# CREEN AUELAIDE

## Regional Landscape Plan 2021-26

Pathway to a cooler, greener, wilder and climate-resilient Adelaide

## Contents

About Green Adelaide	.5
Our vision	.6
Partnerships to deliver iconic programs	.8
Case for action	.9
Our seven priorities	.12
Implementation and	
performance approach	.20



## Recognition of Kaurna Miyurna and Yarta

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).

Mutual respect and trust enables us to walk and work side-byside to restore Yarta.

## Looking to the future

We commit to strengthening the relationship with the Kaurna Miyurna through environmental partnerships such as Warpulai Kumangka (meaning 'working together'). This is an advisory group established under the Native Title prescribed body, the Kaurna Yarta Aboriginal Corporation.

The Kaurna Miyurna's ongoing collaboration with Green Adelaide strengthens the future orientated visions of the respective bodies. Warpulai Kumangka will implement an innovative, world-leading model for cultural engagement in the environmental sector. Focusing on a mutually beneficial learning experience for all stakeholders, the timeless knowledge of the Kaurna Miyurna will help to action sustainable growth of biodiversity in the Green Adelaide region.

Green Adelaide will work with Warpulai Kumangka to raise awareness and build capacity about Aboriginal cultural knowledge, values and lore. This will lead to traditional practices being embedded in Green Adelaide led projects and programs.

## **Minister's Foreword**



There's nothing quite like Green Adelaide. It's unique the world over. This new, exciting, innovative organisation is specifically focused on the practical greening of our capital city; restoring

natural ecosystems in the midst of urban sprawl; rewilding places which are surrounded by hundreds of thousands of residents; and educating our citizenry about why we are doing this and how they can be central players in the success of our urban environment.

Establishing Green Adelaide was an election commitment of the Marshall Liberal Government. We wanted to create a body which would have a powerful focus on taking Adelaide's natural environment from good to great, and building on our enviable liveability status which has received international recognition in recent times.

Our goals are ambitious, but with the right resourcing, smart partnerships and environmental innovation, they are more than doable. Local councils and not-for-profits have a critical role in project delivery and are our key partners. We will respect their insight and priorities, and partner with them to deliver great environmental outcomes.

Green Adelaide's seven legislated priorities create a focused organisation that knows what it's about, so that resources will be efficiently maximised. At every step of its work this organisation will look for ways to make our capital city's natural environment thrive. In many ways the mandate is powerfully straightforward.

We want to see platypus return to the River Torrens; we want to look into the skies about our CBD and catch a glimpse of a peregrine falcon stooping at 400 km per hour; we want native butterflies such as the yellowish sedge skipper to be not only commonplace, but also known and loved by Adelaidians; and we want our populations of fish, amphibians and other water dwelling creatures to survive and expand in our rivers and wetlands. This is exciting stuff.

To shape and drive Green Adelaide, I've appointed a smart, energetic and creative board. Ten people who have experiences from all walks of life (not just the environment) and who will challenge me, the bureaucracy and our community to get this work right and to be boldly ambitious.

Let's work hard together to make Adelaide greener, cooler, wilder and more climate resilient. I can't wait to see the results unfold.

David Speirs MP Minister for Environment and Water





## Presiding Member's Foreword



For the first time metropolitan Adelaide has a government board sharply focused on progressing it towards a more climate-resilient and ecologically vibrant city stretching from the hills to the sea.

We acknowledge the many years of collective effort and achievements in managing and protecting Adelaide's landscapes and natural resources. Green Adelaide will continue to build on these strong foundations over the next five years and beyond. We also acknowledge the Kaurna Miyurna (people) as the traditional owners of the Adelaide Plains.

Recent world and local events, including the devastating bushfires and COVID-19 pandemic, have focused the attention of our community on the nature of our city like never before. This attention to, and interest in, our surroundings coincides beautifully with the founding of Green Adelaide under the *Landscape South Australia Act 2019*.

As our environment continues to get warmer, we are losing vital green coverage that keeps our region cool. By better managing our natural environments, we can reduce this heating and improve the ways we live, work, learn and play through innovative and world-leading practices and assist the health and wellbeing of our people and nature.

