



LEGISLATIVE ASSEMBLY
FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON ENVIRONMENT AND TRANSPORT AND CITY SERVICES
Ms Suzanne Orr MLA (Chair), Miss Candice Burch MLA (Deputy Chair)
Ms Tara Cheyne MLA, Ms Nicole Lawder MLA

Submission Cover Sheet

Nature in Our City

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Mick Gentleman MLA

Member for Brindabella

Manager of Government Business
Minister for Police and Emergency Services
Minister for the Environment and Heritage
Minister for Planning and Land Management
Minister for Urban Renewal

Ms Suzanne Orr
Chair
Standing Committee on Environment and Transport and City Services
Legislative Assembly for the ACT
GPO Box 1020 CANBERRA
ACT 2601

Dear Ms Orr,

Suzanne

Please find attached the ACT Government Submission to the ACT Legislative Assembly Standing Committee on Environment and Transport and City Services Inquiry into the Value of the Natural Environment to an Urbanising Canberra (Nature In Our City).

I trust this submission is of assistance in continuing the Committee's important work for the environment in the ACT.

Yours sincerely

MR

Mick Gentleman MLA
Minister for Environment and Heritage

12/17/18

AUSTRALIAN CAPITAL TERRITORY LEGISLATIVE ASSEMBLY

London Circuit, Canberra ACT 2601, Australia
Phone +61 2 6205 0218

GPO Box 1020, Canberra ACT 2601, Australia
Email gentleman@act.gov.au



@GENTLEMANMick



MickGentleman



The Value of the Natural Environment to an Urbanising Canberra

ACT Government Submission

*to the ACT Legislative Assembly Standing Committee on Environment
and Transport and City Services Inquiry into the Value of
the Natural Environment to an Urbanising Canberra (Nature In Our City)*

June 2018

Overview

Canberra's natural environment is integral to the city's image and lifestyle. This submission outlines the value of the natural environment to a changing, growing and increasingly urban city of Canberra. In partnership with our community, the Government has a key role in protecting, preserving and enhancing the natural environment while also considering the needs of a growing city. The Government considers that these considerations often complement each other and are not always in competition.

For this submission, the 'natural environment' is considered to include the national parks and reserves, urban parks and connecting green spaces. Within the city we refer to 'living infrastructure', the natural elements and features such as wetlands, the urban forest and green refuges that are incorporated into the design and operation of cities.

The natural environment is precious for its intrinsic value as well as the many social, environmental and economic benefits. Our natural environment connects communities, reflects our culture, provides a classroom for life-long learning, provides resilience against a changing climate, gives us clean air and water, contributes to our economy and is part of a thriving tourism industry.

Background

The ACT protects more of its natural assets than any other Australian state or territory. More than 70% of the Territory's 236,000 hectares is reserved to ensure natural, cultural and recreational values are conserved, managed and enhanced for the benefit of all. Urban Canberra includes another 6,600 hectares of publicly accessible open space including urban parks, sportsgrounds and semi-natural urban open space.

Traditional Custodians have understood the importance of the natural environment and our interdependencies on it for our survival. Those custodians maintain their connection to country today and work with the ACT Government in caring for their country.

Nature has been integral to Canberra’s design from the very beginning. Uncluttered and expansive spaces are a distinctive and intended feature of the Griffins’ ‘city in a landscape’. Making nature visible by conserving vistas and views to local features and the skyline beyond is a major contributor to a sense of place and belonging that many Canberrans identify with, as is the mosaic of green space and the urban forest throughout the city and in corridors.

We are now a city of more than 400,000 and as we continue to grow, we need to balance our preservation of the natural environment with increasing urbanisation and our responsibility to respond to climate change.

As outlined in the ACT Planning Strategy (2012), Government is adhering to the compact city policy and greenfield expansion is increasingly limited.¹

Through careful strategic planning we can actively integrate nature into urban areas, into the spaces between our roads and buildings. Providing sufficient living infrastructure means new and renewed areas are both liveable and fit-for-purpose in the future climate. For example, the use of canopy trees and water sensitive urban design, respond to the impacts of urban environments on existing natural assets such as our lakes and ponds.

Nature provides the setting for Canberra’s identity as the ‘garden city’ and our ‘city in the landscape’—our streets, parks and walkways—and the ‘bush capital’ in the reserves within and surrounding the city. Each of the city’s more than 400,000 residents has access to nature within a kilometre of their home—and the opportunities it provides for health and wellbeing, recreation, exercise and social interaction.

