2019-2020

Annual Report



OFFICE OF THE COMMISSIONER FOR SUSTAINABILITY AND THE ENVIRONMENT

Acknowledgement of Country

We acknowledge the Traditional Custodians of the ACT, the Ngunnawal people. We recognise the special relationship and connection that they have with this Country. Ngunnawal people are a thriving community whose life and culture are intrinsically connected to this land in a way that is core to their physical and spiritual wellbeing their cultural practices, and continuation of their law and lore.

© Australian Capital Territory, Canberra 2020

This work is copyright. Apart from any use as permitted under the <u>Copyright Act 1968</u>, no part may be reproduced by any process without written permission from:

Commissioner for Sustainability and the Environment GPO Box 158 Canberra ACT 2601

Telephone: 02 6207 2626 Email: <u>envcomm@act.gov.au</u> Website: <u>www.envcomm.act.gov.au</u>

Published by the

ACT Commissioner for Sustainability and the Environment, Canberra.

Accessibility

The ACT Government is committed to making its information, services, events and venues as accessible as possible.

If you have difficulty reading a standard printed document and would like to receive this publication in an alternative format, such as large print, please phone Access Canberra on 13 22 81 or email the Environment, Planning and Sustainable Development Directorate at <u>EPSDDComms@act.gov.au</u>

If English is not your first language and you require a translating and interpreting service, please phone 13 14 50.

If you are deaf, or have a speech or hearing impairment, and need the teletypewriter service, please phone 13 36 77 and ask for Access Canberra on 13 22 81.

For speak and listen users, please phone 1300 555 727 and ask for Access Canberra on 13 22 81.

For more information on these services visit: www.relayservice.com.au

Cover photography: Mark Jekabsons Title page photography: Matt Sherren

CONTENTS

B4 Risk Management	92
B3 Scrutiny	92
B2.5 Information in Agency Annual Reports	92
B2.4 Activities Under the Objects of the Act	88
Report on the Canberra Nature Park (nature reserves), Molonglo River Corridor (nature reserves) and Googong Foreshores Investigation – October 2011	86
Lake Burley Griffin Investigation 2012	77
Lower Cotter Catchment Restoration Evaluation – The Heroic and the Dammed	68
Implementation Status Report on ACT Government's Climate Change Policy (2017)	59
State of the Environment Report 2015	35
B2.3 Information to be Included in Commissioner's Annual Report	33
B2.2 Performance Against Indicators	31
B2.1 Report on Statutory Functions Under the Act	29
B2. Performance Analysis	29
B1.8 Outlook: Current and Future Priorities and Challenges	20
B1.7 The Commissioner's Achievements	16
B1.6 Stakeholders	13
B1.5 Organisational Structure	11
B1.4 Aboriginal and Torres Strait Islander Reporting	11
B1.3 Role and Functions	10
B1.2 Vision, Mission and Values	10
B1.1 Commissioner for Sustainability and the Environment	10
B1. Organisational Overview	10
SECTION B - ORGANISATIONAL OVERVIEW AND PERFORMANCE	9
SECTION A - TRANSMITTAL CERTIFICATE	7

B5 Internal Audit	92
B6 Fraud Prevention	93
B7 Freedom of Information	93
Submitting an application	93
B8 Work Health and Safety	94
B9 Human Resources Management	94
B9.1 Workforce Profile	94
B9.2 Attraction and Retention Incentives (ARins)	96
B9.3 Participation in Learning and Development Programs	96
B9.4 Future Learning and Development Areas Identified as Priorities	97
B9.5 Whole of Government Learning and Development Initiatives	97
B9.6 Participation in Study Assistance Program and ACTPS Training Calendar	98
B10 Ecologically Sustainable Development	99
B10.1 Office Accommodation	99
B10.2 Resource Management Planning	99
SECTION C - FINANCIAL MANAGEMENT REPORTING	105
C1 Financial Management Analysis	106
C2 Financial Statements	106
C3 Capital Works	106
C4 Asset Management	106
C5 Government Contracting	107
C5.1 Procurement Principles and Processes	107
C5.2 External Sources of Labour and Services: Individual Contracts Exceeding \$25,000	107
C6 Statement of Performance	107
SECTION D - APPENDICES	109
Appendix 1: Staff presenting at conferences, seminars and forums	110
Appendix 2: Compliance Statement	113

LIST OF ACRONYMS

ABV	Abandoned Motor Vehicles
ACT	Australian Capital Territory
ANU	Australian National University
AP2	ACT Climate Change Strategy and Action Plan 2 2007, now the Climate Change Strategy
CEMP	Conservation Effectiveness Monitoring Program
CIT	Canberra Institute of Technology
CMTEDD	Chief Minister, Treasury and Economic Development Directorate
CNG	Carbon Neutral Government
COAG	Council of Australian Government, now the National Cabinet
CSD	Community Services Directorate
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DER	Distributed Energy Resource
EDU	Education Directorate
EEIS	Energy Efficiency Improvement Scheme
EPA	Environment Protection Authority
EPSDD	Environment, Planning and Sustainable Development Directorate
FOI	Freedom of Information
FTE	Full-time Equivalent
GPT	Gross Pollutant Trap
JACS	Justice and Community Safety Directorate
LCC	Lower Cotter Catchment

LED	Light Emitting Diode
MEM	Meeting of Environment Ministers
NCA	National Capital Authority
NEPM	National Environment Protection Measures
NEPP	National Energy Productivity Plan
NSW	New South Wales
OCSE	Office of the Commissioner for Sustainability and the Environment
PCS	Parks and Conservation Service
SoER	State of the Environment Report
TCCS	Transport Canberra and City Services
TWRA	Territory Wide Risk Assessment
UC	University of Canberra
UNSW	University of New South Wales
WSUD	Water Sensitive Urban Design

SECTION A

Transmittal Certificate



Ms Rebecca Vassarotti MP Minister for the Environment GPO Box 1020 CANBERRA ACT 2601

Dear Minister

2019-20 Office of the Commissioner for Sustainability and the Environment Annual Report

This report has been prepared in accordance with section 7(2) for public sector body] of the *Annual Reports (Government Agencies) Act 2004* and in accordance with the requirements under the *Annual Reports (Government Agencies) Directions 2019.*

I certify that the information in the attached report and information provided for whole of government reporting, is an honest and accurate account and that all material information on the operations of the Office of the Commissioner for Sustainability and the Environment has been included for the period 1 July 2019 to 30 June 2020.

