



Towards One Planet Living: Greening the Western Suburbs 2008–2013

A Community Plan 2027 initiative



The City of Charles Sturt would like to thank our community for taking an interest in the development of this plan, and for providing their feedback at public workshops and by phone and email.

We would also like to acknowledge the considerable assistance provided by the following organisations in the preparation of this plan:

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Visy Recycling
Wastecare SA
Zero Waste SA

“ Knowing is not enough;
we must apply. Willing is
not enough; we must do.”

Johann Wolfgang
von Goethe
Poet, writer,
playwright and
natural philosopher

If everyone in the world lived as we do, we would need four planets to live on.

We need to learn how to live well within the resources that the earth provides.

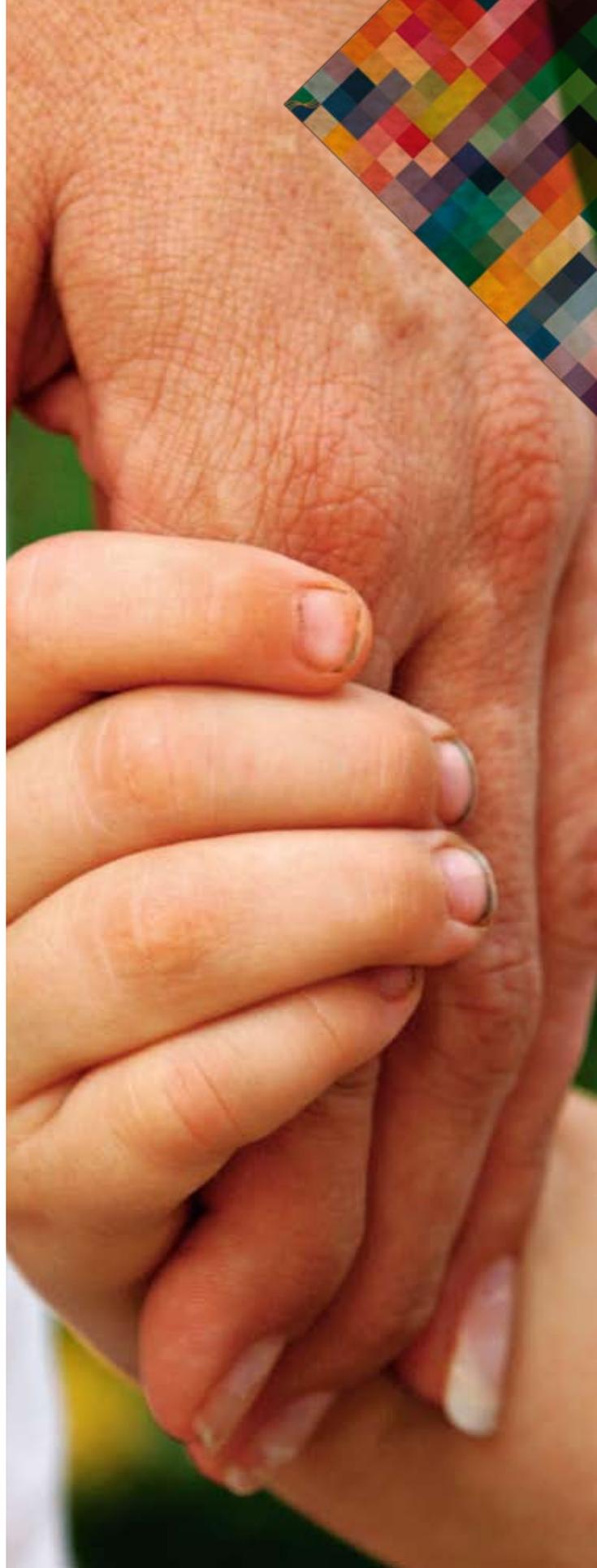
‘One Planet Living: Greening the Western Suburbs’ is a five year plan that presents strategies and actions under four key themes: climate change, water, biodiversity and waste.

‘Towards One Planet Living: Greening the Western Suburbs’ seeks to reinvigorate discussion between Council, its community and other stakeholders about the environmental future we want to create for the City of Charles Sturt.

This work flows directly from the City’s Community Plan ‘Shaping the Western Suburbs 2027’, which has confirmed our vision to be a City which values, protects and enhances the natural environment

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1 Our ecological footprint

The 'ecological footprint' is a tool to measure the resources we use to maintain ourselves and our lifestyles. In 2003, humanity's ecological footprint exceeded the Earth's biological capacity by 25%.

This measure is an acknowledgement that everything we consume ultimately comes from nature. Our consumption is measured in the hectares of land that is required to support us in the long term. If we were all living sustainably, our global ecological footprint would add up to one planet.

The United Nations Human Development Index suggests that the average Italian has a very similar standard of living to the average Australian, yet they have an Ecological Footprint around half the size.

The challenge, from a sustainability perspective, is to achieve a high quality of life within the resources of one planet: Earth.

The City of Charles Sturt is committed to helping our community to actively work towards reducing its ecological footprint. The strategies and actions presented in this document have their own performance measures: overlaying all of these is the measure of ensuring our lifestyles overall are sustainable.

