


# 2017-2021

## State of the Environment Report

Delivering on our Community Strategic Plan,  
Campbelltown 2027







Council acknowledges the traditional custodians of the land, the Dharawal people and their unique and spiritual connections to the land.

We recognise the continuation of cultural, spiritual and educational practices of Aboriginal and Torres Strait Islander peoples from here and all other Aboriginal nations.





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# Welcome to the State of the Environment Report 2017-21 for Campbelltown City Council

Our State of the Environment Report sets out the achievement of the environmental outcomes identified in the Community Strategic Plan over the term of Council. It also includes information on environmental issues important to Campbelltown.

Alongside the End of Term Report 2017-21, the State of Environment Report 2017-21 has been included as an attachment to our Annual Report 2020-21.

## **Integrated Planning and Reporting**

The State of the Environment Report is part of a package of business planning and reporting documents prepared under the Integrated Planning and Reporting (IP&R) Framework. All Councils in NSW are required to follow the IP&R Framework which is governed by the Office of Local Government.

- The Community Strategic Plan is the highest planning document for Campbelltown outlining our community's long term vision for the city as well as the outcomes and strategies needed to achieve this vision.
- The Delivery Program and Operational Plan provide the details on what and when we will deliver to ensure our community's vision is achieved.
- The Resourcing Strategy identifies the resources we will need to deliver on these commitments.
- We regularly report on our progress in achieving our objectives through six monthly Progress Reports, the Annual Report, the End of Term Report and the State of the Environment Report. We also share our performance results and achievements with the community through more informal communication channels including social media, our website, newsletters and media releases.

The Georges and Nepean Rivers, which help to naturally define our local area, also provide limitless opportunity for getting outdoors and connecting with nature, whether it's quietly bird-watching or spotting platypus by the creek, ripping down some serious mountain biking trails, or set-your-own-pace activities like swimming, trekking and fishing - it's all right here in our collective backyard.





# Campbelltown's environment

The Campbelltown Local Government Area (LGA) is situated approximately 53 kilometres south west of Sydney and includes large areas of bushland and waterways.

The aesthetic and natural values of the bushland and waterways include good water quality and native flora and fauna which are contributing factors that attract people to live within and visit the area. We are committed to preserving and rehabilitating these natural assets for current and future residents of the city.

54%

of the LGA contains native vegetation



379

public open space areas



1830

flora and fauna species, 69 threatened



24

state listed heritage items

## NATURAL AREAS TO ENJOY

Dharawal National Park

Simmos Beach Reserve

'The Basin' Keith Longhurst Reserve

Ingleburn Reserve

Freres Crossing

Noorumba Reserve



# Our Environment

## Land and Wildlife

The Campbelltown LGA is situated in the Sydney Basin Bioregion which is one of the most species diverse regions in NSW. It covers an area of approximately 33,150 hectares and incorporates parts of the Georges and Hawkesbury-Nepean River Catchments. It is located at the interface of the Cumberland Plain and the Woronora Plateau and this is reflected in its underlying geology. This provides a unique collection of species, populations and ecological communities which form a range of terrestrial and aquatic ecosystems. To the west of the LGA, on soils predominately derived from Wianamatta Shale biodiversity is representative of the Cumberland Plain. There is then a gradual transition to species, populations and ecological communities which are characteristic of Hawkesbury Sandstone on the Woronora Plateau in the east of the LGA.



## Bushland and Vegetation

Approximately 17,940 hectares or 54% of the LGA still contains native vegetation. The majority of this vegetation occurs within the eastern portion of the LGA which comprises the Holsworthy Military Area and the Upper Georges River Corridor. However, other significant vegetated remnants and corridors have been retained throughout the LGA's urban and rural environments. Approximately 77% of remaining native vegetation is considered to be of high conservation value, 18 % is considered to be of medium conservation value and approximately 5% is considered to be of low conservation value (Ecological Australia 2008).

Based on vegetation mapping for the Sydney Metropolitan Area (OEI 2013) and the outcomes of local biodiversity surveys, native vegetation within the LGA is made up of 19 vegetation communities. Twelve of these communities are listed as endangered ecological communities under the NSW TSC Act 1995. Six of these communities are also listed under the Commonwealth EPBC Act.

## Flora and Fauna

To date over 1,500 flora species have been recorded within the LGA. Twenty-one of these species are listed as threatened species under the NSW TSC Act, 16 of these species are also listed under the Commonwealth EPBC Act. In addition, over 100 of these species have been identified as being regionally significant species on the Cumberland Plain.

Over 330 fauna species have been recorded within the LGA. Forty-four of these species are listed as threatened under the NSW TSC Act and three are listed under the FM Act 1994. Many of these species also have global significance, and are listed on the International Union for Nature Conservations (IUCN) Red List for threatened species. A further six bird species are classed as migratory species under the EPBC Act reflecting their listing under international migratory bird agreements.

Fauna habitat within the LGA is therefore important to a range of threatened and internationally significant fauna species including the koala. The Campbelltown LGA is home to a healthy and expanding koala population, which forms part of the largest koala population in the Sydney Basin. This population is highly valued by the Campbelltown community and is linked to the first sighting of a koala by European settlers in 1798.