I hereby certify that fraud and prevention has been managed in accordance with Part 2.3 of the *Public Sector Management Standards 2006* (see section 113 of the *Public Sector Management Standards 2016*).

Section 13 of the *Annual Reports (Government Agencies) Act 2004* requires that you present the report to the Legislative Assembly within 15 weeks after the end of the reporting year. However, under section 14, the Chief Minister has granted an extension of the time when the report must be presented by you to the Legislative Assembly. The Chief Minister has granted the extension to 18 December 2020.

The annual report must be provided to the Speaker on 18 December 2020 for distribution to each Member of the Legislative Assembly. The annual report must then be tabled in the Legislative Assembly on the next sitting day.

Yours sincerely

Dr Sophie Lewis Commissioner for Sustainability and the Environment

16 November 2020



SECTION B

Organisational Overview and Performance

B1. ORGANISATIONAL OVERVIEW

B1.1 Commissioner for Sustainability and the Environment

The Australian Capital Territory (ACT) Commissioner for Sustainability and the Environment (the Commissioner) is appointed under the Commissioner for Sustainability and the Environment Act 1993 (the Act) and is accountable to the Legislative Assembly through the Minister for Climate Change and Sustainability.

The Commissioner for Sustainability and the Environment is an independent statutory position.

The Commissioner administers no other legislation and has no other statutory functions.

B1.2 Vision, Mission and Values

- Vision: An environmentally sustainable ACT, region and Australia
- **Mission:** To act as an independent voice for the environment and sustainability in the ACT
- Values: Transparency, integrity, independence, rigour, inclusion

B1.3 Role and Functions

The Commissioner undertakes the following functions (these are discussed at greater length in Section B2):

- 1. State of the Environment Reporting for the ACT (s19 of the Act),
- 2. Investigations:
 - a. as directed by the Minister (s12(1)(b) of the Act), or
 - b. at the discretion of the Commissioner, into agencies where actions would have a substantial impact on the environment of the ACT (s12(1)(c) of the Act), and
- 3. Investigations of complaints about the management of the environment by the Territory or a territory authority, or about issues relating to ecologically sustainable development (s13 of the Act).

STATE OF THE ENVIRONMENT REPORTING

INVESTIAGTIONS

COMPLAINTS

B1.4 Aboriginal and Torres Strait Islander Reporting

In relation to Aboriginal and Torres Strait Islander reporting, the Commissioner and office staff undertake the following:

- consider Indigenous perspectives and seek Indigenous people's contribution where appropriate in all projects and office work,
- report on Aboriginal heritage and land management in the State of the Environment Report,
- > commence events with an Acknowledgement of Country,
- > use social media to promote Aboriginal and Torres Strait Islander events, and
- contribute as a member of the Environment, Planning and Sustainable Development Directorate (EPSDD) Reconciliation Action Plan Working Group.

The State of the Environment Report 2019 includes a chapter, Ngunnawal Country, that is dedicated to Aboriginal heritage and Aboriginal land and water management. The report's recommendations reflect these priorities and call for the development of a Framework for Cultural Indicators and an Indigenous Seasonal Calendar.

The office is committed to pursuing a vision of reconciliation that promotes Aboriginal and Torres Strait Islander heritage and values. This includes the ability for Aboriginal people to partake in cultural practices on Country and actively participate in planning and management of land and water.

The office is committed to supporting Aboriginal self-determination and systems of governance, facilitating an ongoing dialogue with government and research institutions to find the balance between traditional practices and accepted scientific approaches to environment and sustainability issues.

In the development of publications, respectful and early engagement with Traditional Custodians is undertaken at every possible opportunity and followed with appropriate citation, remuneration and recognition of intellectual property.

B1.5 Organisational Structure

The Commissioner is a Senior Executive Service 2.3 Ministerial appointment. The Commissioner's remuneration is determined by the ACT Remuneration Tribunal.

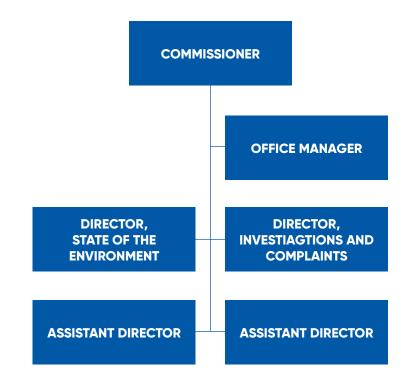
Three people served in the role of Commissioner over the reporting period of 2019-20.

Professor Kate Auty was Commissioner from May 2016 to February 2020. Dr Margaret Kitchin was appointed Acting Commissioner in March 2020 until the appointment of Dr Sophie Lewis in May 2020. The current Commissioner, Dr Sophie Lewis, holds the following additional roles as at 30 June 2020:

- · Honorary Senior Lecturer, UNSW Canberra
- Lead Author Intergovernmental Panel on Climate Change Sixth Assessment Report

The Commissioner is supported by a core team of two directors (SOG B), two assistant directors (SOG C), and an office manager (ASO 6) – see Figure 1.

Figure 1: Office of the Commissioner for Sustainability and the Environment organisational chart as at 30 June 2020.



The staff of the office have professional expertise in a wide range of skills including water science, environmental management, engineering, auditing, risk management, human ecology, mapping and science communication. Having these skills in the office means a reduction in the costs associated with contracting external consultants.

Office staff members are employed under the Public Sector Management Act 1994 and observe the ACT Public Service Code of Ethics.¹

When workloads increase the Commissioner can employ additional temporary staff.

1. ACT Government, 2010: ACT Public Service Code of Ethics

The office pays for corporate support from EPSDD for matters such as:

- > accommodation,
- financial reporting,
- > records management,
- > recruitment, and
- > other personnel services.

Shared Services, located within Commercial Services and Infrastructure of the Chief Minister, Treasury, and Economic Development Directorate (CMTEDD), provides:

- > information management,
- > procurement, and
- > information technology support.

B1.6 Stakeholders

The Commissioner engages in consultation with, and receives briefings from:

FEDERAL GOVERNMENT

- > Bureau of Meteorology,
- > Commonwealth Scientific and Industrial Research Organisation,

TERRITORY GOVERNMENT

All ACT Government directorates as required.

OTHER GOVERNMENT AGENCIES

- Icon Water,
- > National Capital Authority,
- ACT Human Rights Commission (Public Advocate, Children and Young People Commissioner), and
- > ACT Auditor-General.

