

ENVIRONMENTAL EDUCATION PLAN Appendix one & two

Appendix one KEY ENVIRONMENTAL ISSUES FOR CAMPBELLTOWN



The Campbelltown LGA is located on the south-western edge of the Sydney metropolitan area, approximately 53 kilometres from the Sydney CBD and occupies an area of about 312 square kilometres. The LGA, which extends from Glenfield in the north to Menangle Park in the south, comprises 33 suburbs and is surrounded by five other LGAs. The population predominately lives within a linear urban corridor that follows the alignment of the M31 Motorway/Hume Highway and the Main Southern Railway Line.

Campbelltown was developed as a satellite city in response to the Sydney Regional Outline Plan of the 1960s and is part of the South West Growth Centre (together with Camden and Wollondilly LGAs).

The current land use within the LGA is characterised by a variety of urban and rural land uses. The dominant house form is low density detached dwellings, groupings of medium density housing in suburbs and a limited number of apartments located in the CBD.

Campbelltown's current population is estimated at more than 156,000, people; however Council is currently reviewing its population projections to take into account the anticipated growth resulting from the implementation of the Glenfield to Macarthur Urban Renewal Corridor and the Greater Macarthur Land Release Strategies, and it is expected that the population will reach more than 300,000 by 2036.

This growth and corresponding economic development will result in inevitable pressures and impacts on our local environment. ¹ Australian Bureau of Statistics, Census of Population and Housing 2011.

Our Biodiversity

Campbelltown boasts remnant bushland pockets scattered throughout the LGA. These areas of bushland contribute to the biodiversity of not only the Campbelltown area, but the surrounding region. These bushland areas include two critically endangered ecological communities, six endangered ecological communities and a significant number of other highly valuable ecological communities.

More than 65 different threatened species have been recorded in the Campbelltown LGA. These species include the Grey-headed Flying fox, Broad-headed Snake, Koala, Nodding Geebung, Parma Wallaby, Silver Perch and the Powerful Owl.

Campbelltown has a range of parks and reserves that provide a home to these remnant bushland areas and an opportunity for the community to experience their distinctive ecosystems and landscapes, including:

- Dharawal National Park
- Australian Botanic Gardens
- Frere's Crossing
- Ingleburn Reserve

- Simmo's Beach
- Noorumba Reserve
 - The Woolwash
 - Pembroke Park
- The Basin Keith Longhurst Reserve

Our Heritage

Heritage is the most tangible evidence of our history and culture. It includes places, objects and landscapes that have aesthetic, natural, historic or social significance or special values for our people.

Aboriginal heritage

The City of Campbelltown is located on the traditional lands of the Dharawal people. Some of the Aboriginal nations represented in Campbelltown include Wiradjuri, Gamileroi, Yorta Yorta, Gumbainggyr, Yuin and Ngunawal from the NSW/ACT regions. There are also Aboriginal people from nations in other states and the Torres Strait Islands residing in the area.

The Dharawal territory covers an area from Botany Bay south to the Shoalhaven River and Nowra and inland to Camden. The natural resources of the area provided the Dharawal people with food and shelter. Today, there are more than 350 known Aboriginal heritage sites in the area, including rock art, scarred trees, open camp sites, and axe grinding grooves.

The Dharawal people had contact with early settlers from around 1789. Evidence of first contact can be found in charcoal sketches of bulls that had escaped with other cattle from Sydney Cove and made their way to an area near Campbelltown known as the Cowpastures.

European heritage

Campbelltown was one of the first areas in Australia to be established by Europeans. In 1810, Governor Macquarie recommended the area for settlement and named the district Airds. However, it was not until 1820 that Governor Macquarie founded the township of Campbelltown. The town was envisaged as the capital of the greater district. Large land grants (to free settlers) and small land grants (to emancipated convicts) were allocated in Campbelltown. These land grants were consolidated into holdings up until the 1820s and many have given their names to the suburbs of Campbelltown.

