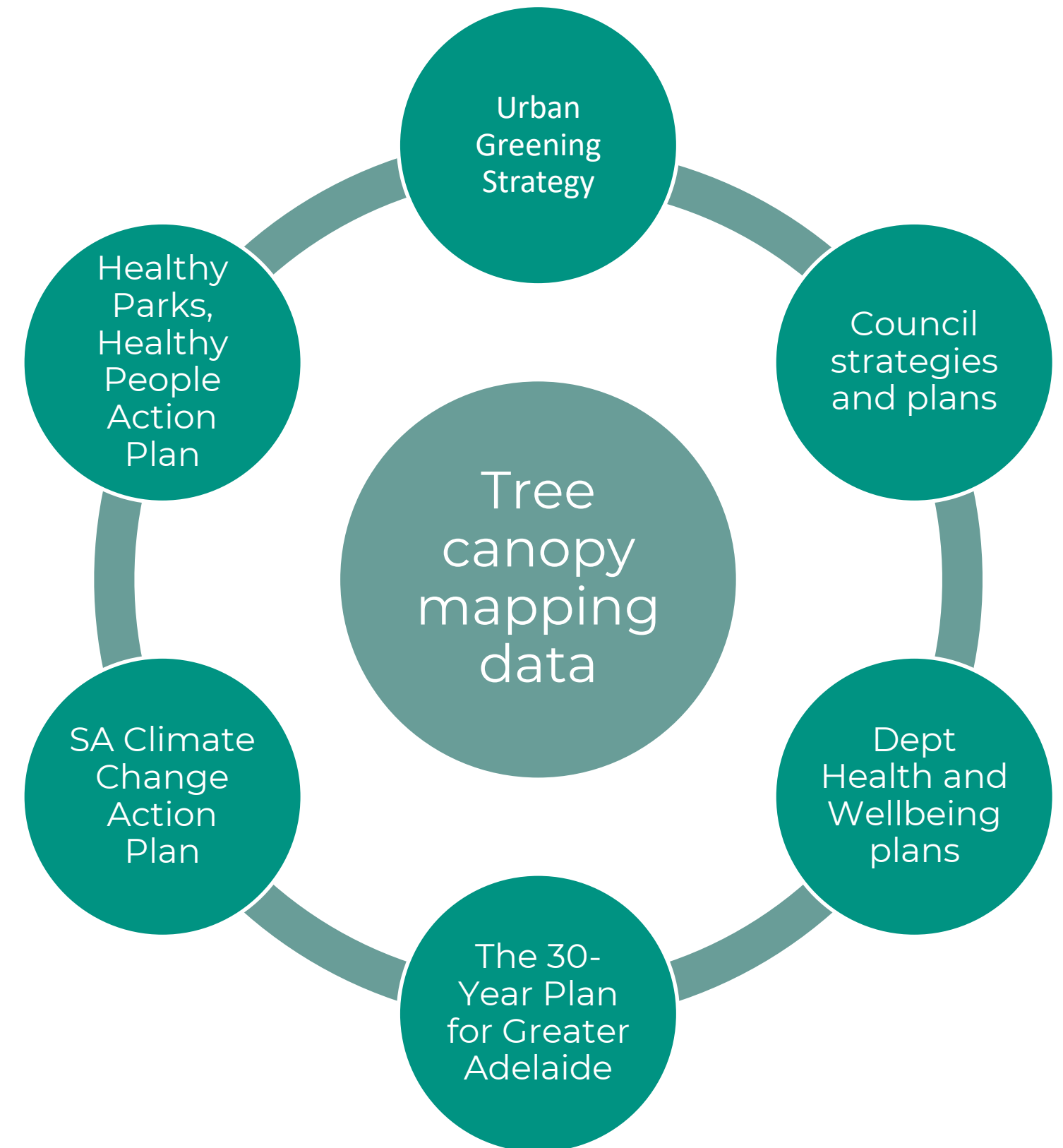
Changing
landscapes

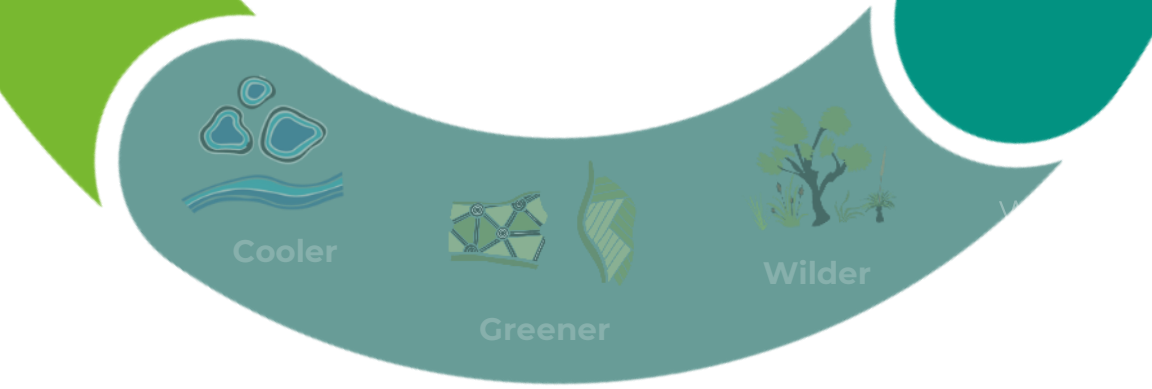


Urban heat and
tree canopy

How will the data be used?