UNIVERSITIES

- > Australian National University
- > University of Canberra, and
- > University of New South Wales.

EDUCATION GROUPS AND SKILLS TRAINERS

- > Australian Association of Environmental Educators, and
- > Canberra Institute of Technology.

NON-GOVERNMENT ORGANISATIONS WITH ENVIRONMENT AND SUSTAINABILITY INTERESTS

- > SEE-Change,
- > Conservation Council ACT Region,
- > Canberra Environment Centre,
- > Canberra Ornithologists Group, and
- > Friends of Grasslands, Landcare and catchment groups.

There are many established and emerging citizen science and environment and sustainability focussed community groups in the ACT. The State of the Environment Report 2019 acknowledged the significant contribution of these groups to environmental management and the economy by dedicating a chapter to their work. The office is committed to meeting with these groups appropriately.



EXPERTS AS NECESSARY FOR REPORTING AND SPECIFIC

> State of the Environment Report 2019,

ORGANISATIONAL FUNCTIONS

- Heat, Humanity and the Hockey Stick Climate Change and Sport in Canberra, and
- > Circular CBR Unlocking the Potential of a Circular Economy in the ACT.

The Commissioner attends and presents at forums, in accordance with invitations and in respect to matters of interest. These have included:

- EIANZ National Biodiversity Offsets Conference Reporting on Strategic Assessment Audits and the use of offsets in the ACT
- Future Earth State of Australian Cities Conference Co-designing urban systems transformation: insights from Future Earth
- Medical Journal of Australia Lancet Countdown on Health and Climate Change 2019 Report
- > Thinking In Circles: Canberra's Circular Economy Forum

For a more extensive list of presentations by the Commissioner and staff at conferences, seminars and forums please refer to Appendix 1.



B1.7 The Commissioner's Achievements

A summary of the Commissioner's achievements in 2019–20 against each key function follows.

B1.7.1 MONITORING THE ACT GOVERNMENT RESPONSE TO THE ACT STATE OF THE ENVIRONMENT REPORT 2015

The Response of the ACT Government to the Recommendations of the ACT State of the Environment Report 2015² was tabled towards the end of the 2016. This document can be found on the Commissioner's website (<u>www.envcomm.act.gov.au</u>).

Progress reports on the ten recommendations are detailed in Section B.2.3.2.

B1.7.2 SPECIAL REPORTS

Special Reports are discussed in detail in Section B.2.1.2.

Minister Directed Investigations

There were no new special reports commissioned under Ministerial direction pursuant to ss12(1)(b) and 21(1)(a) of the Act in 2019–20. This can be attributed in part to the delivery of the State of the Environment Report 2019.

During the 2019-20 reporting year, the office continued to work with the government in relation to implementing recommendations from the following Ministerial directed reports:

- Implementation Status Report on ACT Government's Climate Change Policy 2017
- The Heroic and the Dammed Lower Cotter Catchment Restoration Evaluation 2019

Commissioner Initiated Investigations

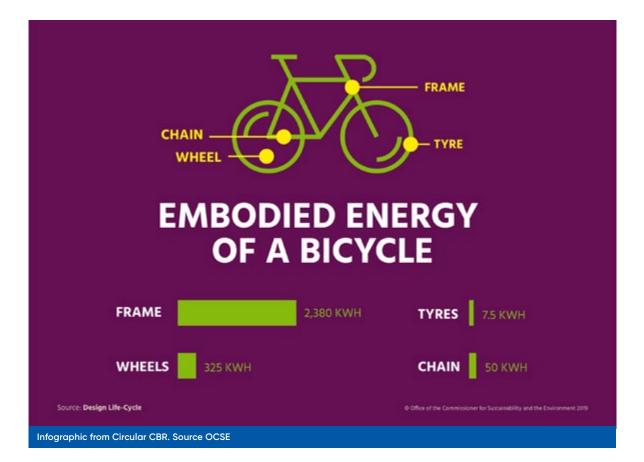
Under ss12(1)(c) of the Act, one of the Commissioner's functions is 'conducting, on the Commissioner's own initiative, investigations into actions of an agency where those actions would have a substantial impact on the environment of the ACT.'

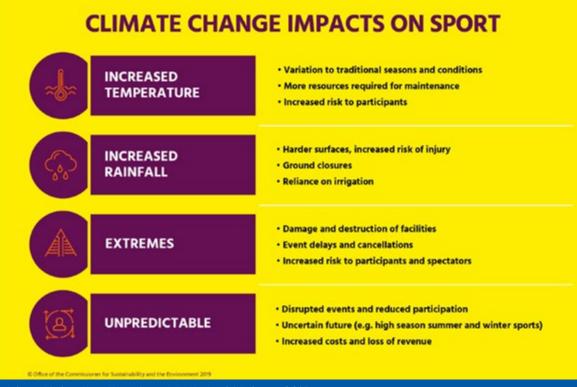
The Commissioner initiated Issues Papers reflecting these statutory requirements. Two Issues Papers were completed in the 2019-20 reporting year:

- Heat, Humanity and the Hockey Stick Climate Change and Sport in Canberra, and
- > Circular CBR Unlocking the Potential of a Circular Economy in the ACT.

Details of the Issues Papers are outlined in Section B2.1.3.

2. Commissioner for Sustainability and the Environment, 2015: State of the Environment Report 2015





Infographic from Heat, Humanity and the Hockey Stick. Source OCSE

B1.7.3 COMPLAINTS RECEIVED AND ADDRESSED

The Commissioner responds to complaints from the public in accordance with the Act. The Act provides the Commissioner with the discretion not to investigate certain complaints (s14 of the Act).

Typically, between five to ten complaints are received each year.

The Commissioner routinely forwards complaints to the appropriate directorate for attention. If the response requires further elaboration, the Commissioner explores the issues raised and may determine to undertake an investigation.

Details of complaints received and how these were addressed are outlined in **Section B2.1.4**.

B1.7.4 OTHER SUBMISSIONS ON ENVIRONMENTAL SUSTAINABILITY

The Commissioner regularly provides input into government consultation processes to promote environmental sustainability and ecologically sustainable development.

A list of the submissions provided in this reporting year is outlined in **Section B2.4.3**.