The Campbelltown and Macarthur area was once an agricultural epicentre. Campbelltown was a relatively small town, providing regional services and facilities within a rural community up until the 1960s. Campbelltown was proclaimed a city in 1968 as part of a growth sector to help cater for Sydney's growing population, and a structure plan was prepared in 1973 to guide the growth of the city. Rapid urban growth has characterised Campbelltown since this time.

Our Water

a) Rivers of Campbelltown

The Campbelltown LGA is located within the catchments of two principal Sydney waterways, the Georges and Nepean River system. Approximately 86 per cent of the Campbelltown LGA lies within the Georges River catchment. The remaining 14 per cent of the LGA feeds into the Hawkesbury Nepean River. These are both significant rivers in the context of the Greater Sydney Region, and add extensively to the amenity of the local area. The local Dharawal population have used these waterways to thrive as a community for tens of thousands of years, therefore giving these water sources a strong cultural importance.

(i) Georges River

The Georges River has a catchment area of approximately 1000 square kilometres, and incorporates 14 different local government areas. The catchment stretches from Wollondilly in the south through to Botany in the north. A large proportion of the Georges River catchment lies within the Campbelltown LGA (approximately 27%). The river has forged unique landscapes ranging from floodplain to steep valley gorges, which boast high levels of biodiversity. Additionally, the river and its foreshore areas also provide a range of recreational opportunities such as bushwalking, picnics, swimming and fishing. The significance of the river to the Campbelltown community is celebrated at the annual 'Riverfest' community festival held in August each year.

(ii) Nepean River

The Hawkesbury-Nepean River is a significant watercourse in the Sydney region. Its headwaters begin in Tarago in the Mulwaree region in the south and it travels through to the Wollemi wilderness area in the north. Notably, the river provides a drinking water source for the Sydney area. Additionally, the river boasts high biodiversity and also offers a range of recreational opportunities. The Campbelltown LGA features a small proportion of the Nepean River.

b) Water quality

The majority of Campbelltown's urban waterways flow into the Upper Georges River, either directly to the Georges River itself, or via the Bow Bowing/ Bunbury Curran Creek System.

Water quality over time has been influenced by rapid urbanisation. Currently, 99% of Campbelltown's population resides within the Georges River catchment. In addition, 100% of the LGA's commercial, industrial areas and business centres are also located within this catchment and, more specifically, the Bow Bowing/Bunbury Curran Creek catchment, through predominately highly modified and constructed waterways.

The distribution and density of urban areas in close proximity to Campbelltown's major waterways has resulted in increased volumes of stormwater being discharged into these systems. Due to its transmission path, stormwater generally has higher levels of pollutants such as sediment, chemicals, litter, excess nutrients and oils.

Our Air

The topography of the Sydney Basin acts as an effective trap for air flow and associated pollution across the Sydney region. During summer, cool overnight air drains from the hills of the Sydney basin and moves toward the ocean, collecting with it the air pollution from vehicles, industry and homes. In the morning, the sea breeze then pushes this air pollution back over our urban areas, collecting more air pollution and creating smog. This weather pattern will continue until a strong rain or wind clears the pollution away.

The NSW Government measures and records the ambient levels of air pollutants across Sydney, Illawarra, the Lower Hunter and selected rural sites around NSW twice daily. Monitoring stations located in the Sydney south west region include Bargo, Bringelly, Camden, Campbelltown West and Oakdale. The information provided by these stations identifies the quality of air within Campbelltown and the broader Macarthur area.

Council understands that clean air is fundamental to the health of its community and the natural environment plays an important role in the management of air quality within the LGA. Council maintains a register of air pollution complaints raised by residents, which are actively inspected by compliance officers.



Our health and wellbeing as a community is directly impacted by the quality of the environment in which we live. Additionally, the environment has an intrinsic value that is beyond the scope of our wellbeing – that is, it deserves to be conserved for its own sake.

Themes such as water quality, biodiversity and climate change are all areas which humans have the potential to influence, for better or worse. As our community grows, human activities increasingly encroach on these natural areas and ecological systems.

Our Sustainability

Sustainability demonstrates that we are dependent on the environment not only for food, water and shelter, but its by-products also form the basis of goods, services, economics, science, and other spheres of human activity and advancement.