Connecting community

The natural environment provides an opportunity for many Canberrans to contribute to its conservation and often its rehabilitation. Apart from its obvious benefits for the environment, it also provides social connections.

The Environment, Planning and Sustainable Development Directorate organised the ParkCare Hub which has over 400 volunteers registered.² Since the ParkCare Hub was created in 2017, 220 new volunteers have joined. The average age is 46, with 38% under the age of 35. ParkCare provides four areas to engage with nature and contribute:

- ParkCare Patch caters for the ParkCare and ‘Friends of’ groups to help protect and enhance their local environment.
- Ranger Assist allows volunteers to work with PCS Rangers on a diverse range of tasks.
- Wildlife Assist lets volunteers work with the PCS Wildlife team to care for and manage native wildlife.

¹ ACT Government (2012) *ACT Planning Strategy*:

https://www.planning.act.gov.au/tools_resources/legislation_plans_registers/plans/planning_strategy

² More information on the ParkCare Hub can be found at: <https://www.environment.act.gov.au/parks-conservation/parks-and-reserves/get-involved/the-ParkCare-initiative> and www.tccs.act.gov.au/about-us/volunteers

- Visitor Assist volunteers work on the popular ‘Visitor Interpretation Program’ at Tidbinbilla or in one of the visitor information centres.

The natural environment brings culturally and linguistically diverse communities together in structured and unstructured programs, bringing people together irrespective of their gender, ethnicity or ability. It’s about a common purpose and belonging to place.

Reflecting our culture

Our natural environment includes and protects sites of great social, cultural and spiritual value to First Peoples communities; it is part of our living culture and a window to our history.

Collectively, physical heritage places and intangible heritage values form part of a larger Aboriginal cultural landscape in which the connectivity between people and place over many thousands of years is understood.

Traditional Custodians were land managers, who were not only sustained by the natural environment but actively managed it, for example through ‘fire stick farming’ or deliberate cultivation of plant species such as the yam daisy.

It is important to the Government to work closely with traditional custodians of its national parks and reserves to learn from and to share responsibility for caring for Country.

An ongoing connection to Country is an important part of Aboriginal culture. Active engagement in land management helps to maintain identity and has direct benefits to community health and financial wellbeing.

Nature’s classroom

Our urban and natural environments provide opportunities for children and adults to learn, to support science and to understand the value of the environment.

The Naturemapr platform, supported by the ACT Government, provides public access to over 1.2 million records of over 7,000 local species and in excess of 250,000 wildlife images. The platform engages citizen scientists, naturalist groups and the public alike.

Government has placed a renewed focus on natural play spaces, where children living in an urban environment can get their ‘hands dirty’. There are now natural play areas in Barton, O’Connor and Tuggeranong, in addition to the many nature reserves and places like the Australian National Botanic Gardens and National Arboretum Canberra where children and adults are encouraged to explore and experience the natural environment.

Our city’s climate resilience

Canberra is getting hotter overall, with more seasonally variable (unreliable) and extreme temperatures and rainfall. According to research by the ANU’s Climate Change Institute, the NARcliM modelled projections for 2030 will be experienced closer to 2020.³

³ Office of Environment and Heritage, NSW (2014) *Australian Capital Territory: Climate Change Snapshot*, NSW Office of Environment and Heritage and ACT Government: <https://www.environment.act.gov.au/cc/regional-climate-projections>

The ACT Climate Change Adaptation Strategy has actions to increase our resilience to climate change, including an action to develop and implement a Living Infrastructure Plan.⁴ This Plan is being delivered as part of the new Climate Strategy for a Net Zero Emissions Territory in 2018. The Government is committed to a carbon neutral future with net zero emissions by 2045.

Canberra's renowned urban forest has more than 760,000 trees in the public realm, providing a wide range of benefits to the community. Trees buffer the built environment from climate impacts including through shade, thus reducing energy use for air-conditioning.

With urban intensification, vegetation in the form of canopy trees and watered grass in the public realm is increasingly the city's air-conditioner. Avoiding the human and economic costs of climate change can be most efficiently and economically addressed by ongoing and expanded investment in natural assets in our city.

This is not just central to Canberra's liveability, it is a major contributor to the low carbon economy and meeting our net zero emission targets.