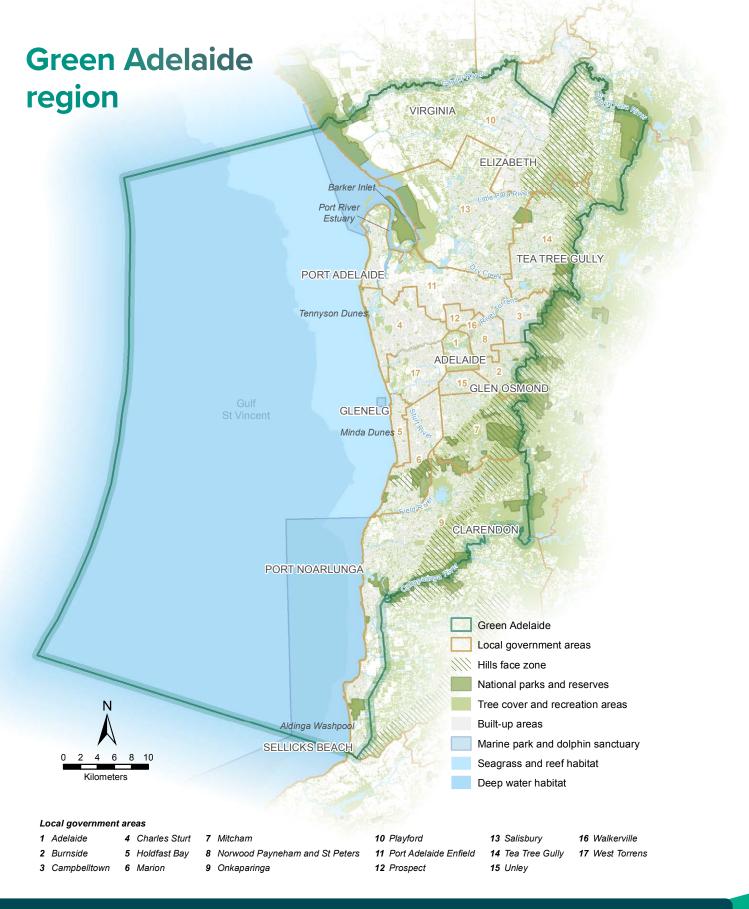
This plan is not only for Green Adelaide but our partners too. We invite you to work with us on delivering iconic legacy projects that will transform the landscape. From rewilding our rivers to greening our suburbs on a grand scale and making Adelaide a National Park City<sup>1</sup>. These will be projects that our whole community can get involved in and benefit from for generations to come.

We look forward to working with the Warpulai Kumangka Kaurna Advisory Group<sup>2</sup>, local and state government organisations, industry, NGOs and the community to create a cooler, greener, wilder and climate-resilient Adelaide.

CRA ana

Professor Chris Daniels, BSc (Hons), PhD, DSC, FAICD Presiding Member

- For further information visit: adelaidenationalparkcity.org
- Warpulai Kumangka means 'working together' in Kaurna see page 1



- Population of
   1.23 million
- An area of
   3,356 km<sup>2</sup> (37% terrestrial and
   63% marine)
- **74 km** as the rosella flies from Gawler River (north) to Sellicks Beach (South)
- 83 km<sup>2</sup> of national parks
- 222 km² of marine parks
  - 61% of marine waters in the Gulf St Vincent
- 23.37%
   tree canopy
   cover across
   metropolitan
   Adelaide
- Approximately
   1,700 kms of watercourses
- 800 native plant and 440 animal species

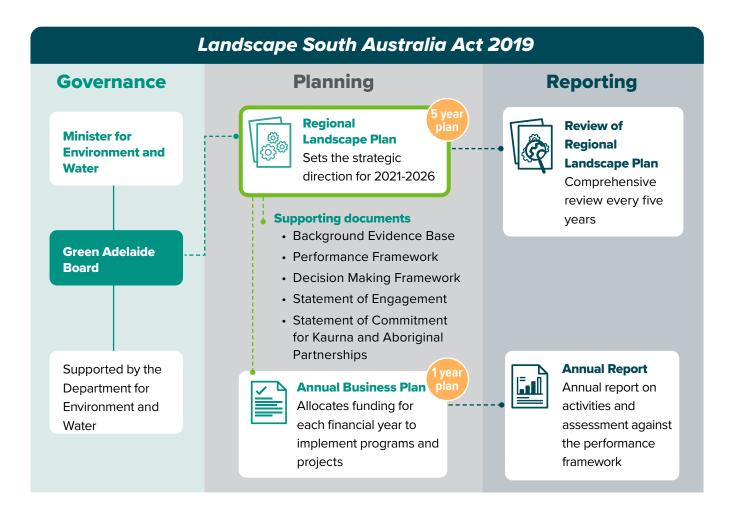
## **About Green Adelaide**

Green Adelaide links an ambitious vision with tangible actions to educate, inspire, influence and enable a cooler, greener, wilder and climate-resilient city by leveraging evidence-based insights and partnerships that enact sustainable change.

The Green Adelaide region and board are established under the *Landscape South Australia Act 2019*. The board is an expert, skills-based body charged with leading innovation and achieving positive outcomes across the urban landscapes of the Green Adelaide region.

Our aim is to green and cool our backyards, streets and neighbourhoods, enhance biodiversity and create healthy green spaces for everyone.

Green Adelaide will deliver practical outcomes across seven key priorities. This five year Regional Landscape Plan will provide strategic direction, supported by annual business plans developed in partnership with our community.