Strategy 1.1 – Reduce our community’s ecological footprint

- Educate our community about the importance of reducing their ecological footprint
- Calculate the ecological footprint of the community of Charles Sturt

Role of Council: leadership, information provider

Link with Community Plan:

Outcome 3 – A city which values, protects and enhances the natural environment

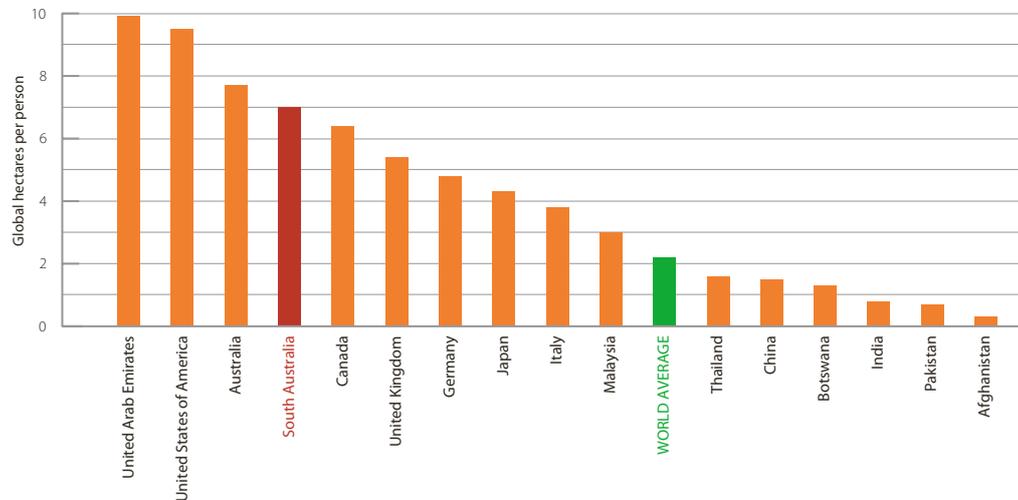
Performance measures:

- Ecological footprint for a resident of Charles Sturt (global hectares per person)

Link with SA Strategic Plan:

- T3.7 Reduce South Australia’s ecological footprint

Ecological Footprint of Selected Nations and South Australia



2 Our changing climate

Strategy 2.1: Provide leadership

Lead the community by education and example to reduce greenhouse emissions and adapt to the impacts of climate change.

- Introduce a sustainability review of all new projects and works managed by Council and use that information to guide project selection and design
- Reduce corporate greenhouse emissions from public lighting, fleet and buildings from a base year of 1997 by 30% by 2020 (that is, from 8,800 to 6,200 tonnes per annum)
- Collect data and report on Council's annual greenhouse gas emissions consistent with the National Greenhouse and Energy Reporting Act 2007 and the National Greenhouse Accounts
- Assist those residents who use our Home and Community Care program to implement simple energy efficiency measures in their homes
- Nurture a low carbon corporate culture, with managers leading by example

- Provide targeted training and assistance to staff and elected members to support them in implementing climate change actions for which they are responsible
- Closely monitor the impacts of the introduction of the Carbon Pollution Reduction Scheme, particularly in relation to direct and indirect costs to Council and the effectiveness of other schemes such as Greenpower
- Investigate the feasibility of establishing community owned renewable energy generation installations in the City of Charles Sturt, including consideration of both solar and wind power
- Investigate the introduction of a loyalty card program to provide direct incentives for sustainable choices by Charles Sturt residents, for delivery as an expansion of the current Community Card and through the 'Sustainable Lifestyles' program

Role of Council: leadership, facilitator/initiator, information provider, direct service provider

Link with Community Plan:
3.2.4, 3.2.5, 3.2.6, 3.4.2, 4.1, 4.2, 4.3.1

Performance measures:

- Greenhouse gas emissions from Council operations (tonnes of CO2 equivalent per annum)
- Staff and elected member awareness of climate change (measured through a survey)
- Renewable energy generated within the City (kilowatt hours per annum)

Link with SA Strategic Plan:

- T3.5 Greenhouse gas emissions reduction
- T3.6 Increase use of public transport
- T3.12 Support the development of renewable energy
- T3.13 Increase the energy efficiency of government buildings
- T3.14 Increase the energy efficiency of dwellings

Strategy 2.2: Adapt to a changing climate

Manage the impacts of climate change on Council operations and the community.

- Implement the Local Government Mutual Liability Scheme 'Climate Change Adaptation Program' to identify risks to this Council from climate change, and plan to reduce their impacts
- Assess risks of climate change to the broader community within the City of Charles Sturt, and plan to reduce their impacts
- Undertake a comprehensive assessment of climate change impacts on the coast in partnership with neighbouring Councils and other agencies, including the Coast Protection Board
- Advocate for updated information regarding climate change impacts on the metropolitan coast to be incorporated into the State Government's planning framework, and our Development Plan
- Incorporate climate change considerations within Council planning and development assessment processes in partnership with other agencies
- Incorporate climate change considerations within Council asset management plans
- Provide fit for purpose outdoor and indoor recreation spaces in anticipation of a hotter and drier climate
- Review work practices for field staff in anticipation of a hotter and drier climate
- Educate our community about the impacts of climate change and how they can adapt to those changes through the new 'Sustainable Lifestyles' program

Role of Council: regulator, information provider, part funder, direct service provider

Link with Community Plan:
3.3.1, 3.3.4, 3.4.1, 4.4.4

Performance measures:

- Climate change risks identified and adaptation strategies developed (Council, community)
- Assessment of coastal impacts completed

Strategy 2.3: Improve building performance

Reduce greenhouse emissions from Council buildings through energy efficiency and renewable energy and assist our community to do likewise.