B1.7.5 COMMUNITY ENGAGEMENT AND ADVOCACY IN FURTHERANCE OF THE OBJECTS OF THE ACT AND FUNCTIONS OF THE OFFICE

The office is strategically committed to ongoing endeavours to increase engagement on critical matters such as climate change. The office actively uses modern digital techniques such as Facebook, Twitter, and Vimeo.

The office's reports include key information in infographics, replacing previous text heavy information. Reports and research were also communicated using Story Maps, an ArcGIS geospatial web based narrative platform. These initiatives aim to increase community accessibility and engagement across all socio-demographic and industry sectors.

The COVID-19 crisis prompted the office to consider new ways of communicating. The Commissioner, Dr Sophie Lewis, initiated a series of interactive Q&A sessions with the community utilising Facebook Live and across government utilising the Microsoft Teams platform. The office also explored the use of videos to communicate complex scientific information and case studies to new audiences.

For further detail refer to Section B2.4.2.



Circular economy explainer video and case studies. Source: OCSE

B1.8 Outlook: Current and Future Priorities and Challenges

The biggest environmental challenge impacting the ACT is climate change and our climate emergency. Other significant and related challenges are greenhouse gas emissions from transport, and land development's ecological footprint. Developing the circular economy and increased regional cooperation present opportunities to address some of these challenges.

B.1.8.1 CLIMATE CHANGE AND OUR CLIMATE EMERGENCY

In the same year that the ACT Government declared a climate emergency (May 2019), the region experienced a period of extreme heat, an extended drought, and an unprecedented summer of weather extremes. In one of the worst environmental disasters in the Territory's recorded history, bushfires in the Orroral Valley sent the ACT into a state of emergency in January 2020. Over summer, 80% of Namadgi National Park (82,700 hectares), 22% of Tidbinbilla Nature Reserve (1,444 hectares) and 3350 hectares of rural lands were burnt by bushfires.³ Smoke haze caused hazardous air quality for over a third of the summer,⁴ and a severe hailstorm in January caused over \$514 million in damages.⁵

In particular, the smoke had a significant impact on the community and their health. In Monash, particulate matter reached levels of 5185 PM2.5, more than 25 times the hazardous level,⁶ and an estimated 31 deaths were attributed in part to smoke-related causes.⁷ Further data from the Grattan Institute and ACT Health illustrates people went to hospital for respiratory problems 27% more on days with PM2.5 levels between 50 and 100, and 70% more on days with PM2.5 levels above 200 (compared to days with PM2.5 levels below 25).⁸ Smoke inhalation at any level can cause serious health problems,⁹ with significant flow on effects for health services and resources.

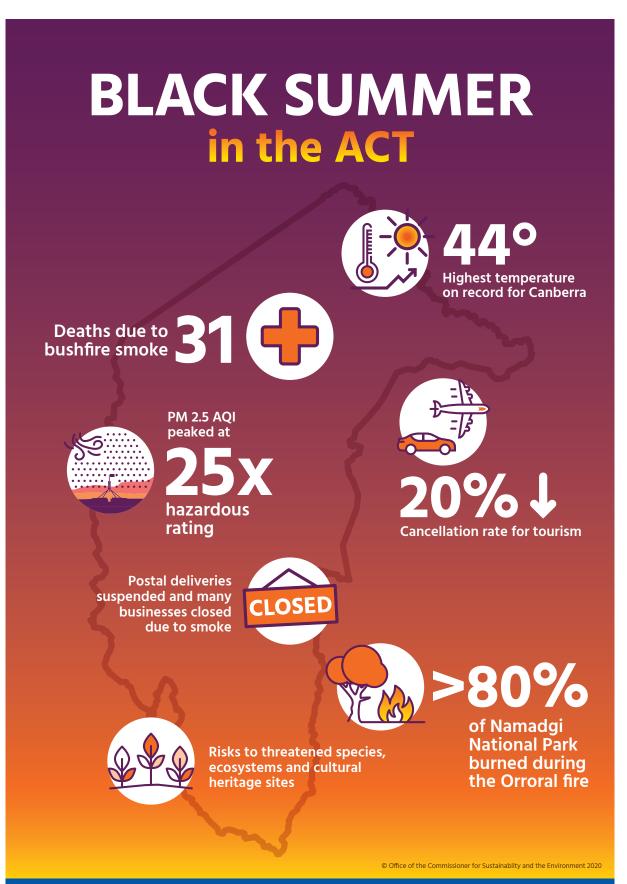
5. <u>https://www.insurancecouncil.com.au/media_release/plain/560</u>, accessed 17 August 2020.

- 7. Arriagada et al., 2020. Unprecedented smoke related health burden associated with the 2019–20 bushfires in eastern Australia, The Medical Journal of Australia.
- 8. Duckett et al., 2020. The health effects of the 2019-20 bushfires: Submission to the Royal Commission into National Natural Disaster Arrangements. The Grattan Institute.
- 9. Walter et al., 2020. Health impacts of bushfire smoke exposure in Australia. Journal of the Asian Pacific Society of Respirology.

^{3.} Environment, Planning and Sustainable Development Directorate, 2020. Orroral Valley Fire Impact Report. ACT Government.

^{4.} https://www.canberratimes.com.au/story/6665438/just-how-bad-was-the-air-quality-in-canberra-thissummer, accessed 17 August 2020.

^{6. &}lt;u>www.canberratimes.com.au/story/6665438/just-how-bad-was-the-air-quality-in-canberra-this-summer</u>, accessed 17 August 2020.



Source: OCSE 2020

As well as direct health impacts, participation in community activities, recreation and sport were affected. In December 2019, a Big Bash League match was abandoned¹⁰ due to smoke, with other smaller competitions being postponed across the ACT. In January 2020, the Australian Institute of Sport closed,¹¹ the ACT's largest mass cycling event was cancelled,¹² a four-game baseball series was called off,¹³ with longer term economic and tourism implications.

These types of extreme weather and fire events are expected to become more frequent and more severe as global greenhouse gas emissions increase. The ACT is already experiencing the social, economic, and environmental impacts of climate change, which are projected to increase further in future decades.