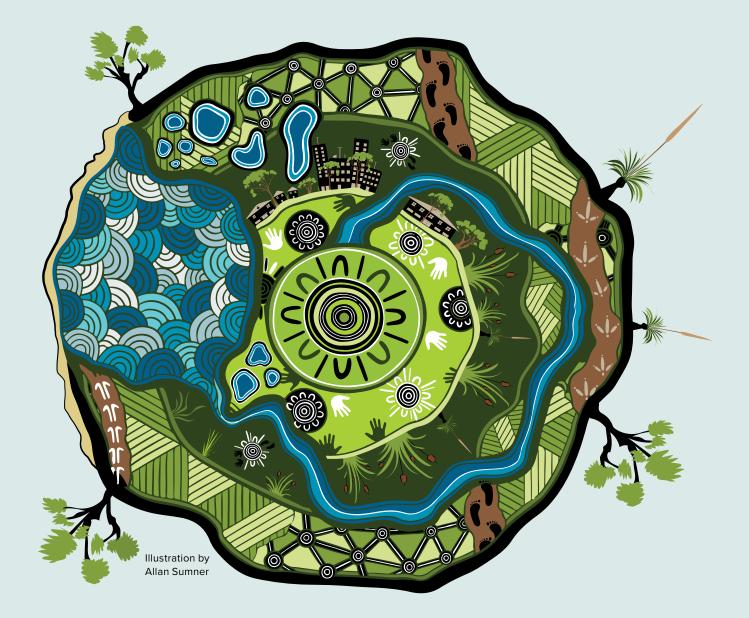


## Landscape levy - Everyone is both an investor and a beneficiary

Green Adelaide is primarily funded by the landscape levy (collected by 17 metropolitan councils). The levy is paid by all ratepayers across the state to fund their local landscape boards to protect and enhance the environment. The levy recognises that as residents and landowners we all have important roles and responsibilities around enjoying, managing and protecting our landscapes.

## **Our vision**

Our vision is for a **cooler, greener, wilder and climateresilient Adelaide that celebrates our unique culture.** This artwork, **Kardalta Tamtanya**, represents Green Adelaide's vision through the interconnected nature of our seven priorities. It shows the importance of the relationships between the land, water, sea, and biodiversity, and people keeping each other healthy, thriving and connected.





This symbol represents Green Adelaide

## Green Adelaide will deliver practical outcomes across seven key priorities



## Biodiversity sensitive and water sensitive urban design

We will build industry and community capacity to design cooler, greener and nature-friendly developments and infrastructure.

### **Coastal management**

We will conserve and restore Adelaide's unique coastline to benefit our way of life, our economy and provide vital habitat for native plants and animals.



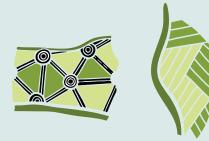
## Fauna, flora and ecosystem health in the urban environment

We will create more urban spaces for plants and animals to thrive in which in turn provides people a better quality of life.



## **Controlling pest animals and plants**

We will help coordinate management of invasive pests to support an Adelaide that is rich with healthy biodiversity.



## Green streets and flourishing parklands

We will increase tree canopy cover and green spaces to create cooler urban areas that encourage biodiversity and improve community health and wellbeing.



### **Nature education**

We will grow nature and sustainability education in Adelaide to support children and adults to connect with the environment.



## Water resources and wetlands

We will protect, enhance and restore Adelaide's water resources (our rivers, wetlands and lakes) to help preserve these essential ecosystems and the wildlife that call them home.

# Partnerships to deliver iconic programs

We will deliver multi-year, large scale and multi-partner programs to achieve our vision. We will work with Kaurna, all levels of government, industry, private landholders and communities to deliver across our seven priorities.

#### **Rewilding our urban landscapes**

The Green Adelaide region is ready to become 'wilder'. Whether that be along the rivers that connect the Mount Lofty Ranges to Gulf St Vincent, along the coastline or other opportunities in between. We will lead rewilding efforts by transforming green spaces into thriving ecosystems suitable for threatened and iconic species and biodiverse places for people to enjoy and connect with nature.

**Key opportunities include:** Field River Valley, Dry Creek, platypus reintroduction scoping study, enhancing threatened butterfly habitat, urban raptors, Aldinga Washpool, Sturt River and Mutton Cove.

**Rewilding means** aiming efforts to restore and protect the biodiversity and natural processes of an area (i.e. the interactions among plants, animals and the environment which help create and shape an area).

### Greening our streets, open spaces and backyards

Our streets, open spaces and backyards are filled with opportunities to accelerate greening and grow our urban forest. This will help combat the urban heat island effect, increase habitat for native wildlife and connect people with nature right on their doorsteps.

**Key opportunities** include bringing together state and local governments, industry, Kaurna and the community to drive an ambitious and coordinated approach to greening our city. This means starting with an updated tree canopy and urban heat baseline to develop a metropolitan-wide greening strategy.

### Making Adelaide a National Park City

In partnership with local government, NGOs and Kaurna Miyurna, we will lead the process of making Adelaide a National Park City.

A National Park City is a place, a vision, and a community. In thinking about our city and urban landscapes in a similar way to national parks we recognise that these areas are full of unique spaces for people to connect with nature and each other.

For an Adelaide National Park City to flourish Adelaide's whole community is invited to take action. For more information visit: **adelaidenationalparkcity.org.** 

#### **Restoring Kaurna cultural practices**

Restoring Kaurna cultural practices will bring truth telling to the forefront of environmental understanding and practices, ensuring Kaurna knowledge is central to creating a sustainable future. Warpulai Kumangka will work in partnership with Green Adelaide and others to support and restore Kaurna ways of working with Country across Kaurna Country. Sharing knowledge and implementing traditional land management practices will be a priority through an innovative urban cultural burning program and an international indigenous knowledge-sharing symposium.







## **Case for action**

Adelaide's growth and prosperity depends on sustaining, protecting and extending our natural environments, taking on the challenges of a drying and warming climate, and safeguarding and promoting the health and wellbeing of our people.