- Deliver a new 'Green Buildings Program' to include the following initiatives:
 - design all new Council buildings and major renovations to achieve five stars under the NABERS Rating Scheme (or equivalent)
 - develop a 10 year program to retrofit all existing Council buildings to minimise greenhouse emissions and aiming to achieve a minimum of four stars under the NABERS Rating Scheme (or equivalent), starting with the Civic Centre and Beverley Depot
 - create an exemplar development through an active partnership with a developer. Allow for public access to the completed development as a demonstration site, and promote as part of the new 'Green Buildings' Program
- facilitate the uptake of energy efficiency and alternative energy options within the City of Charles Sturt through partnerships with local suppliers and/or buying groups
- promote the State Government's Residential Energy Efficiency Scheme and the Commonwealth Government's energy efficiency rebates within the City of Charles Sturt to help residents reduce energy consumption within existing homes
- advocate for improvements to the Building Code of Australia to increase energy efficiency standards for new residential, commercial and industrial developments
- advocate for and identify opportunities to showcase sustainable development, including energy efficient building design, at key sites including as part of the redevelopment of the former Cheltenham racecourse, Clipsal site and others

Role of Council: leadership, owner/ custodian, advocate, facilitator/ initiator, part funder

Link with Community Plan:
1.1.2, 1.4.2, 1.4.3, 2.2.1, 2.5.3, 2.6.1, 3.2.1, 3.4.2

Performance measures:

- Australian Building Greenhouse Rating of Council-owned office buildings, energy consumption per square metre for other Council buildings
- AccuRate rating for new residential dwellings, energy consumption per person for existing residential dwellings

Strategy 2.4: Reduce emissions from public lighting

- Ensure all new public lighting installed within the City is energy efficient (42W compact fluorescent lights, LED lights, solar lights or equivalent)
 - Progressively remove inefficient lighting, including light fittings that have upward-directed waste light, with more efficient alternatives as part of our maintenance and replacement program (Council managed lights)
 - Work with ETSA to ensure inefficient public lights are progressively removed from within our City and replaced with more energy efficient alternatives (ETSA managed lights)
 - Prepare a full inventory of all public lighting assets located within the City of Charles Sturt, noting the light used for each location, its age, ownership and maintenance responsibilities and use that information to guide future maintenance and replacement programs by Council and ETSA Utilities
 - Continue working with the LGA to develop a consistent and collaborative approach to energy efficient public lighting across local Councils
 - Conduct a trial of turning some public lights off at 2am, including in particular those lights whose function is primarily decorative, to determine energy efficiency benefits and public acceptance
 - Continue to update lighting technology to ensure public lighting does not come on until natural lighting has dropped to minimum safe levels
 - Demonstrate energy efficient lighting by installing trials of LED lights along Brebner Drive at West Lakes, and review trial outcomes to guide future installations
 - Work with ETSA Utilities to secure their approval for the use of LED public lighting systems on the SLUoS tariff (that is, to be maintained by ETSA crews) within five years
 - Investigate the costs and benefits of introducing programmed maintenance of Council managed lights to improve their effectiveness over time and to reduce power wastage
 - Consider end of life disposal requirements in the process used to select new public lights
 - Investigate the use of motion sensor lights for a range of applications, including some paths and reserves
- Role of Council:** owner/custodian, advocate, facilitator/initiator, part funder, direct service provider
- Link with Community Plan:** 2.2.2, 2.7.3, 3.4.2
- Performance measures:**
- Street lighting efficiency (lumens per watt) for new and existing street lights (Council managed lights, ETSA managed lights)
 - Greenhouse gas emissions from public lighting (tonnes CO₂e – per annum)

Strategy 2.5: Reduce transport related greenhouse emissions

Reduce transport related greenhouse emissions from Council operations and the community

Council operations

- Select fit for purpose vehicles that are as small and fuel efficient as possible for Council's passenger fleet with the aim of achieving an average of 180 g/km greenhouse gas emissions as defined through the Australian Design Rules
- Reduce greenhouse emissions from Council's works fleet, including contracted services such as the community buses and waste collection vehicles, through improved fuel efficiency and the use of alternative fuels where appropriate
- Investigate the establishment of a bicycle fleet including electric assist bicycles and encourage their use by staff through training and induction

- Provide discounted public transport tickets for staff travel to work, and provide free tickets for staff travelling to the City and other destinations for work purposes
- Support staff to cycle, walk and car pool and provide appropriate end of trip facilities such as showers and lockers
- Develop strategies to minimise air travel with tools like teleconferencing and promotion of local events over interstate/overseas
- Investigate options to reduce greenhouse gas emissions from street sweeping carried out across the City
- Provide information and training to staff on smart driving techniques to improve fuel efficiency

Community

- Publicly endorse the State Government's plans to extend Light Rail from the Adelaide CBD to the Entertainment Centre and, ultimately, to West Lakes and Semaphore, and to electrify the rail network
- Implement the Active Living: Plan to Cycle Local Area Strategic Plan 2008 and promote cycling and active transport through the new 'Sustainable Lifestyles' program
- Focus new higher density residential and commercial developments around existing public transport nodes (transit-oriented developments) and link these areas with surrounding walking and cycling networks

- Work with the State Government to encourage construction of public car parks at public transport nodes and to promote the importance of high quality urban design at these locations
- Continue to advocate for improved public transport services for the Charles Sturt community
- Provide cycling paths through the city as this becomes possible
- Encourage the State Government to promote walking school buses and other active transport options within the City of Charles Sturt
- Investigate the option of introducing a preferred range of bicycle and car parking to be provided in new developments, for inclusion in our Development Plan

Role of Council: owner/custodian, information provider, advocate, regulator, part funder, direct service provider

Link with Community Plan:
1.2.2, 1.4.2, 2.3.1, 2.3.3, 2.4.1, 2.5.1, 2.6.3, 3.4.2

Performance measures:

- Greenhouse emissions per km travelled (Council passenger and works fleet)
- Total kms travelled (by vehicle type – Council passenger and works fleet)

Strategy 2.6: Improve food security

Reduce food associated greenhouse emissions and support locally supplied food systems.