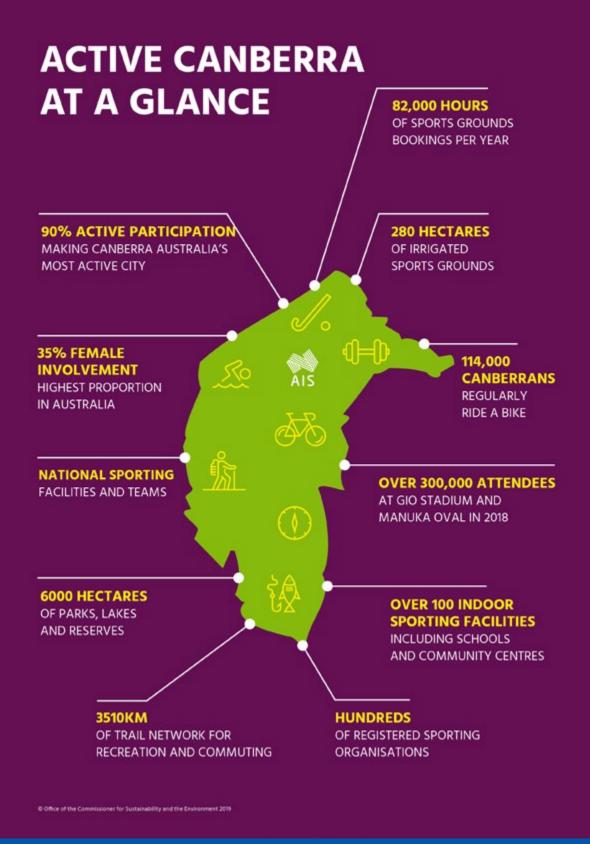
While a certain level of global warming is locked in,¹⁴ the ACT is engaging in proactive climate action. In the 2019–2025 Climate Change Strategy, the ACT Government pledged to reduce greenhouse gas emissions by 50–60% (below 1990 levels) by 2025, establishing a pathway for achieving net zero emissions by 2045.¹⁵ The ACT Government is investigating a Social Cost of Carbon Mechanism, which the office supports and recommends comprehensive community consultation.¹⁶ More information about climate impacts and the ACT's response can be found in the State of the Environment 2019 report.

B.1.8.2 TRANSPORT EMISSIONS AND ACTIVE TRAVEL

Transport emissions are a growing problem in the ACT, increasing by 13% from 2012–2018. In 2020, emissions from transport will make up 62% of total greenhouse gas emissions in the ACT. However, changes in working arrangements and habits in April and May 2020 due to COVID–19 lockdown present an opportunity to change how Canberrans move around. From the 16 March to 17 May 2020, strict COVID–19 restrictions saw an average 38% drop in traffic congestion in Canberra, reflecting the significant reduction of population movement due to lockdown compared to normal travel.¹⁷ Traffic congestion has increased since this period but remains below 2019 levels, reflecting widespread adoption of remote and online study and work arrangements.

- 11. https://www.ais.gov.au/media-centre/news/ais-affected-by-extreme-conditions, accessed 17 August 2020.
- 12. <u>https://the-riotact.com/fire-threat-and-smoke-haze-force-cancellation-of-canberra-big-bike-</u> ride/353739https://www.canberratimes.com.au/story/6564336/smoky-series-puts-abl-in-new-territory/, accessed 17 August 2020.
- 13. Ibid.
- 14. <u>https://www.unenvironment.org/news-and-stories/press-release/temperature-rise-locked-coming-decades-arctic</u>, accessed 20 August 2020.
- 15. ACT Government, 2019. ACT Climate Change Strategy 2019-2025.
- 16. Commissioner for Sustainability and the Environment, 2019. ACT State of the Environment 2019.
- 17. https://www.tomtom.com/en_gb/traffic-index/canberra-traffic/, accessed 19 August 2020.

 <u>https://www.abc.net.au/news/2019-12-22/big-bash-match-called-off-due-to-smoke-in-canberra/11821686</u>, accessed 17 August 2020.



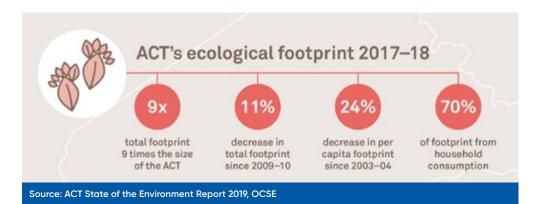
Infographic from Heat, Humanity and the Hockey Stick. Source: OCSE

As COVID-19 restrictions lift further, there is a chance to reduce greenhouse gas emissions from transport through increasing levels of active travel, particularly as Canberra is the most active city in Australia. Community organisation SEE-Change and Switched on Cycles have partnered with the ACT Government to launch an e-bike library, aimed at reducing community transport emissions while increasing health benefits. The 2019-2025 Climate Change Strategy has a key priority of improving cycle paths and walkability increasing access to public transport and encouraging active travel. In addition, the ACT Government's fleet of 20 hydrogen fuel cell vehicles has arrived in Australia, though there are some delays relating to COVID-19 and refuelling infrastructure.

Increased use of public transport, encouraging active travel and reducing car use are all key priorities, and must be prioritised to reduce greenhouse gas emissions, improve Canberra's liveability, and reduce our ecological footprint.

B.1.8.3 LAND DEVELOPMENT AND ECOLOGICAL FOOTPRINT

By 2060, Canberra is projected to grow to a population of 669,814 people, requiring 5,691,345 hectares – nearly 25 times the size of the ACT.²¹ Our total ecological footprint has decreased between 2009–10 and 2017–18, largely due to the ACT working towards achieving 100% renewable electricity in 2020.²² A significant proportion of our ecological footprint is associated with household consumption of goods and services.



18. ACT Government, 2014. Connecting and Building Recreation: A Vision for the Territory.

- 19. https://www.see-change.org.au/cbrebikelibrary, accessed Aug 19th 2020.
- https://thedriven.io/2020/08/06/act-governments-20-vehicle-hydrogen-fleet-grounded-due-to-coviddifficulties/, accessed 19 August 2020.
- 21. Commissioner for Sustainability and the Environment, 2015. ACT State of the Environment 2015.
- 22. Commissioner for Sustainability and the Environment, 2019. ACT State of the Environment 2019.

As the ACT population grows, there is a need for more sustainable land development to reduce our ecological footprint and associated greenhouse gas emissions. It is essential developments minimise their impacts on natural ecosystems and biodiversity. The ACT Government aims to deliver up to 70% of new housing within the Territory's existing urban footprint.²³ It is equally important to improve knowledge about land use change and land health, to develop infrastructure to encourage residents to reduce and recycle material, facilitate active travel and public transport choices, promote shared goods and services, and build resilience and wellbeing through green and blue infrastructure.