Sustainability challenges the way we live and the choices we make. The environment is not infinite, and we need to understand its limits so that future generations can enjoy the same or a better quality of life. In doing so, sustainability inspires us to incorporate a balanced decision-making process supported by sound governance and leadership. This decision-making process respectfully balances and gives equal worth to environmental, social and financial considerations, and is known as a quadruple bottom line approach. In promoting sustainability to the community, we see it as balancing our lifestyles with the environment, making our everyday actions and behaviours environmentally-friendly, thereby reducing the resources that we consume and our impact on the world.

Our Waste

The amount and composition of waste found in landfills today is dramatically different from that of previous generations. In Australia, the rapid advance of technology, combined with significant increases in personal wealth, has seen the growth and creation of new products, markets, business models and modes of production. This has created a dominant consumer culture, which has blurred the line between 'need' and 'want', and seen consumption increase exponentially. Despite this, Campbelltown households have achieved one of the highest diversion rates in Australia for domestic waste. Council has three key objectives in managing domestic waste management in Campbelltown:

- to minimise the amount of waste generated per household
- to achieve the highest possible ratio of recyclables-to-waste produced per household
- to reduce the impacts associated with illegal dumping.

3rd place 2015 Threatened Species Art Competition entrant, Olivia Prior -'Painted Honeyeater'

Appendix two 2017 ANNUAL ENVIRONMENTAL EDUCATION PROGRAM OF WORKS

NAME OF PROGRAM	OVERVIEW	PARTNERS	OCCURS	BUDGET	TARGET AUDIENCE	KPIS
Catch a Carp	Annual fishing competition at a local impoundment, aiming to reduce carp numbers and raise awareness about invasive species and their impacts on the environment and biodiversity	• NSW DPI	Early March	 ✓ Environmental Education budget Sponsorship sought from other sources 	√ Community	Feedback from the community gathered through surveysNumber of people attending the event
Earth Hour – "Connecting our past, present and caring for our future"	Residents are invited to celebrate Earth Hour by taking a journey connecting them to the natural environment and ways to live sustainably through Aboriginal dream time stories and dance	 National Parks and Wildlife Service Tharawal Local Aboriginal Land Council and the Dharawal Men's Aboriginal Corporation 	March 25	✓ Environmental Education budget	✓	 Number of people attending the event Feedback from the community gathered through surveys

NAME OF PROGRAM	OVERVIEW	PARTNERS	OCCURS	BUDGET	TARGET AUDIENCE	KPIS
Threatened Species Art Competition	An annual regional environmental education program that engages young people aged 5-12 to learn about a locally threatened species by creating artwork.	 Wollondilly Shire Council Camden Council Australian Botanic Gardens Western Sydney University Wollondilly Shire Council Camden Council Western Sydney University 	June-Sept	 ✓ Environmental Education budget Contributions/ sponsorship from Wollondilly, Camden Council and Australian Botanic Gardens 	5-12 year oldsPrimary schools	 Number of entrants participating in the competition Number of schools participating in the competition Feedback from teachers on the relevance of the program to the syllabus learning outcomes
Macarthur Nature Photography Competition (MNPC)	An annual regional environmental education program that connects people to the natural environment of Macarthur through the medium of photography.	 MCSL Local high schools 	July – Nov	 ✓ Environmental Education budget Contributions from Wollondilly, Camden Councils Sponsorship sought from other sources 	 General community High schools 	 Number of entrants Number of schools participating Feedback from teachers on the relevance of the program to the syllabus learning outcomes Number of people attending the MNPC awards night
Schools for Sustainability	A two day forum that gives students the opportunity to explore global and local environmental issues through a series of engaging workshops, hear from young sustainability pioneers within the community, identify potential sustainable project initiatives and learn how to prepare grant applications.	Western Sydney University	TBA	 ✓ Environmental Education budget Western Sydney University (\$3k) 	• High schools	 Number of schools participating Feedback from teachers on the relevance of the program to the syllabus learning outcomes Feedback from students on practicality of suggested actions Number of grant submissions received from students post forum Funding granted