- Establish catering guidelines for Council events that promote sustainable and locally sourced foods (i.e. foods sourced within the Adelaide region, South Australia or Australia)
- Support and promote community gardens, farmers markets and food share schemes within the City of Charles Sturt and surrounding areas
- Assist low income residents to access healthy and sustainable foods through the 'Community Foodies in the West' program
- Educate cafes, restaurants and other food businesses about adapting to a warmer climate and energy efficiency opportunities (eg commercial refrigeration) as a component of Council's routine environmental health inspections

- Work with schools and community groups to promote sustainable and locally sourced foods

Role of Council: leadership, advocate, part funder, information provider

Link with Community Plan:
1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.3.4, 1.5.3, 2.5.2, 3.2.4

Performance measures:

- Participation in 'Community Foodies in the West' program
- Number of active community gardens, farmers markets and food share initiatives

Strategy 2.7: Reduce greenhouse impacts of consumption choices

Reduce greenhouse emissions embodied in goods and services by reducing excessive consumption within Council and the community.

- Incorporate sustainability and climate change measures into Council's purchasing policy, and promote the use of locally sourced products with low embodied energy (including tenders and contracts for outsourced services)
- Provide staff with training and resources to enable sustainable and carbon efficient product and service selection
- Develop a purchasing guide for road, footpath construction and other infrastructure projects, to promote the selection of materials with low embodied energy

- Promote Council's greenhouse purchasing achievements to the community and offer tips on how to reduce greenhouse impacts of consumption

- Promote the benefits of low consumption lifestyles to the community as part of the 'Sustainable Lifestyles' program, with a focus on environmental and economic benefits, personal wellbeing and happiness

Role of Council: leadership, information provider

Link with Community Plan: 3.2.3, 3.2.4, 3.2.5

Performance measures:

- Staff awareness of carbon friendly/sustainability purchasing requirements
- Community awareness of and participation in 'Sustainable Lifestyles' program

3 Our water

Strategy 3.1: Provide leadership in sustainable water management

Lead the community by education and example to foster an ethic of efficient water use and innovation.

- Implement the Port Road Rejuvenation Project, with the goal of redirecting 600 megalitres per annum of stormwater for irrigation use
- Continue implementing irrigation efficiencies to ensure standards contained within the Irrigated Public Open Space (IPOS) Code of Practice are met, taking into account the need to provide playing surfaces that are fit for purpose

- Educate and support the community to improve water use practices on their own properties, including a strong focus on increasing the storage and use of rainwater
- Continue the process of retrofitting Council buildings with rainwater tanks that are plumbed into the building

Role of Council: leadership, owner/custodian, information provider, direct service provider

Link with Community Plan:
3.2.4, 3.2.5, 3.3.2, 3.3.3, 3.4.1, 3.4.3

Performance measures:

- KL/annum of stormwater harvested and stored within the City of Charles Sturt
- KL/annum of recycled water used by Council for irrigation purposes
- KL/annum of rainwater harvested and used in Council buildings

Link with SA Strategic Plan:

- T3.9 – Sustainable water supply
- T3.10 River Murray - flows

Strategy 3.2: Reduce dependence on traditional mains water and groundwater supplies and move progressively to more sustainable practices and sources of water

- City of Charles Sturt to harvest and store underground as much or more water as we draw in an average year by 2013
- Increase stormwater harvesting and storage underground within the City to 2 gigalitres per annum by 2020
- Implement the Port Road Rejuvenation Project to maximise capture and storage of stormwater, and make that water available for a range of suitable uses, including irrigation
- Ensure the Cheltenham Redevelopment is designed to maximise capture and storage of stormwater, and make that water available for a range of suitable uses, including irrigation
- Investigate the incorporation of a new Managed Aquifer Recharge (MAR) scheme in the vicinity of the Grange Creek and incorporate this concept into designs for the redevelopment of the reserves in this area
- Investigate opportunities to access recycled wastewater for use within the City of Charles Sturt
- Move towards a more transparent, user pays approach to water use by all council tenants, and provide information to assist them to move to more sustainable use of water
- Promote the increased re-use of grey water in suburban areas, while educating residents about the potential risks to soils and health of inappropriate or careless grey water use

Role of Council: leadership, direct service provider, advocate

Link with Community Plan: 3.3.3, 3.2.2

Performance measures:

- KL/annum mains water and groundwater used by Council
- KL/annum mains water and groundwater used within the City of Charles Sturt