Developments within Canberra's existing urban footprints must adhere to Canberra's Living Infrastructure Plan, which sets out a framework and requirements to cool the city and protect outdoor spaces within the city.²⁴ A key goal is to provide Canberra's urban footprint with the equivalent benefits of a 30% tree canopy cover and 30% permeable surfaces by 2045,²⁵ which help to mitigate the urban 'heat island' effect.²⁶ Programs included with the plan, such as park upgrades, city cooling trials and urban forest strategies, are critical elements of sustainable land development.

B.1.8.4 DEVELOPING THE CIRCULAR ECONOMY

The aim of the circular economy is to minimise the amount of consumed resources (including fossil fuels) and waste generated (including greenhouse gas emissions). It is based on principles of designing out waste, keeping products in use for longer, and regenerating natural systems.²⁷ Cities around the world play a key role, and there is increasing support in Australia for the development of the circular economy.

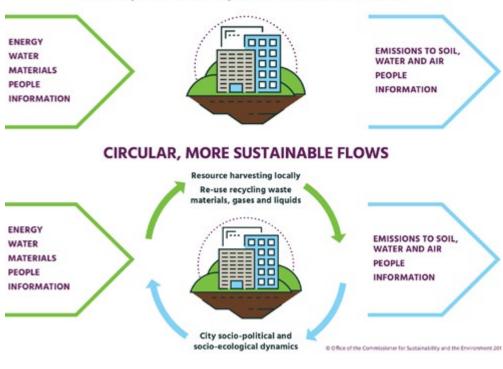
23. ACT Government, 2018. ACT Planning Strategy 2018.

24. Environment, Planning and Sustainable Development Directorate, 2019. Canberra's Living Infrastructure Plan: Cooling the City. ACT Government.

25. lbid.

^{26.} Hulley, M. 2012. The urban heat island effect: causes and potential solutions. Metropolitan Sustainability.

^{27.} https://www.ellenmacarthurfoundation.org/circular-economy/concept, accessed 19 August 2020.



LINEAR, INEFFICIENT, UNSUSTAINABLE FLOWS

Source: OCSE

In September 2019, the office conducted a preliminary analysis of the potential for a circular economy in the ACT.²⁸ Using examples of coffee, beer and riding, the issues paper outlined opportunities for Canberra to implement circular initiatives including uptake of renewables, reusing and recycling to close the waste loop.

There is already significant federal interest in the circular economy, as evidenced by the 2018 Senate Environment and Communications References Committee's report on waste in Australia, where its first recommendation was to establish the circular economy.²⁹ The ACT has some elements of the circular economy already functioning, including but not limited to:

- > Shared services such as Uber, Airbike and Airbnb,
- > A new e-bike library, piloted by SEE-Change,³⁰
- > Trialling of roads made of recycled materials including glass and plastic,³¹
- 28. Commissioner for Sustainability and the Environment, 2019. Circular CBR: Unlocking the Potential of a Circular Economy in the ACT.
- 29. Senate Environment and Communications References Committee, 2018. Never waste a crisis: the waste and recycling industry in Australia. Australian Government.
- 30. https://www.actsmart.act.gov.au/what-can-i-do/community/electric-bike-library, accessed 19 August 2020.
- 31. https://actcds.com.au/canberra-to-trial-roads-made-of-recycled-plastic-and-glass/, accessed 19 August 2020.
- 32. https://actcds.com.au/act-cds-celebrates-one-year-anniversary/, accessed 19 August 2020.

- The Container Deposit Recycling Scheme, where over 26 million containers returned in its first year of operation,³² and
- Community services such as The Green Shed, the Recyclery and community composting.

However, the ACT has been focused on waste management (reduce, reuse, recycle) and this focus has not unlocked the economic potential through an active business transition. Opportunities are apparent in the development of a comprehensive economic strategy to transition to the circular economy, including:

- Raising the general level of awareness and understanding of the circular economy in Government, business and the community.
- Adopting an active transition to the circular economy through strategy in Government or business.
- Conducting material flow analysis which would be critical to inform the government in respect of policy and consultation with business, industry, and the community more broadly.
- Promoting pilot projects and demonstration sites to provide an evidence base, critical to fostering change.
- Leveraging regional partnerships to maximise the economic and environmental opportunity.

A transition to the circular economy is needed to make better use of our resources and minimise impacts to our natural environment.

B.1.8.5 REGIONAL COOPERATION

A significant number of regional policy and operational matters require crossjurisdictional collaboration, including aspects such as bushfire safety, water management and cross-border developments.

An example of this is the recent bushfires, burning irrespective of state lines and threatening large areas across the ACT and NSW. The Orroral Valley fire in January 2020 threatened Bredbo in NSW, whilst the deadly 2003 Canberra bushfires originated in NSW from lightning strikes. Cooperation between NSW and ACT bushfire emergency services is critical for human safety, and extends to prescribed burning operations, fire season preparation and landscape recovery.

Water management within the ACT is an inherent cross-border issue of high importance with the recent impacts on water security and bushfire management. Under the ACT Water Resources Act 2007, the ACT and Region Catchment Management Coordination Group is a governance mechanism for water management across the ACT and the wider region, including surrounding regional councils in NSW. Water management in the ACT operates under direction from the Murray-Darling Basin Authority, while still providing water for the Canberra region. In the face of projected changes in rainfall and drought occurrence, regional cooperation is essential for maintaining water security at both a territorial and national level.



Orroral Valley Fire January 2020. Source: Canberra Times

Finally, cross-border developments such as Ginninderry require significant collaboration. Stretching from the north-western suburbs of Canberra to the Yass Valley in NSW, this joint venture is an undertaking between the ACT Government and Riverview Developments, contributing land holdings from NSW.³³ Municipal services, resource management and ecological conservation will require effective and ongoing cooperation between many local, regional and national stakeholders.

B2. PERFORMANCE ANALYSIS

B2.1 Report on Statutory Functions Under the Act

B2.1.1 STATE OF THE ENVIRONMENT REPORT

This section relates to statutory functions under s19 of the Act.

The 2019 ACT State of the Environment Report (SoER) was delivered to the Minister on 21 December 2019 and tabled in the Legislative Assembly on 13 February 2020. This 4-yearly report covered the period from 1 July 2015 to 30 June 2019.

The SoER included an assessment of the state and trends of the environment, the pressures on it and their impacts, the management initiatives that are in place to address environmental concerns, and the effectiveness of those initiatives. Data gaps and policy challenges are outlined.