We are driven to take action for a number of reasons including:

- creating wilder and more biodiverse places
- designing buildings and neighbourhoods that incorporate nature
- strengthening our response to climate change
- unlocking potential through partnerships
- moving from just acknowledging to deeply embracing the Aboriginal connection to country
- deepening and celebrating our unique relationship with nature.

#### Creating wilder and more biodiverse places

Biodiversity loss is accelerating globally and it is becoming increasingly important for all parts of society to play their role in helping to preserve the diversity we have for future generations.

Urban and semi-urban environments can provide valuable habitats for many native species and have a role to play in conserving threatened species, enhancing biodiversity and facilitating connections between people and nature.

Nature remains embedded throughout the urban environment and can be found in the parks, streets, gardens and backyards of the suburbs. Urban parks, wetlands, street tree canopy and private gardens all have a role to play in creating a mosaic of wilder places across the city. Improving nature by increasing greening and biodiversity across the metropolitan landscape will enhance connectivity with the network of conservation and national parks fringing the city. This will also support the health of the river corridors that wind their way from the hills to the sea and the diverse metropolitan coast and marine habitats. Improving Adelaide's position as one of the most liveable cities in the world will require strong leadership, influence, commitment and collaboration across all tiers of government and the community so we can prepare for and respond to current and future challenges.

### Designing buildings and neighbourhoods that incorporate nature

Urban areas (particularly residential land use) make up the majority of the Green Adelaide region. Minor infill development is now the single largest provider of new housing in metropolitan Adelaide and has contributed to a significant reduction in green cover in many neighbourhoods. This is because this type of development generally increases site coverage and driveway crossovers, and reduces space for gardens and tree planting, creating up to 90 per cent impervious surfaces. Minor infill has also contributed to a significant reduction in mature trees in many neighbourhoods, leaving metropolitan Adelaide with an overall tree canopy cover below 24%<sup>2</sup>.

This loss of tree canopy and urban green cover reduces habitat for native fauna and creates urban heat islands which impact the health of people and wildlife. An increase in roofs, roads and other hard surfaces in residential developments also puts neighbourhoods at greater risk of flooding as rain and stormwater are less easily absorbed. This in turn decreases the soil moisture recharge, reducing water for trees and shrubs at a time when, with rising temperatures, they need the moisture even more.

Incorporating water-sensitive and biodiversity-sensitive urban design into both the public and private realm is imperative to ensure the liveability of our city and support the conservation of our native flora and fauna.

<sup>&</sup>lt;sup>2</sup> Aerometrex 2020 - search for Enviro Data SA metropolitan Adelaide tree canopy report



## Strengthening our response to climate change

As a result of climate change, the Green Adelaide region is expected to:

- be warmer and drier throughout the year with more days of extreme heat and longer, hotter heatwaves which will be exacerbated in some areas by urban heat island effects
- receive less reliable, although sometimes more intense rainfall, and experience changing annual rainfall patterns which increase the risk of flooding
- see the loss of a wide range of climate-sensitive species
- experience sea level rise and greater storm surges impacting on coastal infrastructure and ecosystems.

We recognise that a climate emergency has been declared by several local government organisations within the region. Significant action must be taken to improve the resilience of our built and natural environments, our wildlife and our community in the face of the predicted changes to our climate in the coming decades.

Strategic urban greening, creating quality green space, adopting climate-smart design that incorporates water and biodiversity, and increasing the resilience of the coastline, marine environments and remnant vegetation will be at the core of our actions.



## Adelaide climate change projections by 2030



Annual mean daily maximum temperatures are projected to increase by up to 1.1°C\*.



Mean annual minimum temperatures are projected to increase by up to 0.8°C\*.



Number of days per year over 40°C is projected to increase from 2.4 days per year (in the 1981-2010 baseline period) to around 4.3 days per year.



Mean sea surface temperatures are projected increase by 0.5°C\*.



Mean annual rainfall is projected to decline by 5.4% (from the baseline period of 1981 to 2010). Summer rainfall is projected to increase by up to 2.7%, with autumn, winter and spring rainfall projected to decline.



A sea level rise of around 13 cm is projected\*.

#### \*Compared to the 1986 to 2005 baseline.

Source: Green G and Pannell A (2020). Guide to Climate Projections for Risk Assessment and Planning in South Australia, Government of South Australia, Department for Environment and Water, Adelaide.



## Unlocking potential through partnerships

Partnering recognises the unique resources, knowledge and capabilities that different partners have and brings these together to deliver a much greater impact than could be achieved individually. Collaboration through partnerships is also important to achieving long-lasting and sustainable environmental outcomes.

Tackling issues like climate change requires collaboration and knowledge-sharing amongst partners from all sectors and we are committed to bringing our partners together to achieve our vision.

Partnering will also enable the coordination and leveraging of funding across multiple stakeholder groups to avoid duplication and maximise outcomes.

Partnering with a number of sectors such as First Nations peoples, local governments, researchers, NGOs, peak industry bodies and community groups will enable each sector to bring unique value, expertise, resources and perspective to solving the region's complex landscape problems. Local government in particular will be a key delivery partner and their involvement in greening initiatives will be vital to the success of this work.