Strategy 3.3: Water Sensitive Urban Design in new and existing developments

- Advocate for Planning SA to adopt a statewide framework for water sensitive urban design, including a set of performance based targets to be applied at both individual allotment and whole of development scale, and incorporate those requirements into the Residential Code
- Incorporate key elements of that framework into the Development Plan for the City of Charles Sturt, and advocate for them to be incorporated into the Building Code of Australia to reduce downstream flood impacts and ensure water conservation measures are incorporated into new buildings
- Advocate for the recognition of off-site managed aquifer recharge schemes (such as those proposed for the former Cheltenham racecourse and Port Road) within that framework and to replace any requirement for on-site detention of water on individual allotments in these areas
- Adopt a flexible approach to the selection of WSUD treatments and solutions to deliver on the above targets, incorporating the use of rainwater tanks, on and off-site stormwater detention and MAR schemes and other mechanisms as appropriate to suit the characteristics of each site and the nature of each development, and acknowledging that on-site detention of stormwater may not be appropriate in all instances
- Develop a WSUD guideline to provide further information and guidance to developers, including those implementing smaller in-fill developments, within the City of Charles Sturt
- Educate and support the community to improve water use practices on properties within existing developments, including a strong focus on increasing the storage and use of rainwater

Role of Council: regulator, advocate, information provider

Link with Community Plan: 3.3.1, 3.3.2

Performance measures:

- KL/annum of stormwater harvested by Council (in new developments)
- KL/annum of rainwater harvested and used in private developments

Strategy 3.4: Minimise polluting discharge to watercourses and water dependent ecosystems and maintain environmental flows

- Promote and advocate for the protection and rehabilitation of our inland waters
- Educate, encourage and enforce the application of appropriate policies and legislation (including the EPA Water Quality Policy), to prevent the pollution of water
- Increase stormwater harvesting and storage to reduce flooding and pollutant loads to the environment and to provide an alternative source of water for irrigation purposes within the City of Charles Sturt
- Increase the total area of wetland and vegetated areas managed for their biodiversity function, and with the capacity to clean stormwater prior to aquifer injection or discharge to Gulf St Vincent

Role of Council: advocate, regulator, owner/custodian

Link with Community Plan:
3.1.4, 3.3.3

Performance measures:

- Pollutant loads in stormwater outflows (suspended solids, nitrogen, phosphorus)
- KL/annum stormwater outflows to the marine environment

Strategy 3.5: Manage stormwater to protect and minimise risk to property, infrastructure, public health and safety

- Increase stormwater detention as per strategy 3.2 above, recognising their contribution to reduced peak stormwater flows and the associated reductions in flood risk within the City of Charles Sturt
- Continue to work in cooperation with significant private landholders, including the golf courses and other open space areas, to detain floodwaters and link these initiatives with potential users of that water
- Continue flood mapping of the City to develop a complete picture of flood risk areas
- Develop a whole of City Stormwater Strategy that responds to current and future flood risks and takes into account projected increases in settlement density, runoff and the need to harvest and reuse stormwater
- Continue to advocate for the detention of stormwater in upstream councils and locations to reduce flood risk to the City of Charles Sturt

Role of Council: direct service provider, initiator/facilitator, advocate

Link with Community Plan: 3.3.2, 3.1.2

Performance measures:

- Updated flood zone mapping – reduction in area subject to inundation in a 1–100 year flood

Strategy 3.6: Facilitate the uptake of commercial opportunities associated with sustainable water supply

- Partner and assist potential suppliers of recycled and sustainable water within the City of Charles Sturt, in recognition of their key role in the implementation of this strategy, including in particular SA Water and private developers
 - Work with the potential suppliers and users of recycled water within the City to develop a fair pricing policy for the sale of recycled water to residential and commercial users
 - Take appropriate steps to minimise any health risks associated with reclaimed water used within the City of Charles Sturt
- Role of Council:** leadership, initiator/facilitator, direct service provider
- Link with Community Plan:** 3.2.2, 3.2.4, 3.2.5, 3.2.6, 3.3.2, 3.3.3
- Performance measures:**
- Council adopts a fair pricing policy for the sale of recycled water to residential and commercial users within the City

Strategy 3.7: Engage Communities in Water Resource Management

- Incorporate sustainable water use and pollution prevention into a new 'sustainable lifestyles' program for the City of Charles Sturt (aimed at residential users and incorporating water management alongside climate change, biodiversity and waste issues)
- Adopt the residential water use target of 140 litres of water per person per day, and promote this target to help our community relate their own use of water to sustainability targets set by the various spheres of government
- Investigate the option of installing 'smart metering' in selected new developments to help inform and educate people about their use of water
- Work with state agencies including DTEI, Business SA, EPA and others to promote the role of local businesses in the transition to more sustainable use and sources of water consistent with Strategy 3.2, with a particular focus on small to medium enterprises
- Identify opportunities to provide financial and other incentives to the community sector and small to medium enterprises, to assist with the transition to more sustainable use of water

Role of Council: leadership, advocate, information provider, agent

Link with Community Plan: 3.2.2, 3.2.5, 3.2.6

Performance measures:

- 'Sustainable lifestyles' program developed and implemented
- Uptake of water efficiency measures within Charles Sturt (rainwater tanks, SA Water rebates, other measures)





4 Our biodiversity

Strategy 4.1: Provide leadership in biodiversity conservation and native revegetation