NAME OF PROGRAM	OVERVIEW	PARTNERS	OCCURS	BUDGET	TARGET AUDIENCE	KPIS
An Evening with the Koalas	An 'Evening with the Koalas' will invite the community into one or more of our bushland reserves to be taken on a guide through the reserve to search for and document koala sightings. This will be followed by a sit down candle lit dinner in the reserve, supplied by a local catering company	Sydney Metro WildlifeWIRES	7-17 Nov	ТВА	General communityTourists	 Number of people attending the event Feedback from the community gathered through surveys
Project Green and Golden Bell-frog	 Project Koala is a school place based learning program that will see students: investigate a locally threatened species visit the habitat of the animal and hear first-hand from the industry experts currently working on its recovery collaboratively design and deliver a community awareness and behaviour change strategy to contribute to its recovery (primary schools) OR collaboratively design and create products that will directly impact the recovery of the threatened species (high school) 	 Taronga Zoo Wooglemai Environmental Education Centre National Parks and Wildlife Services 	TBA	✓ Environmental Education and Tourism and Marketing budgets	 Local schools General community Tourists 	 Number of schools participating in the program The development of a community awareness and behaviour change strategy through a local primary school or the development of products that will directly impact the recovery of the threatened species through a local high school
Educational signage for Simmo's Beach Reserve	Council will collaborate with Macquarie Fields High School art students to develop educational signage for Simmo's Beach Reserve. This program will also include on-site fields trips with students.	Macquarie Fields High School	TBA	TBA	 Macquarie Fields HS Reserve users 	 Number of students participating in the program Students re-design of Simmo's Beach Reserve educational signage Implementation of the re-designed signage into Simmo's Beach Reserve

NAME OF PROGRAM	OVERVIEW	PARTNERS	OCCURS	BUDGET	TARGET AUDIENCE	KPIS
Sustainability toolkit for Council child care centres	 Development of a toolkit to assist centre staff in: engaging staff in early childhood education for sustainability to assist in the implantation of the Quality Improvement Plan (QIP) delivering staff/community workshops undertaking sustainability audits of centres identifying environmental actions to improve centres' operations such as retrofits and management initiatives. 	•	Late 2017	✓ Environmental Education budget	 Council staff Children and families using Council child care facilities 	 Number of childcare centres engaging with the toolkit Feedback on the relevance of the toolkit in addressing sustainability across the seven stages of the QIP
Paper upcycling across Council	The program aims to re-distribute waste paper that would otherwise be recycled or discarded and provide it to Council childcare centres, thereby reducing costs in paper purchase, as well as upcycling paper and extending its shelf life. Paper collection bins will be placed throughout the building for collection of non-confidential paper.	•	All year	√ NA	• Council staff	 Amount of paper upycled to Council childcare centres. Measured by weight Monetary amount of paper purchasing costs of childcare centres Number of workshops delivered to the Campbelltown community Number of people attending each workshop Yearly total number of people attending workshops
Community sustainability workshops	Sustainable education workshops delivered by the Macarthur Centre for Sustainable Living (MCSL) focusing on environmental practices that will reduce household bills and reduce their ecological footprint. Topics include: • how to keep chickens at home • cooking with edible weeds from the garden • building a no-dig garden • building a bee hotel	• MCSL	All year	✓ Waste Education budget	 CALD communities Seniors Lower socio- economic groups General community 	 Number of workshops delivered off-site from MCSL to better target community groups who cannot reach the MCSL facility Number of workshops delivered Number of people attending workshops
Waterwise Waterways – stormwater education program	The Waterwise Waterways drain artwork program is delivered through local primary schools to educate students about stormwater processes, and encourage behaviours that can reduce our impacts on the environment. Students design artwork to be placed on stormwater drains around the local area to promote the connection between drains and waterways to the local community.	• Local primary schools	All year – as requested	✓ Stormwater Levy	 Primary schools General community 	 Number of schools engaged with the program Number of drains featuring artwork across the LGA