## Moving from just acknowledging to deeply embracing the Aboriginal connection to country

Kaurna Yarta (country) extends from Crystal Brook to Cape Jervis and incorporates the western part of the Adelaide Hills, covering the entirety of the land area of the Green Adelaide region.

The approach of the Kaurna Miyurna to sustainably manage natural resources remains of utmost relevance. The cultural knowledge, skills and perspectives of the Kaurna Miyurna, and all Aboriginal people, must be recognised and embedded to shape decision making and land management practices.

Through the Warpulai Kumangka Advisory Group, we will listen to, learn from, partner with, and empower the Kaurna Miyurna and Warpulai Kumangka to deliver on-ground outcomes, including projects to reignite traditional practices.

## Deepening and celebrating our unique relationship with nature

The accessibility of natural environments in such close proximity to the city has helped drive a deep appreciation and love of nature. For example, 94% of South Australians have said that conserving nature is of critical importance<sup>3</sup>.

Signs of the strong value that the community places on nature have been present throughout 2020, with visitation to the state's parks and open spaces increasing by 43% during the COVID-19 pandemic and growing calls for the protection and increase of urban vegetation, especially large trees. Visits to our suburban beaches also continue to grow.

This provides an opportunity to build on and drive a deeper relationship of love, stewardship and pride in our landscapes as part of the community's collective identity. This could lead to immeasurable benefits to our community's health, wellbeing, connection and cohesion, and protection of our region's unique ecosystems, flora and fauna for future generations.

We recognise and celebrate the diversity across our communities and are committed to providing opportunities for everyone to be involved in learning about and caring for our landscapes. This will be integral to the success of Green Adelaide.

<sup>&</sup>lt;sup>3</sup> 2016 South Australians and the Environment Community Survey

# Our seven priorities

Each of our priorities are highly interrelated and need to work together to create a cooler, greener, wilder and climate-resilient Adelaide.



## **Coastal management**

### Goal: Conserve and restore coastal and marine habitats and biodiversity

The coastline of the Green Adelaide region lies within the sheltered waters of eastern Gulf St Vincent and includes a wide range of environments from sandy beaches and dune systems, wetlands, cliffs, coastal vegetation, estuaries, mudflats, rocky reefs and seagrass meadows.

These coastal and marine ecosystems provide vital habitat for a diverse range of flora and fauna and support many species unique to southern Australia. They also have important socio-economic and public amenity value. Healthy seagrass, mangroves, saltmarsh and dunes protect the coastline from erosion and help to buffer against flooding of nearby developed areas during storm surges. Our region is also well placed to take advantage of blue carbon due to the extent and quality of its coast and marine systems. Blue carbon is carbon captured and stored in coastal ecosystems including seagrass meadows, saltmarshes and mangroves.

Our coast and marine environments are however impacted by a range of issues. For example, nutrients and sediments from stormwater and wastewater discharge affect marine habitats close to the shore, influencing their long-term health and resilience. Coasts are inevitably vulnerable to sea level rise and the effects of storms as a result of climate change. Sea temperatures are also rising and the effects of this may be heighted in the shallow gulf waters.

Key focus areas		Outcomes	
C1	Enable a partnerships approach to adaptive coast and marine management	Coordinated conservation and restoration of natural coast and marine environments	
C2	Partner and inspire on-ground investment in in the conservation and restoration of coastal and marine environments	Improved biodiversity outcomes, including habitats and species of key conservation concern.	
С3	Conserve and restore environments that can be used to sequester blue carbon	Enhanced climate resilience and adaptation and increased environmental and social benefits	





# Water resources and wetlands

## Goal: Water resources deliver environmental, economic, social and cultural benefits

Urban creeks, rivers, estuaries and wetlands provide essential habitat and refuges for native fauna. They also often provide important recreational opportunities and have cultural significance. Several watercourses, including the Little Para, Torrens-Karrawirra Pari and Onkaparinga-Ngangkiparingga rivers, flow out of the Mount Lofty Ranges and across the region. These form biodiversity corridors throughout the urban landscape and feed the region's natural and artificially constructed wetlands, including important coastal wetlands like the Barker Inlet. Groundwater is also an important water resource used by commercial industry and for irrigation of quality public green space. Stormwater management, including the application of water sensitive urban design principles, goes hand in hand with best practice land management to minimise watercourse erosion, protect and enhance biodiversity, and prevent polluted discharge going to the sea.

The responsibility for managing Adelaide's water resources is shared by all landholders, including state government, local councils, businesses and individuals. This shared responsibility adds unique challenges and complexity to achieving an integrated 'hills-to-sea' approach to urban water management, which considers the sustainable management of all water sources to ensure benefits are maximised.

#### Key focus areas

- W1 Protect, enhance, and restore water resources and water-dependent ecosystems through partnerships and on-ground delivery
- W2 Build water knowledge and management capacity of public and private landholders, practitioners, community and industry
- **W3** Influence simple and enabling water management policy frameworks

#### Outcomes

Biodiverse public and private blue and green spaces that enhance the quality and sustainability of water resources

Effective management of watercourses and resources by landholders (public and private)

Best practice, sustainable water management





# Biodiversity sensitive and water sensitive urban design

### Goal: Build industry and community capacity to design cooler, greener and biodiverse urban infrastructure

Issues arising from urbanisation such as flooding, the provision of green space, urban heat island effects, impacts of stormwater on coastal environments and maintaining stream ecology can be addressed through a stronger adoption of water sensitive urban design (WSUD) and biodiversity sensitive urban design (BSUD).