The vulnerable Grey-headed Flying-fox has also established two camps within the LGA. These camps provide a safe place for flying-foxes to breed and raise their young. They also act as important stopover sites for flying-foxes migrating along the east coast of Australia. Flying-foxes are important pollinators and seed dispersers for many native species including commercially important rainforest and hardwood species. In response to its declining numbers the Grey-headed Flying-fox is the subject of a Commonwealth Recovery Plan as are a range of other threatened species that occur within the LGA including the Regent Honeyeater, Swift Parrot, Brush-tailed Rock Wallaby, Murray Cod and the Large-eared Pied Bat.



## Water

The Georges River and Nepean River help to naturally define our local area and provide limitless opportunity for getting outdoors and connecting with nature.

The Georges River catchment covers an area of almost 1000 square kilometres, and supports a range of land uses, including market gardens, agriculture, mining, industrial manufacturing, landfill and army firing range.

While the catchment is highly urbanised in some areas, large areas of the bushland surrounding the river - including remnant floodplain forests of the Cumberland Plain - are some of the most pristine in western Sydney. A large corridor from Appin to Glenfield has been protected as part of the Georges River Regional Open Space Corridor.

## Bushfires

A significant portion of the Campbelltown LGA is covered by dense bushland sacred to the Dharawal people and protected as National Park. This terrain has suffered from bushfires in the past with native species including the platypus and koalas suffering as a result. The bushfires in the summer of 2019-20 delivered extended periods of very poor air quality, and in April 2018 bushfire occurred within the Holsworthy Barracks and surrounding bushland before nearing residential areas in the Campbelltown LGA. Sydney Trains closed the train line between East Hills and Glenfield due to the proximity of the flames.

A large bushfire event not only threatens the natural assets of Campbelltown but also the loss of adjacent property and air quality concerns effecting the health of our community.

## Climate and Urban Heat

As a western Suburb of Sydney, extreme heat events are a common occurrence for Campbelltown. The local climate for the region is predominantly temperate, which typically results in hot summers and mild, dry winters. The inland location of the city influences local climate, with higher temperatures experienced compared with more coastal areas. A comparison of recent data from Sydney's Observatory Hill and the Australian Botanic Garden Mount Annan shows that summer heat (number of days over 35°C) in the region is usually greater and has also been increasing in the past decade.

The LGA is particularly exposed to urban heat impacts associated with the density and heat retention of urban development, which harbours the heat from events for a prolonged period of time. Recent research completed in partnership with Western Sydney University has shown a particularly severe heat island effect in the urban areas of Campbelltown. With an increase in urban development planned for Campbelltown's CBD areas there is potential for increased risk of urban heat impacts, which will be exacerbated by increases in extreme heat driven by climate change.

Planning for this development must take urban heat into effect as it has a range of significant effects on particularly vulnerable communities including the elderly and is accompanied by a range of social issues and liveability considerations.







**Our Community Goal**  
**A respected & protected**  
**natural environment**



# A respected & protected natural environment



In our Community Strategic Plan, Campbelltown 2027, our community told us they want a respected and protected natural environment. To achieve this they defined the key goals, strategies and indicators required to achieve this outcome.

### Our Goal

- our people embrace the city’s natural surrounds and see it as a unique point of difference
- we work together to ensure development in the LGA is approached in a sustainable manner, and

that our natural assets, bushlands and waterways are treated with respect

- our community is engaged and educated on the benefits of managing and accessing open space
- we protect biodiversity conservation, our visual landscape and our heritage values, and recognise the importance of creating a sustainable and resilient city for future generations.

### Community Strategies

- 2.1 - Implement and advocate for initiatives that conserve the city’s natural environment
- 2.2 - Activate the city’s natural bushland and open spaces, fostering enhanced community stewardship of these areas
- 2.3 - Promote and educate our community on sustainable practices and encourage practicable take up of more sustainable life-choices
- 2.4 - Conserve and care for our city’s biodiversity
- 2.5 - Plan for and ensure that development in our city is sustainable and resilient

### Council Indicators

- 2.1 - Measured positive environmental impacts as a result of environmental initiatives
- 2.2 - Activation initiatives achieved that result in natural spaces being used differently and more frequently
- 2.3 - Number of education programs run by Council
- 2.4 - Achievement of actions as outlined in the sustainability strategy

### Community Indicators

- 2.5 - Participation in education programs run by Council
- 2.6 - Reported changes in sustainable practices as a result of education programs run by Council
- 2.7 - The community reports more opportunities to access well activated natural and open spaces