Paired with **urban heat** hotspots, and **social vulnerability** variables, the **tree mapping** data can assist in **greening prioritisation**.

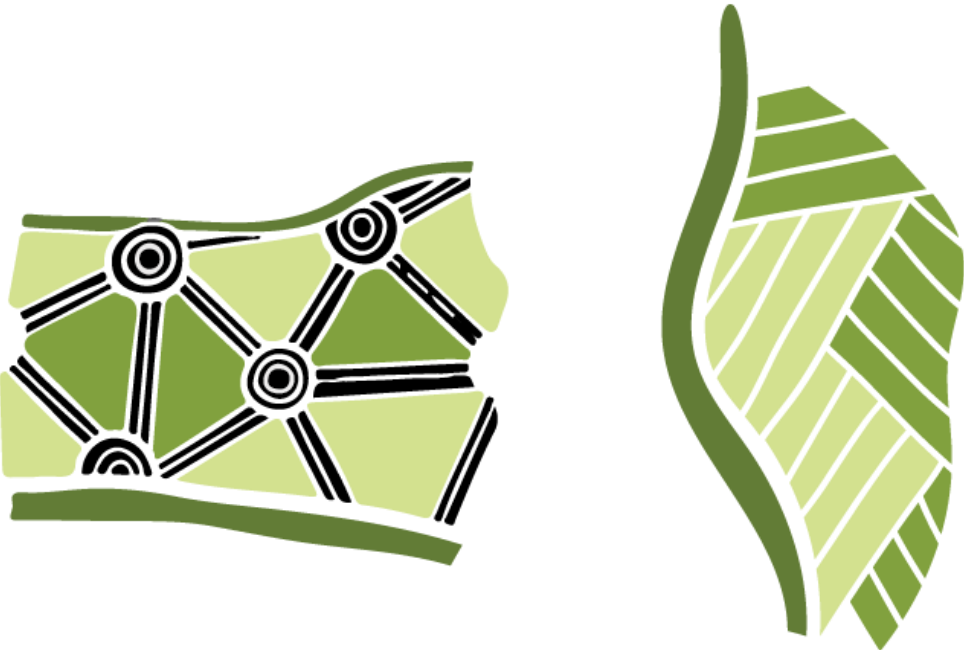




Adaption and influence



Cooler



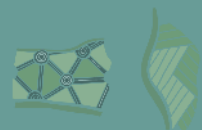
Greener



Wilder



Cooler



Greener

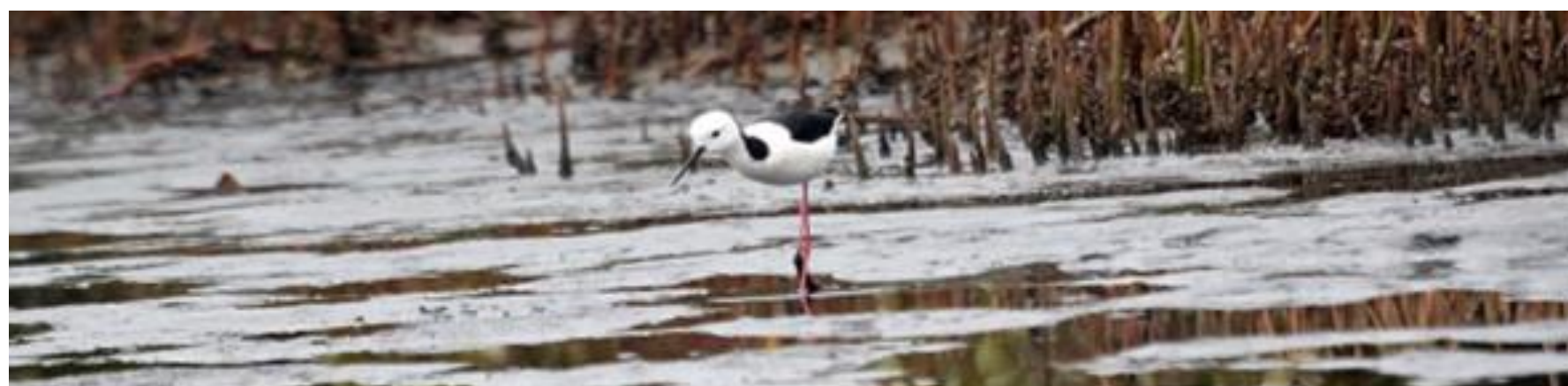


Wilder

Wilder

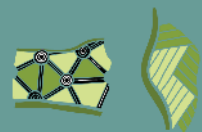
Cooler

Water-sensitive
urban design
and managing
water resources
and coasts





Cooler



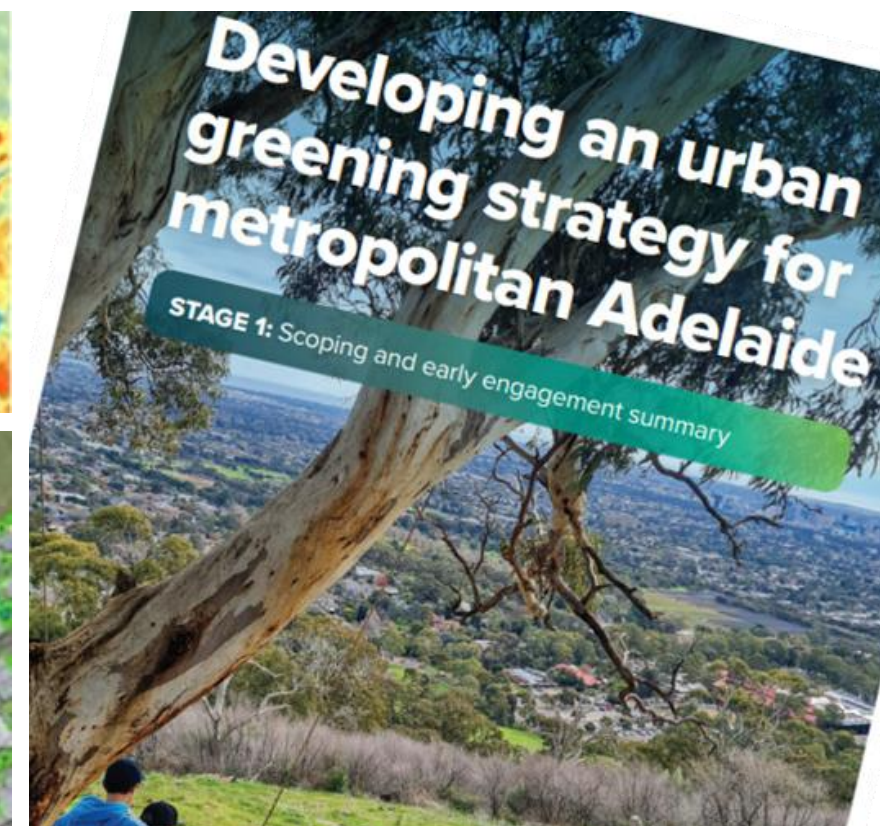
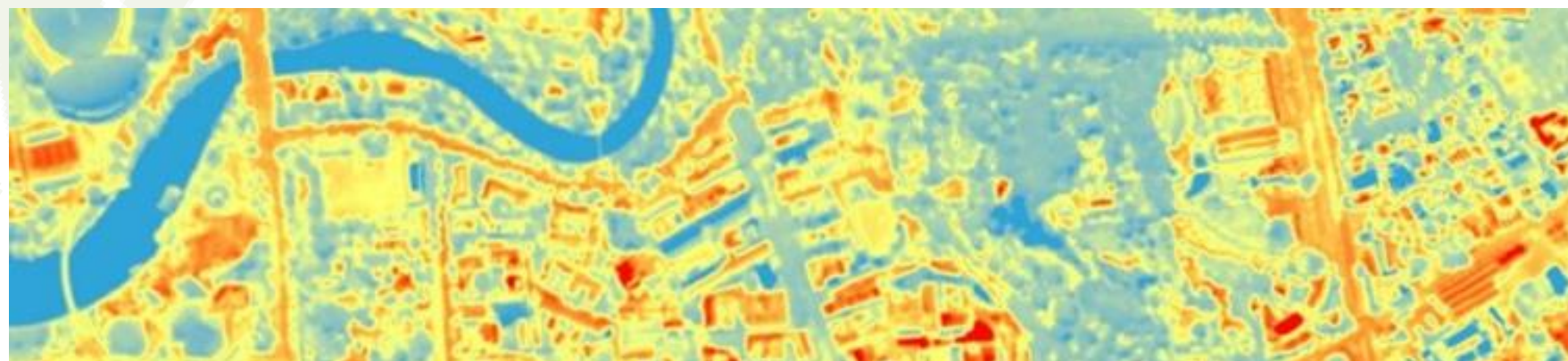
Greener



Wilder

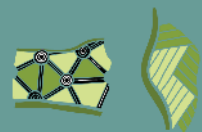
Greener

Evidence and
planning, on-
ground planting.





Cooler



Greener



Wilder

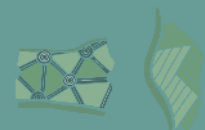
Greener

Grassroots Grants

success stories



Cooler



Greener



Wilder

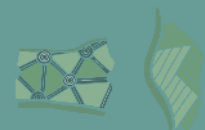
Wilder

Bringing back
species, enhancing
habitats and
connecting people
with nature.





Cooler



Greener



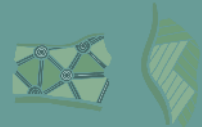
Wilder

Wilder





Cooler



Greener



Wilder

Bold rewilding – Our plan for platypus

Scoping study identified a number of positive signs about river's suitability, including:

- reasonable abundance of **food**
- **low levels** of plastic or litter-based pollution
- **improved water quality** in several sections
- **suitable submerged habitat** in several sections.