WSUD focuses on integrating the urban water cycle (including potable water, wastewater and stormwater) with the built and natural urban landscape. WSUD measures can be applied to all development types and range from the storage, treatment and use of runoff to water-efficient landscaping. The need to improve understanding and capacity in BSUD is being increasingly recognised. BSUD links urban planning and design to the basic needs and survival of native plants and animals by creating environmentally friendly urban habitats, promoting ecological processes and encouraging positive human-nature interactions.

Adopting these designs in development at every scale will help to ensure Adelaide is liveable, productive, biodiverse and resilient to the future challenges of a changing climate and increasing urban density.

Key focus areas		Outcomes	
BW1	Influence and incentivise best practice BSUD and WSUD in new developments, major transport corridors, public open spaces and local streetscapes	Best practice BSUD and WSUD outcomes in both the private and public realm	
BW2	Catalyse and partner on research and other tools to address barriers to implementation and identify opportunities for innovation	Implementation barriers are solved and opportunities harnessed for improved urban greening, BSUD and WSUD	
BW3	Build community, council and industry knowledge, motivation and capacity to deliver best practice outcomes	Improved BSUD and WSUD implementation success by community, councils and industry	

Green Adelaide Regional Landscape Plan 2021-26



# Green streets and flourishing parklands

## Goal: Increase the extent and quality of urban green cover

Well vegetated streetscapes and other public areas provide much more than a pleasant place to live. They can also provide habitat for native fauna, enhance biodiversity and improve mental and physical health. With the increasing number of people living in apartments or houses with small or no backyards, greener streets and quality public green space will become even more important in offering places for recreation and connection to nature.

Urban heat mapping has identified 'heat islands' in the Adelaide metropolitan area. These areas generally have fewer green spaces, trees, shrubs and grass and can be up to 3 to 4°C hotter on sunny days. It is vital that tree cover and quality green space are increased to help maintain community liveability and enable us to better adapt to climate change. Green space should be accessible and beneficial for all, reflect the local context, and be embedded with cultural knowledge. Ensuring adequate water is provided to support greening is also an important factor in a warming and drying climate.

Greening on private land will also be an important part of increasing our urban green cover. Central to this will be encouraging new developments to retain existing mature trees and plant new ones. Government also has role to play in greening transport infrastructure projects and other government assets. Green Adelaide will play a lead role in the strategic delivery of green infrastructure, coordinated across local government, other agencies and the community.

Key focus areas		Outcomes	
G1	Drive coordinated, accelerated greening of streetscapes and public spaces	Improved regional coordination to achieve more climate-resilient, water smart and sustainable urban greening outcomes	
G2	Influence the protection of trees and incentivise greater greening of private land through the new planning system and other levers	More new infill housing and commercial developments keep mature trees and plant more than the minimum landscaping requirements	
G3	Identify priority locations for improved urban greening and define what success looks like in different contexts	Strategic, high quality climate-resilient greening reflective of local context and need	



## Fauna, flora and ecosystem health in the urban environment

### Goal: Conserve, restore and expand habitats for native flora and fauna

The Green Adelaide region encompasses many different environments including remnant woodlands and grasslands; rivers, creeks and wetlands; and coastal and marine habitats. Even within our suburbs, remnant trees and other vegetation can still be found dotted throughout the landscape. These provide a home to an abundance of unique flora and fauna species, many of which are threatened. These plants and animals are what make the Green Adelaide landscape unique. They are a source of inspiration and joy for the community and create a sense of place for us now, as they have for the Kaurna Miyurna for thousands of years.

Helping our flora and fauna to thrive is critical to ensuring a healthy, sustainable and resilient landscape which supports ecosystems that supply clean air and water, pollination of plants, pest control and many other ecosystem services. Biodiversity conservation and restoration also improves the health and wellbeing of our communities by increasing opportunities for people to connect with nature. This is turn develops their awareness, knowledge and skills to become stewards for the natural environment.

Realising these benefits to their fullest extent requires work to reduce the numerous threats to habitat and native species. This includes the introduction of pest species, clearance of habitat and the many challenges associated with our changing climate.

	Key focus areas	Outcomes
F1	Enable and invest in improving knowledge about species and ecological systems and their management	Flora and fauna conservation management practices are improved
<b>F2</b>	Invest and partner in protecting, improving and/or creating terrestrial habitats	Terrestrial habitat condition improves at sites with significant investment
F3	Identify and support the implementation of recovery actions for threatened plants, animals and ecological communities	Quality (or extent) of habitat is enhanced and threatened species' population decline is halted (or reversed) at targeted sites



# Controlling pest animals and plants

## Goal: Manage the effects of pests and impact-causing native species

The diversity of ecological habitats, soil types, climatic conditions and the intensity of human settlement make our region highly susceptible to invasion from a variety of pest plants and animals in both the terrestrial and aquatic environments. As people have modified the natural environment, the resilience of our native species and the ecosystems they inhabit has also changed. This has led to the decline of many species but also increases in a small number of species that have been able to capitalise on this changed environment.