Environmental assessments were based on 26 core indicators across 7 themes (climate change, human settlements, air, land, biodiversity, water and fire) selected to address specific environmental issues.

The Commissioner provided 35 formal recommendations to assist the ACT Government to make strategic and practical decisions; and undertake specific actions to improve environmental outcomes. The recommendations aim to focus ACT Government effort where it is likely to have the greatest impact including opportunities to integrate multiple environmental outcomes into government policies and programs.

In addition to formal recommendations, the Commissioner has presented 42 key actions across the 7 themes to assist with ongoing environmental management. These are not formal recommendations and do not require an ACT Government response.

The 2019 SoER includes a dedicated chapter on Indigenous heritage and environmental issues and interests. This is the first time the ACT SoER has begun with such considerations. Other dedicated chapters include acknowledgement and celebration of ACT community contribution to sustainability and environmental knowledge, and the importance and status of Canberra's urban trees.

To improve communication and accessibility, development of an interactive SoER website was commenced. This was completed and launched in August 2020.

The office will annually review the Government's responses to the 2019 SoER

recommendations through the annual reporting process.

A final update on implementation of the ten recommendations from the State of the Environment Report 2015 can be found in **Section B2.3.2**.

B2.1.2 SPECIAL REPORTS

This section relates to the statutory functions under s12 of the Act.

In the 2019–20 reporting period, no investigations were initiated to allow for completion of the State of the Environment Report 2019.

An update from the ACT Government on the progress of outstanding recommendations from previous special reports is outlined in **Section B2.3.2**.

B2.1.3 ISSUES PAPERS

In the 2019-20 reporting period the office published two Issues Papers:

- Circular CBR: Unlocking the Potential of a Circular Economy in the ACT
- Heat, Humanity and the Hockey Stick: Climate Change and Sport in Canberra

Issues Papers are a preliminary exploration into environmental sustainability matters relevant to the ACT, informing the Commissioner and/or Minister on issues that may be considered for investigation.

Under Section 12 (1)(c) of the Commissioner for Sustainability and the Environment Act 1993,³⁴ one of the Commissioner's functions is "conducting, on the Commissioner's own initiative, investigations into actions of an agency where those actions would have a *substantial impact* on the environment of the ACT."

Issues Papers are linked to these statutory requirements.

There is no statutory requirement for Issues Papers to be tabled in the Legislative Assembly, or for recommendations to be presented. This is only required if the matter is elevated to an investigation. As such, there is no requirement to report on Issues Papers in **Section B2.3.2**.

B2.1.4 COMPLAINTS

Complaints may be made to the Commissioner about the ACT Government's management of the environment or about issues relating to ecologically sustainable development in the ACT (s13 of the Act). All complaints must be lodged on a legislated form (available on the <u>ACT Legislation Register AF2017-157</u>). The first responsibility for the office is to forward the complaint to the appropriate agency for their attention and response.

In addition to formal complaints, individuals and groups have, over time, indicated their concerns and/or opposition to government actions in a manner of other ways. These are registered as a Potential Complaint until such time a formal complaint is lodged. Potential complaints are closed off at the end of the financial year.

Telephone and email inquiries have not always related to complaint matters. Simple inquiries received by the office are addressed directly. Some of these inquiries are referred to the ACT Government and resolved.

Since July 2019, three formal complaints and one potential complaint have been closed following inquiry.

lssues status	Number	Topic and Status
Complaints continuing from 2018-19	2	1819-004 – Ginninderry development south and west of Stockdill Drive Received: 28/5/19 CLOSED: 22/8/19 1819-005 – Planning decisions on Urban Trees in Civic Received: 1/6/19 CLOSED: 18/9/19
Potential Complaints received in 2019–20	1	<i>1920-002 – Waste Facility in Fyshwick</i> Received: 25/10/19 CLOSED: 30/6/20
Formal Complaints received in 2019-20	1	<i>1920-001 – Pine Forestry near Tharwa</i> Received: 19/11/19 CLOSED: 11/2/20

Table 1: Summary of complaints for 2019-20

B2.2 Performance Against Indicators

This section of the report provides an assessment of the Commissioner's performance against our key statutory functions as indicators:

- > reporting on the ACT State of the Environment Report recommendations,
- scoping, investigating and preparing reports on Ministerial or Commissionerinitiated investigations, and
- > responding to community complaints.

Table 2: Summary of performance against the Commissioner's accountability indicators

Accountability indicators ³⁵	Original target 2019–20	Actual result 2019–20	Variance from amended target
a. Report on the uptake of recommendations on the ACT State of Environment Report as part of the annual report	October 2019	October 2019	0
b. Undertake Ministerial initiated investigations in accordance with the Minister's direction	100%	Not Active*	Not Active*
c. Undertake Commissioner initiated investigations in accordance with the Terms of Reference	100%	Not Active*	Not Active*
d. Undertake complaints generated investigations in accordance with the Terms of Reference	100%	Not Active*	Not Active*
e. Report on complaints about the management of the environment by the Territory or a Territory agency as part of the annual report	October 2019	October 2019	0

*Please note that there have been no Minister Directed, Commissioner initiated, or complaints generated investigations in 2019-20.

35. 2015–16 Budget Statements, Environment and Planning Directorate, p17 <u>http://apps.treasury.act.gov.au/</u> <u>data/assets/pdf_file/0006/733812/E-EPD-Budget-Statements.pdf</u>

B2.3 Information to be Included in Commissioner's Annual Report

B2.3.1 SPECIAL FACTORS WITH A SIGNIFICANT IMPACT ON THE ENVIRONMENT

This section relates to the statutory functions under s20 (a) of the Act and includes details of 'any special factor that the Commissioner believes had a significant impact on the environment during the year'.

The Commissioner identified the following factors as having a significant impact on the environment during 2019-20, many discussed previously in **Section B.1.8**:

- Temperature extremes were frequent during the summer, high temperature records were broken in both December and February, with Canberra Airport recording its highest temperature on record, reaching 44°C in January 2020.
- The Orroral Valley bushfire that began on 27 January 2020 saw large scale devastation of our natural environment.
- Persistent smoke from nearby bushfires in both NSW and the ACT blanketed the Territory over the summer at hazardous levels.
- > The COVID-19 pandemic continues to severely impact Australia, vastly changing habits of employment, education, transport and travel.
- The ACT reached its target of 100% renewable electricity in 2020 with investments in wind and solar farms in the ACT, NSW, Victoria, and South Australia.