## **Community strategies & Council's progress**



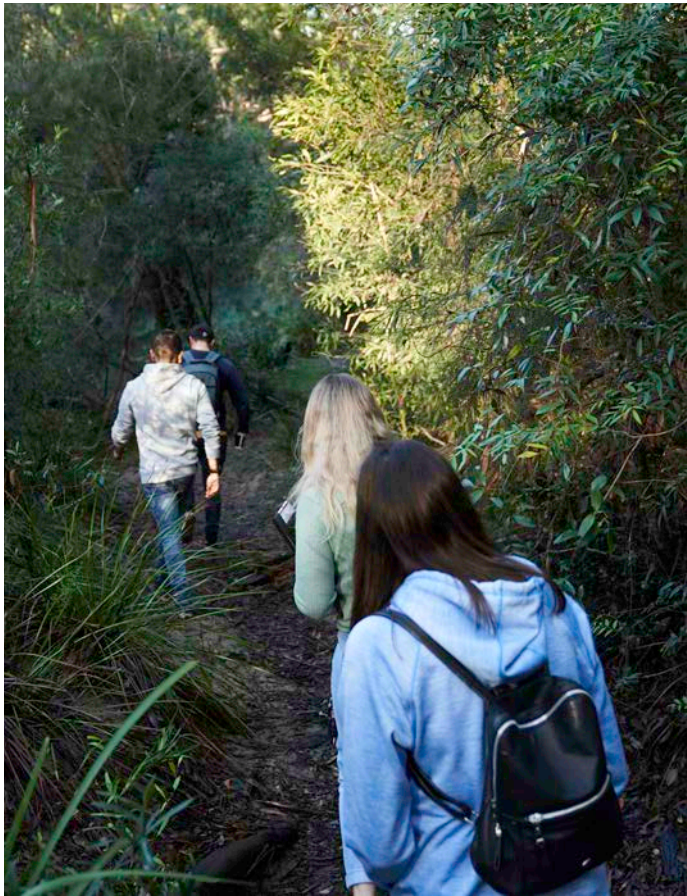
# Community Strategies and Council's Progress

## Community Strategy 2.1 - Implement and advocate for initiatives that conserve the city's natural environment

We finalised the **Comprehensive Campbelltown Koala Plan** of Management in 2018 which provides a strategic direction to ensure the protection of koalas into the future. The Plan provides legislative direction for development assessment in koala habitat as well as a range of actions to educate our community and address key threats such as bushfire, vehicle strikes and dog attacks. The adoption of the plan builds on tireless work undertaken by community members, academics and our staff and is the culmination of many years of work since the first plan was developed in 1990.

In 2020, we launched the **Land for Wildlife Program** in Campbelltown. Land for Wildlife is a free, voluntary, and non-binding program that recognises the importance of habitat protection on private property. It aims to encourage and support private landholders and community groups to preserve and restore as much habitat for wildlife as possible on their properties. Properties are assessed against specific criteria and receive access to officer support, incentives and grants. The Land for Wildlife Program is accompanied by Koalatown Certified Properties which aims to encourage rural landholders to adopt and become accredited for delivering actions associated with our Campbelltown Comprehensive Koala Plan of Management including fencing, habitat conservation and mitigating threats such as pools and domestic dogs. The first property as part of both programs was registered in Minto Heights in June 2021 and conserves a total of 3.7ha of endangered vegetation and core koala habitat.

We drafted **Grey headed flying fox Camp Management Plans** in 2021 for colonies located in Campbelltown and Macquarie Fields. The plans provide a framework for us to ensure the protection of these important threatened species and their habitat whilst ensuring that impacts to surrounding residents can be minimised. The Plans provide for a range of actions including habitat restoration, community engagement, residential subsidies for impacted properties and methods to assist wildlife carers and GHFF during heat stress events.



## Community Strategy 2.2 - Activate the city's natural bushland and open spaces, fostering enhanced community stewardship of these areas

We initiated the **Bush Explorers Program** in 2019 to encourage both residents and visitors to get out and experience nature and to showcase what the Campbelltown region has to offer. The program focuses on Council-owned reserves across the LGA and targets a range of topics including birdwatching for beginners, serenity strolls, bush tucker walks, wildflower walks, water bug hunts and night spotlighting. During 2020, the program hosted 27 events with 163 attendees with many participants reporting they had never been to these bushland reserves before and that they would return in the future.



## Community Strategy 2.3 - Promote and educate our community on sustainable practices and encourage practicable take up of more sustainable life-choices

**Environmental Education** plays a key role in ensuring that our community has the information and understanding that they need to make smart lifestyle choices that reduce our impact on local natural areas and wildlife so we can enjoy them for generations to come.

Guided by our Environmental Education Plan we deliver and support a comprehensive environmental education program that includes:

- Focus on people of all ages – early learners, students, parents, adults
- Range of ways to learn and get involved – education packs, workshops, volunteering, events
- Resource libraries