<ul style="list-style-type: none"> • Identify areas within the City to be managed specifically for their biodiversity value, including addressing threats, identifying locations suitable for the creation of buffers, education and interpretation • Facilitate the preparation of an agreement between the four landholders of remnant vegetation in the Tennyson Dunes, including the preparation of a plan to enable the ongoing protection and management of this area • Involve other landholders in this area in the above process, and identify opportunities to provide extra buffering and protection to this remnant 	<ul style="list-style-type: none"> • Continue to advocate for the rehabilitation of aquatic biodiversity, including cooperation with other Councils and agencies with responsibilities for the River Torrens • Continue to employ qualified staff and to provide training programs and resources to ensure Council works are planned, designed and implemented in a manner that cares for and protects native vegetation and the environment • Develop a skilled team with the knowledge and ability to maintain biodiversity sites (including coastal dunes and new wetlands) using bushcare techniques 	<p>Role of Council: leadership, owner/custodian, initiator/facilitator, direct service provider</p> <p>Link with Community Plan: 3.1.1, 3.1.2, 3.1.3</p> <p>Performance measures:</p> <ul style="list-style-type: none"> • Agreement established to manage and protect Tennyson Dunes • Number of staff and contractors trained in biodiversity conservation and bushcare skills and techniques <p>Link with SA Strategic Plan:</p> <ul style="list-style-type: none"> • T3.1 – Lose no species
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Strategy 4.2: Manage threats to biodiversity

- Cooperate with neighbouring Councils and Government agencies to control pest plants, animals and pathogens that present threats to native species, habitats and ecosystems (including Phytophthora and pest plants that spread from suburban gardens)
- Manage stormwater to minimise impacts on coastal and offshore ecosystems from weeds, sedimentation and elevated concentrations of nutrients and other contaminants
- Continue to reinforce the importance of responsible domestic animal keeping, and educate the community about the threats posed by uncontrolled animals on the survival of wildlife
- Develop appropriate strategies to provide for off-lead exercise of dogs away from biodiversity conservation areas
- Establish and maintain biodiversity plantings within open space in a wide range of situations, including away from the coast, to increase our chances of retaining some native vegetation under the influence of climate change
- Educate and inform Council staff about indirect impacts on biodiversity (in Australia and overseas) that can result from purchasing decisions, and promote more sustainable product choices

Role of Council: initiator/facilitator, information provider, regulator, part under

Link with Community Plan:
3.1.1, 3.1.2, 3.1.3, 3.1.4, 4.4.4

Performance measures:

- Community awareness about responsible domestic animal keeping, including appropriate locations for off-lead exercise of dogs
- Pollutant loads in stormwater outflows (suspended solids, nitrogen, phosphorus)

Strategy 4.3: Revegetate with local native species

- Continue to work cooperatively with specialists to conduct broader landscape planning and to design revegetated areas to maximise their ability to function as natural ecosystems
- Incorporate local native species into the coastal dunes and wetlands to be developed as part of the Port Road Rejuvenation Project and the new residential development at the former Cheltenham racecourse
- Continue to reduce turf areas and incorporate plantings of local native species in public spaces and reserves, taking into account the need to provide recreational spaces and playing surfaces that are fit for purpose
- Develop a planting policy to guide the use of native plants by the City of Charles Sturt and to guide and assist developers in the incorporation of local native species in streetscapes and open space
- Promote the collection and propagation of seed from remnant native vegetation within the City to preserve genetic biodiversity
- Continue the 'Trees for the Future' and other related programs to promote the accommodation of large native trees in parks and reserves
- Map and investigate the establishment of green corridors within the City of Charles Sturt, including the series of reserves along Grange Lakes
- Consider the recreation of habitat nodes for identified reserves and at selected locations within the River Torrens Linear Park
- Maintain and promote first choice species lists for dryland reserve, street tree and backyard plantings that are native to this area, with reference to the City of Charles Sturt Tree Policy

Role of Council: owner/custodian, information provider, initiator/facilitator, agent, part funder, direct service provider

Link with Community Plan:
2.4.2, 2.5.2, 3.1.1, 3.1.2, 3.3.2, 3.4.3

Performance measures:

- Number of local native species incorporated into Port Road and Cheltenham wetlands
- Number of local native tree species planted
- Total hectares revegetated with native species
- First choice species lists developed and distributed

Strategy 4.4: Promote an understanding and appreciation of natural areas, and promote community action

- Provide educational opportunities to help our community to develop an appreciation for our biodiversity, including the installation of interpretive signage and self guided materials
- Maximise the potential for biodiversity awareness and education as part of the design and construction of the Coast Park path, including revegetation with native species and the installation of interpretive signage
- Educate the community about the biodiversity and water conservation benefits of native vegetation in home gardens and open space, and include as part of the new Sustainable Lifestyles program
- Provide updated information on the Council website, including the provision of lists, photographs and suppliers of native plants appropriate for backyards
- Establish and promote demonstration sites within the City to showcase the benefits of using native plants in suburban gardens
- Continue to foster community action, including assisting schools and community groups with native planting and weed eradication programs

Role of Council: information provider, advocate, part funder

Link with Community Plan: 3.1.3, 3.1.4, 3.2.4, 3.2.5, 3.2.6, 4.1.4

Performance measures:

- Community awareness of our remnant biodiversity and the benefits of native vegetation in suburban gardens and open space
- Number of people actively participating in volunteer conservation activities

Strategy 4.5: Improve our understanding of the biodiversity within the City of Charles Sturt

- Collate information about biodiversity including remnant vegetation, threatened species and existing revegetated areas within the City of Charles Sturt, and use this information to guide and prioritise actions identified within this strategy
 - Establish a monitoring program for targeted reserves and apply that information to updating management plans for those areas
 - Continue to consult with experts in the field to develop and update management plans for biodiversity conservation areas and to update the strategies and actions outlined in this document
 - Upgrade and maintain Council's tree register to include all street trees, significant trees on public land, significant tree removal applications for public and private land, and other trees of historical or cultural significance
 - Consider the development of an offset program to quantify and ensure an appropriate level of native revegetation is undertaken following the removal of a significant tree
 - Identify the potential impacts of climate change and sea level rise on coastal vegetation and consider this information in the development of management plans for these and other sites within the City
- Role of Council:** leadership, owner/custodian, information provider
- Link with Community Plan:** 3.1.3, 3.4.1, 4.1.3
- Performance measures:**
- Monitoring program established and implemented
 - Tree register established and maintained