Effectively managing pest and impact-causing native species can help to preserve biodiversity, safeguard primary production and limit impacts on amenity and health for community benefit. Managing the effects of pest and impact-causing native species is a significant challenge, particularly in urban environments where control options are often limited. It's always most costeffective to manage pest or impact-causing native species effects before they become significant. This requires vigilance through undertaking surveillance to detect pest species quickly and identify when there is potential for a species to start causing impacts.

The responsibility for managing pests lies primarily with landholders, however partnerships between them, government, research institutes, commercial enterprises and the broader community, will increase the capacity for success. Green Adelaide contributes to compliance, surveillance, research and prioritisation processes to achieve coordinated and timely pest management outcomes.

Key focus areas		Outcomes	
P1	Enable research, contribute expert advice and undertake compliance to support effective management of species	Knowledge and delivery of effective management strategies for pests and impact-causing species improves	
P2	Work with partners to conduct surveillance to detect incursions of new and emerging pest plants and animals	Identification and control of new and emerging pest animals and plants before they are widely established	
<b>P3</b>	Establish partnerships to develop and implement innovative management strategies and educational programs for impact-causing species	Threats to key biodiversity and primary production assets are mitigated and community awareness improves	





## **Nature education**

#### Goal: Inspire communities to value, connect with, and care for nature

The beating heart of a cooler, greener, wilder and climateresilient city is community involvement and action. Everyone has a role. We can all care in our own way.

Key to this is recognising we are an intricate part of nature, celebrating our love of nature and enriching our understanding of how nature works – particularly in our local environment. Nature education needs to resonate with the cultural diversity of the whole population, and be accessible for everyone. It spans biodiversity, water, coast, climate change, sustainability and more.

Connecting to the natural world improves our wellbeing. It delivers developmental, physical and mental health benefits. Hands-on experiences discovering and learning about the outdoors nurtures advocacy, our desire to protect the natural environment and to live more sustainably. This shared sense of place and ownership can then increase social cohesion and community resilience to adapt to challenges like climate change.

A constantly evolving social and technological landscape requires nature education to captivate people to think and act locally. Success will see consistent cooperative effort and involvement by organisations across government, private enterprises, NGOs, education and the community.

Key focus areas		Outcomes	
N1	Enable a social movement of diverse nature 'stewards' through school/educational partnerships, community learning and development, nature play, citizen science and sustainability activities	Widespread environmental awareness, values, advocacy and action across diverse communities	
N2	Raise awareness and build capacity about Aboriginal cultural knowledge, values and lore	Traditional practices are embedded in community-led projects and programs	
N3	Lead cross-sector nature education community campaigns to reach diverse audiences	Increased community awareness, understanding, inspiration and action to connect with and care for nature	

# Implementation and performance approach

This section outlines how we will work with our partners, make decisions about investment and monitor our performance.

### Our role

Many organisations are already actively involved in managing the landscapes of the Green Adelaide region. These include state and local governments, private enterprises, community groups and individual landholders. We will undertake roles which add value and increase the scope of the good work already being done while also facilitating greater collaboration and innovation. We will play our part in progressing towards our vision of a cooler, greener, wilder and climate-resilient Adelaide through the following roles.

Facilitate research, data and knowledge sharing

e.g. Surface water monitoring

**Deliver on-ground** 

practical action

Provide education and capacity building

> e.g. Water Sensitive SA

ich as Breakout Creek, Aldinga Washpool Enabling a cooler, greener, wilder and climate-resilient Adelaide

Support whole of

region coordination and governance

e.g. Council based Climate-Resilient Coordinators

Inspire community love of nature

> e.g. School nature education programs

Influence legislation and policy

e.g. Influence planning policy

> Provide financial incentives

e.g. Grassroots and council grants

### **Partnering and collaboration**

At the heart of Green Adelaide will be its partnership approach in connecting people to programs and policies that further the health of our urban spaces. Green Adelaide will take an expansive approach to the codesign of new initiatives and projects with partners from a range of different sectors – all levels of government, private enterprises, industry organisations, community groups and individual residents. In particular, Kaurna Miyurna partnerships will be important to Green Adelaide's partnership approach. Green Adelaide is committed to genuine, inclusive and fit-for-purpose engagement with our partners and the broader community. As part of this, we will set up clear, transparent and regular communication and feedback channels with our key partners. Refer to **greenadelaide.sa.gov.au** for a copy of our Engagement Statement.



'We engage to share information, seek input, create discussion, find new ideas, combine knowledge, collaborate on decisions, connect and maximise efforts, inspire action and walk together'.

Green Adelaide's Statement of Engagement

#### **Investment principles**

Green Adelaide has an ambitious vision. To achieve it, we will make informed decisions about how the landscape levy is invested to amplify its effect.

Below are a number of investment principles which will inform our funding decisions in a robust and transparent way. Green Adelaide will assess potential projects against the principles to determine how our investment will be targeted in our annual business plans.