## Community Strategy 2.4 - Conserve and care for our city's biodiversity

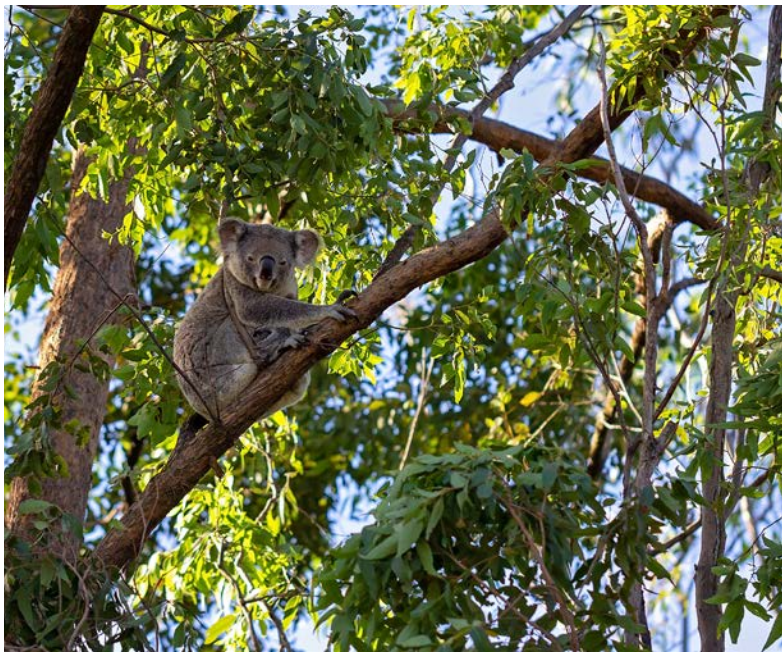
Every year we complete an annual program of environmental works at key bushland reserves and waterways. The works are focused on areas of high biodiversity value including in critically endangered vegetation and habitat for threatened species for the koala.

Key projects include:

- Restoring koala habitat and critically endangered Shale-Sandstone Transition Forest and Cumberland Plain Woodland at Noorumba Reserve in Rosemeadow

- Strategic Koala Habitat Restoration at Macquarie Fields and Ingleburn
- Enhancing critically endangered Shale-Sandstone Transition Forest in Smiths Creek Reserve
- Weed removal, drainage improvements and revegetation of 2,500 trees and shrubs along a 2km length of creekline and 4.14 ha of riparian land at Fifth Avenue and Loftus Reserves, Macquarie Fields (located upstream of Simmos Beach Reserve).

In 2020, we initiated a program titled **Platypus Pals** that aimed to rediscover and map the extent of the Georges River platypus populations and to educate the community about threats to their survival. The program focused on the use of a new technique called environmental DNA (eDNA) where water samples are collected and tested in a laboratory for the presence of platypus DNA. The first stage of the program was completed in partnership with platypus expert Dr Tom Grant and Macarthur National Parks Association as well as 24 community volunteers. The samples at 30 key sites across the Upper Georges River Catchment confirmed a small platypus population present in the middle section of the Upper Georges River. Further works to educate the community and school groups as well as install signs and tangle bins at key locations for disposal of fishing tackle is planned to ensure the protection of the animals into the future.







# Community Strategies and Council's Progress

## Community Strategy 2.5 – Plan for and ensure that development in our city is sustainable and resilient

Over the past 18 months, our community has been impacted by fires, floods and a persistent disease pandemic. Unfortunately, underlying these events (shocks) are the everyday pressures (stresses) that weaken our ability to withstand, respond and adapt.

In January 2021, we engaged AECOM to undertake a **Resilience Hazard Assessment** using best practice methodology applied by Resilient Sydney and resilience strategies internationally. We have also conducted a Climate Change Risk Assessment with AECOM to identify and prepare for climate change risks that are most likely to affect our city.

The Resilience Hazard Assessment is the first stage of a broader Resilience approach for our city. It seeks to deeply understand our community and their needs and is founded on extensive data and insights. The Resilience Hazard Assessment has identified:

### Ten shocks

*(events that can stop our city)*

- Bushfires
- Infrastructure failure (transport, digital, electrical)
- Extreme temperatures and heatwaves
- Financial crisis and high structural unemployment
- Disease pandemic
- Flood (flash, riverine)
- Drought and water shortages
- Severe storms (i.e. East Coast lows)
- Cyber attack
- Civil disobedience/terrorism

### Ten stresses

*(everyday pressures our community experience)*

- Increasing vulnerable populations
- Homelessness
- Family violence, drug and alcohol abuse
- Food security
- Aging community infrastructure and facilities
- Housing affordability
- Increasing congestion for commuter travel
- Increasing densification of development
- Increasing digital divide
- Increasing average temperatures

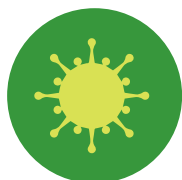
Over the past 18 months, our community has been impacted by fires



FLOODS



FIRES



PANDEMIC

### Seven resilience hazards

*(the hazards our city will face if we do not embed resilience into our decision making)*

- Severe disruption to the services, infrastructure and assets that support our city and its people
- Health and community services are overwhelmed
- Critical infrastructure doesn't meet or keep up with our changing community needs
- Extreme heat days threaten our lives and the things we do
- Council's agility and resources are tested as we work to deliver and meet our commitments
- Our First Nations knowledge and wisdom are not respected and embraced
- Our city grows without an identity or spirit to support community cohesion and strength





# **Community & Council indicators**



## Community and Council Indicators

### Council Indicator 2.1 – Measured positive environmental impacts as a result of environmental initiatives

Our environmental initiatives have included:

- **Bushcare Volunteer Program** – this connects community with our local environment through hands-on conservation activities that aim to create environmental stewardship at key bushland reserves within the LGA. Since 2017, Bushcare groups have worked at 13 sites, with 1,667 participants with 5,647 volunteer work hours completed. Volunteers have planted 4,100 trees, shrubs and grasses and removed 197 bags of weeds and 160 bags of rubbish across 6 ha of bushland.
- **Bush Regeneration Projects** –
  - o Strategic Koala Habitat Restoration at Macquarie Fields and Ingleburn, has involved rehabilitation of 4.2 ha land including site preparation, fencing and planting of 15,250 koala habitat trees. To assist with tree plantings a Koalatown Tree Planting event was undertaken in August 2020, which involved 93 local residents planting 1,000 trees at the site.
  - o Smiths Creek Reserve. This has focused on enhancing critically endangered Shale-Sandstone Transition Forest in the reserve, local core koala habitat. Contractors have undertaken 3,651 hours of work, targeting weed infestations along 4.2km of creek-lines across 12 ha of land.
  - o Fifth Avenue and Loftus Reserves, Macquarie Fields (located upstream of Simmos Beach Reserve). This has involved weed removal, drainage improvements and revegetation of 2,500 trees and shrubs along a 2 km length of creekline and 4.14 ha of riparian land. The project has involved 273 community members in 19 events including community days to plant trees and collect rubbish within the reserves.
- **Controlling Priority Weeds** – Annual surveillance activities cover 129 km of major roadside, 35 km of drains, creeks and rivers, 200 private properties, as well as public recreation areas, markets and businesses. The project also facilitates a range of on-ground control projects including:
  - o Control of Alligator Weed
    - over 45 km of waterway in the Nepean River catchment twice per year in partnership with Camden Council and Wollondilly Shire Council
    - over 52 kms waterway in the Georges River catchment twice per year.
  - o Detection and control of Frogbit (state prohibited plant) in the Georges River in 2019 and an ongoing partnership with Liverpool Council to achieve eradication.
  - o Detection and control of 4 other new incursions of high priority weeds, including Ming Asparagus Fern, Climbing Asparagus, Skunk Vine and Water Poppy.
  - o On-going control of Boneseed, Cats Claw Creeper, Green Cestrum and Tiger Pear to eradicate and/or contain these highly invasive plants.
  - o Monitoring, detection of multiple online sales and confiscation for Prickly Pear species and cultivars, Asparagus weeds, Water Hyacinth, Frogbit and Water Lettuce.
- **Benchmarking Heat across Campbelltown** – A Western Sydney University study examined the distribution of heat across the Campbelltown LGA. As part of our natural area programs, a total of 21,600 trees were planted to provide benefits to biodiversity and to reduce urban heat island impacts.
- **Breathing Wall installation** – We installed a breathing wall at Campbelltown Station to assist in cooling the surrounding area, reduce noise, provide habitat for insects and butterflies, and remove pollutants from the air. The Breathing Wall contains 160 modules and over 1,200 plants.
- **Cool Seals** – We're testing a product that has previously shown it can reduce surface temperatures by up to 14 degrees Celsius on average. This will be applied to 2 existing car park surfaces – HJ Daley Library carpark and our staff carpark. Temperature sensors and monitoring equipment have been installed at the HJ Daley Library to help us understand the impact the product has on these areas.
- **Sydney Water partnership** – We are partnering with Sydney Water to improve water efficiency across our local businesses and residential strata community. As part of the program, we will work with 50 high water consuming businesses and residential strata properties, to achieve a reduction of 150 kilolitres of water savings per day.

### Council Indicator 2.2 – Activation initiatives achieved that result in natural spaces being used differently and more frequently

In 2017, we engaged a consultant to prepare the **Review of Bushwalking Tracks and Associated Facilities** in Campbelltown Report. The report included a detailed assessment of our key bushland reserves, and provided recommendations for trail upgrades, signage and facilities to encourage activation and increased community use.

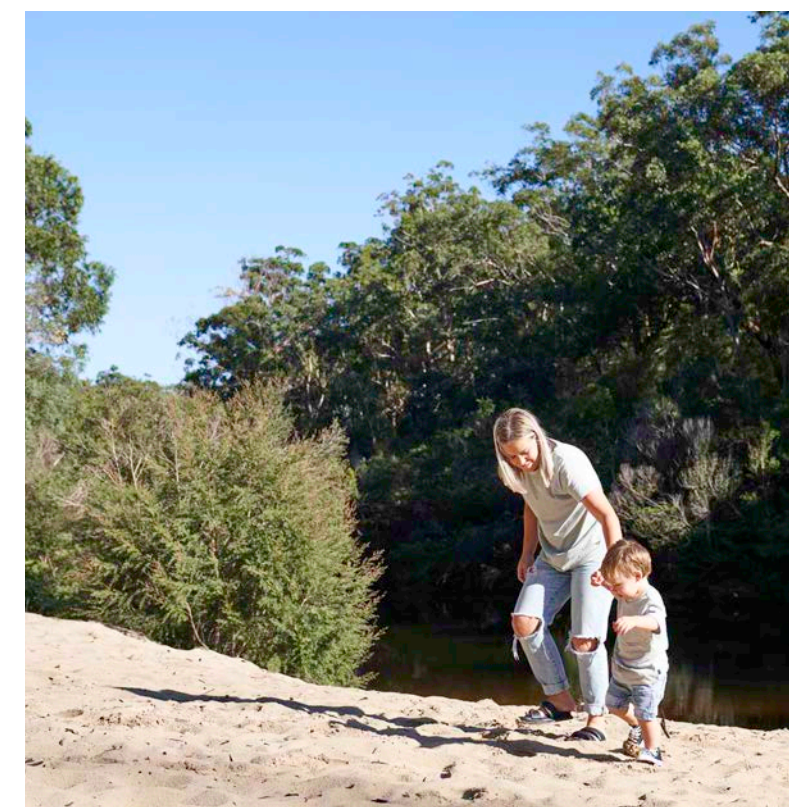
In 2019, we completed the first project as part of the review at **Simmos Beach Reserve** through funding from the NSW Government which has a combined project value of \$120,000. The project included upgrades to entrance, trail head and way finding signage, landscape improvements throughout the reserve and upgrades to trails including stairs and bridges. The project was delivered in partnership with James Meehan High School, with local schools students participating in the naming of the bushland trails as part of the project.