Clean air and water

The vegetation in our natural environments cleans and filters water, traps sediment, recycles nutrients, stabilises slopes and slows runoff to improve the quality of water. Without the large expanses of intact native vegetation that parks protect, the costs of water filtration and flood mitigation would dramatically increase.

Namadgi National Park provides up to 85% of Canberra's water from the Cotter Catchment in the ACT, with an estimated economic value of at least \$100 million per year. A recent study of water filtration by permanent wetlands, calculated they provide more than \$7,000 worth of water purification per hectare each year. Conversely, where water quality is not protected by wetlands and other natural solutions the impacts can be significant. It has been estimated the closure of Lake Burley Griffin cost in excess of \$20 million annually.⁵

Water sensitive urban design (WSUD) planning requirements for greenfield and infill development in the Territory Plan helps maintain water and vegetation in our urban environments. WSUD assists in supporting our natural urban environments by improving water quality, reducing potable water usage and the urban heat island effect, increasing amenity and biodiversity, improving local microclimates and property values. It can also have mental and physical health benefits and improve social interaction, especially if the community is engaged and involved in the siting, design, establishment and maintenance of these WSUD assets.

⁴ The Strategy can be accessed from: http://www.environment.act.gov.au/__data/assets/pdf_file/0004/912478/ACT-Climate-Change-Adaptation-Strategy.pdf

⁵ R. Neil (2012) *Report on the state of the watercourses and catchments for Lake Burly Griffin*, Office of the Commissioner for Sustainability and the Environment: http://www.environmentcommissioner.act.gov.au/__data/assets/pdf_file/0010/590860/Part_1_-_Report.pdf

Trees and plants act as the ‘lungs’ of our cities and towns. Their leaves naturally filter the air by stabilising dust and absorbing pollutants. The trees, however, are only part of the solution.

Government is acting to ensure good air quality is maintained through reducing motor vehicle emissions through provision of an integrated transport network, quality road infrastructure to minimise transport delays and encouraging active travel modes such as walking or riding.⁶

The Government’s air environment protection policy also aims to maintain the city’s air quality by reducing other air contaminants including wood smoke and chemical pollutants.

Health benefits

Interacting with nature can provide a range of health benefits, including physical and psychological well-being.

Access to good-quality, well-maintained green spaces can help to improve our physical and mental health by encouraging us to walk more, to play sport, or simply to enjoy a natural environment.

The prevalence of obesity in Australia has more than doubled in the past 20 years.⁷ Data from the Australian Diabetes, Obesity and Lifestyle (AusDiab) study indicate that the total direct cost for obesity in 2005 was \$21 billion.⁸

A study in the United States found that active park users were healthier than non-park users for a number of measures including blood pressure, body mass index and levels of depression.^{9,10}

Economic value to our city

Our natural environment contributes directly to the local and national economies through tourism, employment and expenditure on management and services. Parks encourage private and public sector investment in roads, tourism infrastructure and commercial services, and have considerable recreational value to visitors. Parks and reserves offer spaces for events and recreational activities.

Some cities have estimated the annual financial benefits generated by trees. The method of calculation differs, but this provides an indication that city administrations are considering the broad value of living infrastructure in an urban environment. For Adelaide it is estimated that the gross annual benefit of each tree is \$424/year; in Perth each street tree has been valued at \$10,000–\$50,000 depending on its maturity and location; in Brisbane it is

⁶ ACT Government (1999) *Air – Environment Protection Policy*:

https://www.accesscanberra.act.gov.au/app/answers/detail/a_id/1320

⁷ OECD (2017) *Health at a Glance 2017*: <http://www.oecd.org/health/health-systems/health-at-a-glance-19991312.htm>

⁸ Australian Institute of Health and Welfare (2018) *Mental Health Services in Australia Web report*:

<https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/summary>

⁹ Godbey, G, Roy, M, Payne, LL & Orsega-Smith, E. (1998) *Final report on the health and park use study*, the National Recreation and Park Association, USA

¹⁰ Parks Forum (2008) *The value of parks*

estimated that the total value provided by its street trees is \$1.66 million/year given the CO² capture, air pollution removal and stormwater benefits.