Investment principles			
Strategic	Alignment with our vision and priorities to deliver a cooler, greener, wilder and climate-resilient region that celebrates our unique culture		
Collaboration	Partnerships with other groups and organisations deliver the best possible results and broaden the reach of Green Adelaide		
Value for money	Green Adelaide's investment leverages additional funding and resources (including in-kind) and maximises benefits to the region		
<b>Economic stimulus</b> Jobs and economic opportunities are created			
Kaurna values	Irna values Kaurna Miyurnas' voice and values are embedded into Green Adelaide's busines and employment opportunities considered		
Climate ready	imate ready Our work and our investments are based on the most recent climate projection contribute to building climate resilience		
Innovation	Research, trials and innovation inspire and showcase new ways to improve our environmental stewardship of the region		
Capacity and capability	Resources, evidence, data, knowledge and skills are enhanced and maintained		
Inspiration	The community is inspired, educated and enabled to be stewards of nature		
Sustainability	Environmental, social, and economic sustainability is enabled		
<b>Equity</b> Funding is targeted where it is most needed e.g. based on socio-economic factors locations with a lack of green space and high urban heat			

#### **Evidence-based decision making**

Improving how we collect, analyse and share qualitative and quantitative data will be important to enable adaptive management approaches to current and evolving pressures on our landscapes. We will leverage data from our monitoring activities to inform communications, capacity building activities, policy development, and implementation of projects. We will also play a leadership role in coordinating and sharing data with our partners to support region-wide adaptive management.

## How will Green Adelaide measure its impact?

Our annual report will detail the expenditure of amounts raised by levies and demonstrate our progress in implementing our plan through a set of organisational indicators called annual output indicators, for example:

- · hectares of habitat maintained/restored
- number of volunteers/citizen science events/hours
- number of trees and other vegetation planted
- · hectares of pest plant and animal control
- levy dollars invested
- additional funding and resources leveraged
- number of project partners
- number of grants

- spread of investment socially and spatially
- media/social media reach
- number of research trials funded
- number of projects led by, or with input from, Kaurna
- Kaurna employment (Green Adelaide projects/ programs)
- number of capacity-building events.

Every five years we will assess progress using a set of environmental and social outcome measures that provide a snapshot of how Adelaide's urban landscapes are performing. The table shows examples of outcome measures we will likely use to track progress.

Our Performance Framework will identify the measures that we will use, where we will source data from, whether we need to set up any new monitoring programs or data collection, and the timeframes for measurement. This framework will align with the State Landscape Strategy, national reporting frameworks and relevant state and local government targets. The Performance Framework will be made available on our website.

Priority		Examples of five-yearly outcome measures	
	Coastal management	<ul> <li>Reef condition</li> <li>Seagrass extent and condition</li> <li>Coastal habitat condition of significant sites (vegetation)</li> <li>Populations of species of conservation concern (seabirds)</li> </ul>	
	Water Resources and wetlands	<ul> <li>Aquatic ecosystem health (native fish and macroinvertebrates)</li> <li>Groundwater (salinity and level)</li> <li>Surface water (flow and quality)</li> </ul>	
Biodiversity sensitive and water sensitive urban design		<ul> <li>Uptake of WSUD and BSUD in new development</li> <li>Uptake of WSUD and BSUD in council projects</li> </ul>	
<b>X</b>	Green streets and flourishing parklands	<ul><li>Tree canopy and green cover</li><li>Urban heat mapping</li></ul>	
	Fauna, flora and ecosystem health in the urban environment	<ul> <li>Terrestrial habitat condition for specific sites (vegetation)</li> <li>Populations of species of conservation concern</li> </ul>	
JP	Controlling pest plants and animals	<ul> <li>Distribution of terrestrial pests (fauna and flora)</li> <li>Distribution of marine and aquatic pests</li> </ul>	
	Nature education	<ul> <li>Community environmental values, knowledge and behaviours</li> <li>Community knowledge, recognition and attitudes towards Kaurna culture</li> </ul>	



## **Strategic** links

Our work has important links with other sectors across local, state and federal governments, including planning, health, and sport and recreation. Wherever possible, our actions under this plan will align with and contribute to, current and forthcoming plans and strategies to ensure we are working with our partners towards shared outcomes.

Some of the strategies and plans to which our Regional Landscape Plan and annual business plans will align include:

- State Landscape Strategy (2021)
- Warpulai Kumangka Strategic Plan (2021)
- South Australian Government Climate Change Action Plan 2021-2025
- Directions for a Climate Smart South Australia (2019)
- State Water Directions Statement (in development)
- Game On: Getting South Australia Moving framework (2020)

- Blue Carbon Strategy for South Australia (2019)
- Australia's Strategy for Nature (2019-2030)
- South Australia's State Planning Policies (2019)
- The 30-Year Plan for Greater Adelaide (2017 update)
- Healthy Parks Healthy People action plans (over multiple years)
- Metropolitan Adelaide and Northern Coastal Action Plan (2009)
- Relevant council strategies and plans.

We will also ensure that we meet legislative obligations such as the *Environment Protection and Biodiversity Conservation Act 1999* and be an active contributor to state and national environmental reporting such as the State of Environment Report.

We will continue to work collaboratively with relevant statutory bodies such as the Coast Protection Board.

## Kaurna place names

Aldinga Washpool	Wangkondananko (Possum Place)	River Torrens	Karrawirra Pari (river of the Red Gum forest)
Onkaparinga	Ngangkiparingga (place of the women's river)	Sturt River	Warripari (windy place by the river)
Patawalonga	Pathawilyangga (swamp gum foliage place)		

#### For further information:

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