### Council Indicator 2.3 – Number of education programs run by Council

We have delivered a number of environmental education programs, including:

- **Citizens engage with heat** – we partnered with the University of NSW to provide a citizen science project aimed at empowering community members to better understand and respond to urban heat. The project titled, scientists working with communities to improve urban microclimate, is part of a larger community-focussed engagement campaign funded by the Commonwealth Department of Industry, Innovation and Science, and administered by the Royal Melbourne Institute of Technology in partnership with the University of New South Wales (UNSW), Built Environment faculty. Participants were provided with temperature sensors and were able to see the temperature variation between different materials and colours, urban design elements and vegetation coverage.

- **Thrive: Ideas to Inspire** – This was a series of free community talks focused on sharing, showcasing and celebrating ideas that drive positive change. Each talk featured sustainability or resilience industry expert or leader, including Dr Sebastian Pfautsch, Senior Lecturer in Urban Studies and a Research Theme Fellow for Environment and Sustainability at Western Sydney University and co-founder and managing director of Junglefy, a business renowned for delivering complex and innovative green walls, roofs and facades – known as living infrastructure, Jock Gammon. This series has been postponed due to COVID.
- **School Environmental Education Plan** – This Plan supports a number of environmental education programs to promote biodiversity, sustainability and environmental awareness within schools, and encourages students to enhance their stewardship of the local environment. The EEP provides for 12 themed excursions/incursions that are available to early learning, primary school and high school students and engaged 5,353 students in 132 workshops during 2019-2021.
- **Koalatown** – aims to educate and engage residents in meaningful actions to protect and conserve koalas. The program attracted 883 Koalatown supporters via the website and delivered 720 information packs to residents and delivered 5 community events and engaged 408 residents.





# Community and Council Indicators

## Council Indicator 2.4 – Achievement of actions as outlined in the sustainability strategy

- **Renewable energy** – We have joined 17 other councils to assist with mitigation of volatile prices for electricity and gas (estimated cost savings are greater than \$1 million across a 3 year period). We also now source 20% of our entire electricity portfolio from Moree Solar Farm, providing significant cost savings, reducing carbon emissions and supporting investment into the renewable energy industry in NSW.
- **Solar network** – We installed more than 2,000 solar panels on our large electricity consuming facilities. The panels will provide an annual projected generation of over 740,000 kWh of renewable electricity.
- **Energy and water efficiency audits and upgrades** – We undertook efficiency audits at its top energy and water consuming facilities. The audits identified poor performing and resource intensive mechanical equipment, inefficient lighting and leaks, with opportunities included in our proactive and reactive maintenance program.
- **Transitioning to net zero** – We are working towards transitioning our operations toward net zero emissions. We commenced an analysis of the greenhouse gas emissions associated with our activities, and are currently identifying emission reduction pathways required to achieve net zero.
- **Towards a Greener Fleet** – We purchased our first Electric Vehicle, a Nissan Leaf, to replace a petrol vehicle used to conduct regular inspections across the city. This is the beginning of a longer term strategy to adopt the most environmentally conscious fleet possible.



## Community Indicator 2.5 – Participation in education programs run by Council

- We successfully engaged 5,353 early learning, primary school and high school students in 132 workshops during 2019-2021 including:
- **Junior Ranger** – A program for children aged 5-12 years to get dirty, catch bugs, explore waterways and be a wildlife detective.
  - **Wild about Wildlife Education** – A school program to spot koalas in Smiths Creek Reserve, at Leumeah.
  - **Amazing eco-art** – Workshops to look at the world of mini beasts and how to attract and house tiny living things before creating a recycled bug hotel for them. At the end of the workshop all participants took the bug hotels home to hang in their gardens.



## Community Indicator 2.6 – Reported changes in sustainable practices as a result of education programs run by Council

We have engaged the **Macarthur Centre for Sustainable Living** to facilitate community education and upskilling workshops on issues related to waste avoidance and home composting. The workshops aim to provide the skills and knowledge to reduce waste generation and ultimately live more sustainably.