The Valuing Victoria's Parks Report shows tourists spend \$1.4 billion per year in Victoria related to their visits to parks, adding 14,000 jobs to the state's economy. The parks contain more than one million hectares of catchments that supply water used for drinking, food production and other industries, with this amenity valued at \$21–\$28 million.¹¹

Nature-based tourism ranks among top travel motivators for international visitors to the country. The ACT is taking advantage of this significant market to provide world-class nature-based tourism experiences close to a capital city and international airport.

For the growing China market, nature-based tourism in the ACT holds great appeal due the ease of access to wildlife viewing, Aboriginal cultural immersion and viewing night skies.

The National Arboretum, home to 44,000 trees, continues to be one of our major attractions welcoming more than a million visitors since it opened in 2013. Government is also investing in a visitors centre at Mulligans Flat together with the Woodlands and Wetlands Trust. Ready Cut Cottage at Namadgi National Park and Nil Desperandum at Tidbinbilla have been opened for overnight visitors, and WildFest, an overnight 'glamping' experience will take place in September/October 2018.

The trail network that stretches for approximately 3,500 kilometres across the natural areas of the ACT, our abundance of wildlife and landscapes present opportunities to further broaden the experience base of visitors to the region.

There is sustained growth in commercial operators seeking to use ACT parks and reserves to provide visitors with new and varied experiences. A recent example is the Wildfest pop up wilderness camp to be run at Tidbinbilla Nature Reserve during the September / October school holidays this year. This event will cater for the high-end user utilising luxury 'glamping' tents which will attract a different clientele to the Reserve.

Importantly our natural environments provide the venues for vast array of passive and active recreational pursuits from mountain biking, fishing and walking to bird watching. The spin-offs support our local economy from the bike shop to the outdoor clothing retailers and camera stores.

Conserving our natural capital

Our natural environment conserves and protects biodiversity, which is important to Canberra's educated and environmentally aware residents.

Nationally, Australian wildlife has suffered an extraordinary rate of extinction—10% of the 273 endemic mammals over the last 200 years. A further 21% of Australian endemic

¹¹ Parks Victoria (2015) *Valuing Victoria's Parks report*, Victoria State Government: <http://parkweb.vic.gov.au/about-us/valuing-victorias-parks>

mammals are now assessed as threatened. Likewise, 2.2% Australia's birds are now extinct and a further 11.8% are threatened.¹²

The ACT is playing its part in halting this decline. The ACT preserves the largest patch of nationally-endangered yellow box woodland in public hands and the largest patches of temperate native grassland left in Australia. More than 35 species of plants and animals are listed as threatened species in the ACT, including the endangered Northern Corroboree Frog and Brush tailed Rock Wallaby. A recently announced joint project between the ACT Government and Zoos Victoria, with support from the Australian Government, will fund the construction of a predator-proof fence to help in the long-term survival of the Brush tailed Rock Wallaby, which has only, an estimated, 40 left in the wild.

By maintaining and enhancing ACT's natural environments, our native plants and animals will continue to be protected and conserved. Our native animal ambassadors like Brian the Bettong play a significant role raising awareness with the public for the need to manage and protect ACT's environment.

The major river corridors, urban hills and ridges, and the hills and reserves provide important regional links for wildlife movement and connection into natural areas. At a smaller scale the numerous parks, waterways and landscape features in the urban area provide links between private gardens and the natural areas. Maintaining these connections helps provide refuge for some species to cope with a warming climate, counters increasing fragmentation, and allows for changes in species distribution and abundance.

Conclusion

The ACT Government recognises the intrinsic and tangible values the natural environment provides and upholds its responsibility for the protection and preservation of our unique natural environment and for balancing the needs of the environment with that of a growing population.

As part of the 2018-19 Budget, the Government has committed more than \$12 million over four years, to tackle environmental issues and protect nature reserves¹³. It is also acknowledged that there is an ongoing relationship with the ACT Government and the National Capital Authority in relation to maintaining/ preserving natural spaces within the Territory e.g. the current NCA Master Plan for Yarramundi Reach.

¹² Australian Commonwealth Department of Environment and Energy (2015) *Threatened Species Strategy*: <http://www.environment.gov.au/system/files/resources/51b0e2d4-50ae-49b5-8317-081c6afb3117/files/ts-strategy.pdf>

¹³ ACT Government Budget 2018-19 media release: *Delivering national leadership in protecting our environment*: <https://apps.treasury.act.gov.au/budget/budget-2018-2019/media-releases/delivering-national-leadership-in-protecting-our-environment>