5 Our waste

Strategy 5.1: Provide leadership in sustainable waste management

- Implement best practice waste and recycling programs in Council buildings as a model of sustainable waste management for small to medium enterprise

Role of Council: leadership, owner/custodian, information provider

Link with Community Plan:
3.2.3, 4.3.1

- Manage building and construction wastes through Council projects in accordance with best practice, and manage our contractors to ensure they do the same
- Ensure our purchasing policy reflects the need to prevent the unnecessary generation of waste and to avoid creating waste management problems for the future
- Incorporate waste management needs as part of the assessment of all new developments

Performance measures:

- Total Council waste generated (tonnes per annum)
- Total Council waste recycled (tonnes per annum)

Link with SA Strategic Plan:

- T3.8 Zero Waste

Strategy 5.2: Work to improve the effectiveness and efficiency of our kerbside waste management services

- Recycle or compost 65% of all material presented at kerbside by 2010, and allow for the inclusion of food scraps in kerbside organics collections
 - Aim to reduce contamination of kerbside recycling (with rubbish) to less than 10% by weight
 - Aim to reduce contamination of kerbside collected organics to less than 1% by weight
 - Work with the Cities of Port Adelaide Enfield and Tea Tree Gully to coordinate a joint tender process for kerbside waste and recycling services beyond 2010 to assist in attracting the best services, prices and environmental outcomes on behalf of our ratepayers
 - Consider opportunities to introduce a higher level of choice to kerbside waste and recycling systems and move beyond a 'one size fits all' approach
- Role of Council:** direct service provider, initiator/facilitator
- Link with Community Plan:** 3.2.5, 3.4.1, 4.4.4
- Performance measures:**
- % of kerbside material sent for landfill disposal, recycling or composting (by weight and by volume)
 - Contamination as a percentage of kerbside recycling (by weight)
 - Contamination as a percentage of kerbside organics (by weight and by volume) and by item

Strategy 5.3: Review and improve kerbside hard waste services

- Conduct a review of kerbside hard waste services in early 2009, including consideration of:
 - opportunities to improve recycling rates, including for the management of electronic wastes
 - alternative delivery models and options
 - ensuring the service is provided on a cost-effective basis for ratepayers
- Implement improvements to kerbside hard waste services from 2009/10 onwards

Role of Council: direct service provider

Link with Community Plan: 3.2.5, 3.4.1, 4.4.4

Performance measures:

- Total hard waste collected (tonnes per annum)
- Total hard waste recycled (tonnes per annum)

Strategy 5.4: Advocate for the provision of improved services and options for the management of difficult wastes

- Advocate for the provision of both short term and long term solutions to the management of hazardous and electronic wastes as follows:
 - form partnerships with State Government, including Zero Waste SA, to ensure greater access to recycling and disposal options for our community in the short term; and
 - provide support and advocacy for the longer term solution of incorporating end-of-life recycling and disposal into the purchase price of hazardous and electronic items
- Advocate for the provision of greater access to responsible disposal options for hazardous wastes, including increased opening hours for a permanent hazardous waste depot
- Identify 'hot spots' for illegal dumping and develop site-specific strategies to reduce dumping at these locations
- Continue to expiate high priority litter and illegal dumping offences where possible and advocate for improvements to the Local Government Act to provide a simpler and more practical approach to litter expiations in the future

Role of Council: advocate, information provider, agent, regulator

Link with Community Plan: 3.2.5, 4.4.3

Performance measures:

- Increased services offered by the State Government for the disposal of household hazardous wastes (distance, opening hours per annum)
- Number of litter and illegal dumping expiations issued (per annum)
- Number of reported litter and illegal dumping offences (per annum)

Strategy 5.5: Improve waste reduction and recycling by businesses and new developments in our area

- Promote the various options and services available to businesses in our area with a view to facilitating the uptake of improved waste reduction and recycling options

Role of Council: information provider, initiator/facilitator, agent

Link with Community Plan:
3.3.1, 3.2.3, 3.2.5

- Link local businesses with service providers and programs offered by Zero Waste SA with the goal of providing better recycling services and advice
- Continue the focus on pollution prevention at construction and demolition sites, in cooperation with KESAB and others
- Incorporate consideration of waste management needs in the upcoming residential review of our Development Plan

Performance measures:

- Number of local businesses accessing assistance from Zero Waste SA
- Number of reported pollution incidents on construction and demolition sites

Strategy 5.6: Provide improved recycling at events and public places

- Seek funding assistance from Zero Waste SA to trial a range of recycling options for public places and events, including beachside locations
- Provide leadership in the management of events by providing recycling options and using materials that minimise environmental impacts wherever possible
- Investigate the possible incorporation of public place recycling into major venues and facilities such as AAMI stadium, shopping centres, at high profile public events and with street litter bins

Role of Council: agent, initiator/facilitator, leadership

Link with Community Plan:
3.2.5, 4.4.4

Performance measure:

- Number of Council events and public places offering a recycling option
- Contamination as a percentage of public place and event recycling (by weight)