Common themes of the workshops include:

- composting and worm farming (food waste reduction)
- garden to table cooking – range of themes (waste reduction by growing your own food)
- cooking workshops – with a focus on food waste reduction;
- plastic free cooking and living (waste reduction)
- school holiday workshops about composting, worm farming, cooking to reduce food waste and waste in general and plastic art (where recycling of plastics is discussed)
- seasonal gardening – support growing your own food to reduce waste.

## SUSTAINABLE EDUCATION PROGRAMS



\* The number of education programs delivered in 2020 was comparatively lower than previous years due to the impacts of COVID-19.

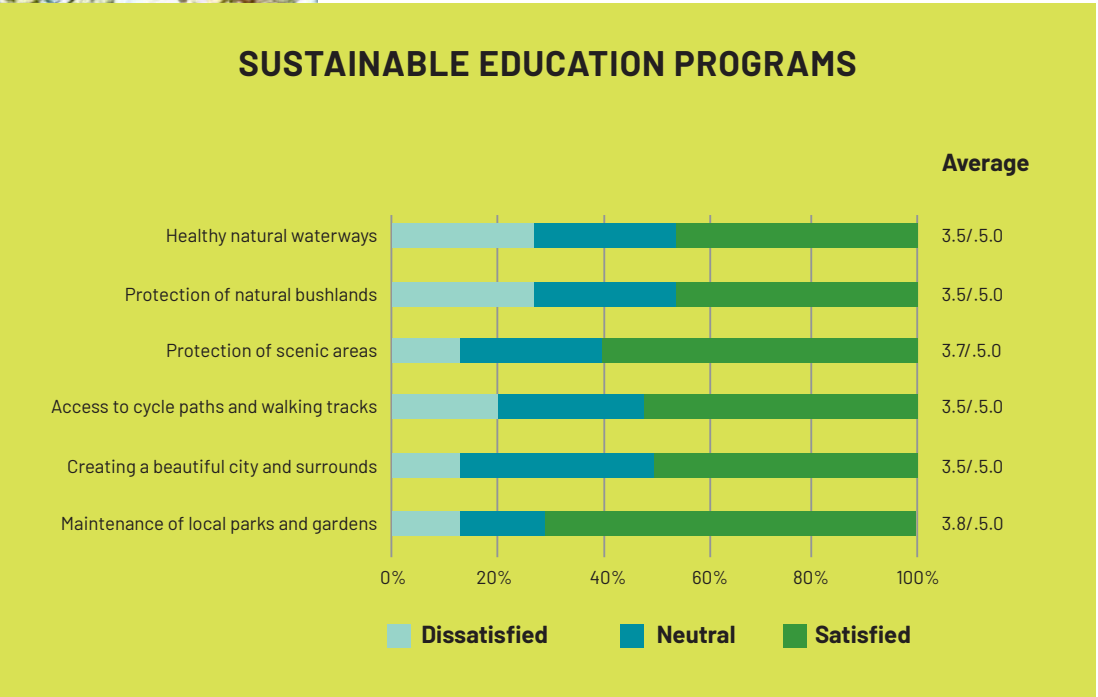
- Our Participation in the **Sydney Water Savings Partnership** has provided education and onsite implementation of Water Savings for Local Businesses.
- The Water Savings Partnership is a collaboration between Sydney Water and local Councils that aims to engage, educate and support non-residential customers in driving the adoption of behaviours, products and services that reduce their potable water demand. Our goal is to help our customers save water and improve their triple bottom line while helping Sydney build a more water resilient network.
- The program provides customers with a tailored service offering, site-specific recommendations as well as funding opportunities to support the implementation of water saving opportunities.
- To date achievements include:
- Completed assessments of 14 local childcare centres, identifying 5.17 kL/day in water savings. Implemented savings at 3 centres and commenced plan to implement savings across 8 Council owned Early Learning Centres.
  - Participated in the Washing Machine Replacement Program with Council's 8 Early Learning Centres. Identified possible further replacement opportunities at Council's Animal Care Facility.
  - Implemented direct on-site improvements with water efficient aerators, which saved significant time as part of the savings implementation process.
  - Represented Sydney Water and Council at the Campbelltown Chamber of Commerce meeting, reinforcing the importance of water savings and promoting the multi-tiered savings programs offered by Sydney Water to local businesses. This generated publicity, leads and an ongoing relationship with that will present further engagement opportunities.
  - Established a rebate program for the discretionary funds working collaboratively with a number of sections in Council.
  - Established a strategic relationship with Western Sydney Business Centre (WSBC) to deliver a Small Business Sustainability Program anchored by the Partnership and supported by a (WSBC) officer experienced in energy efficiency.
  - Established the Integrated Water Solutions Working Group with key partners including Sydney Water, Department of Planning, Industry and Environment (DPIE) and The NSW Environmental Protection Authority.





**Community Indicator 2.7 - The community reports more opportunities to access well activated natural and open spaces**

The 2018 Community Satisfaction Survey identified the community's satisfaction (on a scale from 1: dissatisfied to 5: satisfied) with services and facilities provided by Council such as our natural areas and open spaces. These responses indicate low community dissatisfaction with these areas.



‘Bushcare Volunteer Program, connects community with our local environment through hands-on conservation activities’





# Measuring performance



Measuring performance

Category	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21
Threatened Species	Number of flora threat-ened species listed under State, BC Act (Common-wealth, EPBC Act)	23 (17)	23 (17)	23 (17)	23 (17)	23 (17)
	Number of ecological communities listed under State, BC Act (Common-wealth, EPBC Act)	12	13	14	15	15
	Number of fauna threat-ened species listed under State, BC Act (Common-wealth, EPBC Act)	46 (13)	46 (13)	46 (13)	46 (13)	46 (13)
Environment	Native vegetation protected by biodiversity stewardship or conserva-tion agreements (Ha)	109.33	109.33	128.02	128.02	131.72
	Number of sites protect-ed by biodiversity stew-ardship or conservation agreements (Ha)	7	7	10	10	11
	Area of bush regenera-tion works (Ha)	2.5	20	8	14.6	3.8
Water	Compliance with water quality objectives in the catchment <sup>2</sup>	N/A	N/A	235	360	280
	Number of Water quality improvement devices	67	76	78	81	81
	Georges Riverkeeper Rubbish Collection Stats and sites/tonnage	19255	25118	22872	12003	9746
	Lineal length of aquatic weed control completed (Nepean and Georges River Catchments)	63.6	63.6	63.6	63.6	79
	Licensed discharge points to waterways	0	0	0	0	0
	Septic systems	780	783	784	785	788
	Septic systems inspections	182	137	223	157	224
	Septic system compliance (%)	95	90	92	97	94
Population	Number of dwellings	56724	57957	59567	60375	61716
	Population	164649	167930	170912	174078	176151 <sup>1</sup>

<sup>1</sup> Forecast ID estimate

Category	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21
Waste	Recycling (t)	14100.52	12894.16	11,716.70	11,569.94	11,729.18
	Garden Organics (t)	16641.29	12949.1	5,715.64	16,028.10	19,454.74
	Clean-up (t)	7004.63	8015.06	7146.82	8252.42	8921.64
	Mixed Waste (t)	33,649.98	33,294.63	34,468.95	35,977.12	38,330.10
Land Use	Total area covered (ha) - Burning	19	175	22	3	44
	Number of assets protected - Burning	402	621	477	3	447
	Total area covered (ha) - Mechanical	257	159	239	188	227
	Number of assets protected - Mechanical	8023	5707	8697	8168	9256
	Number of dwellings approved	1,853	1,978	2,008	1,595	1,217
	Number of approvals relating to commercial premises	184	166	162	111	143
	Number of approvals relating to industrial premises	50	39	42	37	49
	Cycleways constructed (m)	6512	6059	2392	3739	12
	New footpaths constructed (m)	15931	36028	2078	19404	574
	Illegal vegetation/tree clearing events reported	35	49	58	43	85
	Trees/plants planted by Council (excluding Operations Team)	1000	4100	1000	19000	2500
	Tree removal applications approved	448	443	396	385	411
Priority Weeds	Number of priority weed inspections	432	432	432	432	305
	Number of lineal KM's inspected (waterways, roads and rail)	240.4	240.4	240.4	240.4	239
	Area of terrestrial weed management completed (Ha)	30.5	30.5	30.5	30.5	143
	Number of new priority weed incursions	1	0	0	5	2



Measuring performance

Category	Indicator	2016-17	2017-18	2018-19	2019-20	2020-21
Heritage	Number of local listed European heritage items	105	104	105	105	105
	Number of state listed European heritage items	23	23	23	23	23
	Number of state listed Aboriginal heritage items	0	1	1	1	1
Council Sustainability	Electricity consumption (kWh)	15058816	15409541	13698291	13939217	14164090
	Gas consumption (MJ)	19899209	25564456	25240923	26014353	24871.083
	Electric Vehicle travel (km)	n/a	n/a	n/a	n/a	3000
	Collected size of solar systems installed	99	163.6	0	0	0
	Renewable electricity generation	414808	409439	541310	412475	240118
Community Participation and Education	Number of Bushcare groups	7	10	8	8	11
	Number of Bushcare hours	1570	2090	2300	1453	2150
	Number of Bushcare events	2	8	23	35	30
	Number of attendees at Bushcare events	N/A	N/A	235	360	280
	Number of environmental events	22	19	16	54	34
	School students engaged environmental education	0	0	0	3017	2236
	School classes engaged in water quality education activities	6	8	4	9	8
Council Sustainability	Electricity consumption (kWh)	15,058,816	15,409,541	13,698,291	13,939,217	14,164,090
	Gas consumption (MJ)	19,899,209	25,564,456	25,240,923	26,014,353	24,871,083
	Collected size of solar systems installed (kW) (excluding Amenities blocks)	99	163.6	0	0	0
	Renewable electricity generation	414,808	409,439	541,310	412,475	240,118
	Electric Vehicle travel (km)	0	0	0	0	3000