Strategy 5.7: Tailor an effective education program to promote access to and correct use of waste and recycling services by our community

- Conduct regular reviews of awareness and understanding of key audiences and waste issues identified within this strategy
- Develop a tailored education program for the City of Charles Sturt to:
 - improve access to and correct use of waste and recycling services by our community
 - reduce the common items of contamination that have been identified within our kerbside recycling and organics collections
- increase diversion of recyclable items from landfill
- Foster partnerships with KESAB, Zero Waste SA, neighbouring Councils and others to ensure our education programs are sympathetic and complementary to those offered by other agencies and elsewhere within metropolitan Adelaide
- Challenge the 'one size fits all' approach to waste services and investigate options to introduce elements of choice and flexibility

Role of Council: information provider, initiator/facilitator

Link with Community Plan: 3.2.3, 3.2.5, 3.4.1, 4.4.1, 4.4.2

Performance measure:

- Awareness and understanding of key waste issues as measured in a community attitudes survey

Strategy 5.8: Monitor waste generation and recycling programs and develop a better understanding of environmental impacts of waste management

- Schedule regular kerbside waste and recycling audits to ensure Council retains access to timely information to guide decisions
- Seek additional information from the processors of recycling and organic material to verify achievement of recycling yields
- Continue to monitor tonnes of material received for recycling and disposal through kerbside hard waste collections and use that information to guide improvements
- Continue to monitor tonnes of material received for recycling and disposal at the Toogood Avenue Waste Management Centre and use that information to guide improvements
- Conduct research into the greenhouse gas emissions generated as a result of the waste and recycling programs of the City of Charles Sturt, with a particular focus on methane generation in landfill and from burning fossil fuels in trucks and other transport modes
- Use that research to inform a better understanding of the implications of Carbon Pollution Reduction Scheme for the City of Charles Sturt and review the strategies outlined in this plan accordingly
- Monitor trends in waste generation and management and adapt Council programs and activities accordingly

Role of Council: owner/custodian, information provider, direct service provider

Link with Community Plan: 4.1.5

Performance measure:

- Tonnes of material received for recycling, composting and disposal through each of the mechanisms identified above
- Annual climate change impacts of waste quantified

Strategy 5.9: Ensure the provision of economically sustainable waste services

- Plan and manage waste services and programs to ensure they are cost effective, accessible and efficient
- Advocate for the State Government to allocate funds collected through waste levies to the direct provision of improved waste services, including accessible hazardous waste services, to the community
- Identify opportunities to attract grant funding from Zero Waste SA and others to assist with innovations in waste management and improved education programs
- Adopt a transparent approach to communicating waste and recycling costs and benefits to our ratepayers, including economic benefits associated with improving recycling rates through such programs as the collection of food waste in kerbside organics collections
- Educate our community about the value of the waste and recycling services we provide

Role of Council: information provider, part funder, direct service provider

Link with Community Plan: 3.2.6, 4.2.1

Performance measure:

- Processing costs for waste, recycling and organic waste streams (\$ per tonne)
- % of rates revenue allocated to waste management and recycling programs

6 One Planet Living® In the UK and beyond

The term 'One Planet Living' was first used in the UK for a program run jointly by BioRegional and WWF. It has since taken root in a number of countries globally.

The aim of their One Planet Living® program is to create a world in which people can live happy and healthy lives within a fair share of the Earth's resources. The ultimate aim is to reduce global per capita greenhouse gas emissions and ecological footprint to 0.8 tonnes and 1.25 global hectares per person respectively, by 2050.

The program is based on 10 guiding principles of sustainability with associated targets:

- 1. Zero Carbon** – All buildings to be best practice in energy efficient and powered by on or offsite renewable energy
- 2. Zero Waste** – Reduction in all waste generation including recyclables, and approaching zero waste to landfill by 2020
- 3. Sustainable Transport** – Reducing the need to travel and facilitate low and zero carbon transport solutions, to reduce emissions in line with the GHG target

- 4. Local and Sustainable Materials** – Reduce the impacts of all goods and materials used in the construction, maintenance and occupation of the community

- 5. Local and Sustainable Food** – Encourage local, fresh unprocessed produce, organic produce, reduced waste and lower animal protein diets, to contract and converge personal food footprints that are consistent with the overarching targets

- 6. Sustainable Water** – Adopt locally specific best practice in water conservation, efficiency and recycling, and surface water management

- 7. Natural Habitats and Wildlife** – Aim to facilitate establishment or enhancement of valuable wild space consistent with the global need for 20-30% of biologically productive land and make a net positive contribution to local native biodiversity.

- 8. Culture and Heritage** – Create a thriving sense of place and a sense of community through enhancing and reviving valuable aspects of local culture and heritage

- 9. Equity and Fair Trade** – Help towards a thriving, equitable future for all through inclusiveness, participation, fair employment, and affordability

- 10. Health and Happiness** – Strive for best practice in promoting the health and happiness of their residents and workers, through neighbourhood design, construction phase, community governance and lifestyles

While the UK's BedZED community remains a world-leading environmental development, One Planet Living Communities will go even further, for example by following zero-waste strategies.

The term 'One Planet Living' is a trade mark owned by BioRegional and WWF. While those organisations have not been directly involved in the development of this plan by the City of Charles Sturt, they have given their permission for the use by Council of the term in this plan and associated materials produced by Council.

More information on this program is available on www.oneplanetliving.org



City of
Charles
Sturt