The ongoing impacts of the climate emergency are apparent in Canberra, demonstrated by record-breaking temperatures in summer accompanied by poor air quality. Extreme weather and climate events will continue to significantly impact the ACT, with social, health and economic implications.



Smoke haze during Canberra's Black Summer. Source: Jenny Church

B2.3.2 MEASURES TAKEN DURING THE REPORTING YEAR

This section relates to the statutory functions under s20 (b) of the Act and must include details of 'measures taken during the year by or for the Territory in relation to the implementation of any recommendation in a State of the Environment Report under s19 or special report under s21'.

This includes responses from government directorates regarding:

- 1. actions undertaken between 1 July 2019 and 30 June 2020 against the ten recommendations from the 2015 State of the Environment Report (s19 of the Act),
- 2. an update on directorate actions taken between 1 July 2019 and 30 June 2020 against investigations (s21 of the Act), and
- 3. an update on actions undertaken against recommendations for completed complaint investigations.

Responses provided by directorates have been summarised with minimal editing.

State of the Environment Report 2015

Government's Response and Directorate updates

This section provides a final update on the implementation status of recommendations from the State of the Environment Report 2015 for the 2019-20 reporting year. The State of the Environment Report 2019 was tabled in the Legislative Assembly in February 2020. The Government response to the recommendations was delivered in July 2020. Future Annual Reports will provide an update on the implementation status of recommendations from the State of the Environment Report 2019.

RECOMMENDATION 1 – CLIMATE CHANGE

That the ACT Government ensures that the new Climate Change Adaptation Strategy is best practice, cross-sectoral and integrated into other key strategies, with effective monitoring, reporting and evaluation.



Government response: Supported

EPSDD UPDATE

Relevant strategy, Plan of Management or audit ACT Climate Change Strategy 2019–25



- The ACT Climate Change Strategy 2019-25 (the Strategy) was released in September 2019. It sets out the next steps for working towards the ACT's legislated emissions reduction targets and net zero emissions goal while building resilience to unavoidable climate change impacts. The Strategy replaces both Action Plan 2 and the Climate Change Adaptation Strategy, and considers both mitigation and adaptation outcomes of decisions and policy measures.
- In September 2019, the ACT Government also introduced Canberra's Living Infrastructure Plan to promote greater integration of planning and environmental policies to deliver a more sustainable and resilient urban environment in the context of urban intensification and a changing climate.
- > Progress will be tracked on an ongoing basis and reported annually as part

of the Minister's Annual Report on Implementation of the Climate Change and Greenhouse Gas Reduction Act 2010.

TCCS UPDATE

Relevant strategy, Plan of Management or audit Transport Strategy, Active Travel Framework and Strategic Cycle Network Plan, ACT Waste Management Strategy 2011–2025 and Waste Feasibility Study Roadmap and Recommendations, and the National Waste Policy 2018 and National Waste Policy Action Plan 2019.



- Following consultation on the draft Moving Canberra document, TCCS is currently drafting a new Transport Strategy with the aim to replace the 2012 Transport for Canberra strategy. The new strategy will consider the ACT's greenhouse gas emissions targets in the transport sector, as outlined in the ACT Climate Change Strategy 2019–2025.
- Continued delivery of school focussed active travel programs to increase safety and to support and encourage more children to walk or ride to school.
- Infrastructure improvements were delivered around schools to increase safety and amenity for children who walk or ride to school, which included new footpaths, crossing upgrades and traffic calming treatments.
- Roll out of priority crossings and missing links in the shared path network to support trunk routes in the strategic cycling network. Progress toward a wayfinding strategy including signage.
- Further progress under the Age Friendly Suburbs program and town centre improvement works which are due to be completed by the end of 2021.
- Establishment of dockless bike share in central Canberra and a framework for expansion of micromobility to dockless e-scooters in 2020-21.
- Delivery of encouragement campaigns: Canberra Walk and Ride Week and Spoke Up! for women's health (Women's Health Week) to increase the number of women who cycle for transport and health.
- Preliminary planning for tree planting to provide shade on popular active travel routes.
- Emergency measures taken during COVID-19 that will have legacy implications for walking and cycling including the Slower Streets initiative encouraging safer speeds to allow shared streets and whole of government encouragement messaging for health and wellbeing.
- Economic stimulus projects as a result of the COVID-19 pandemic including new paths to support walking in local communities and planning for further stimulus funding to deliver additional strategic linkages in 2020-21.
- > Following the introduction of a new public transport network in April 2019

including Stage 1 of Light Rail, Transport Canberra has continued to enhance its public transport offering with minor timetable adjustments, end of trip facilities and introducing more modern, efficient and cleaner bus fleet.

- Commenced the development of a Zero Emission Transition Plan for Transport Canberra bus fleet.
- Commenced a 12 month lease of a fully electric bus in Transport Canberra bus fleet.
- > Planning of future stages of light rail to reduce car dependency and support a more compact urban form.
- The School Safety Program continued to be delivered to support all schools, which included delivering infrastructure improvements and programs to make it safer and to encourage more children to walk or ride to school.

ACT NoWaste

- ACT NoWaste supported EPSDD to towards achieving the outcomes of the Climate Change Strategy 2019–25.
- Actions continue towards the Waste Management Strategy goal of a carbon-neutral waste sector facilitated by the Waste Feasibility Study recommendation to reduce waste sector emissions by diverting organics from landfill:
 - Continued expanding the green waste bin collections with over 80,800 households opting in for the service (as at 31 May 2020) representing a current take-up rate of 48%. The contamination rate to date is under 0.03% (by weight), which is an outstanding result and reflects the commitment by Canberra residents to using their green bins correctly.
 - Procured a Bulky Waste collection service for ACT residents with bookings for the service commencing on 1 July 2020. Service provider Suez has partnered with the Salvation Army and Vinnies to reuse and resell bulky waste items wherever possible and minimise the amount of material going to landfill.
 - The project also saw an upgrade of the system for managing requests for additional and upgraded bins and reporting broken or stolen bins, as well as the integration of the green waste bin registration system.
 - A key recommendation of the 2018 ACT Waste Feasibility Study report was to examine options to implement a household Food Organics and Garden Organics (FOGO) collection service in the ACT. Work continued to examine options to implement a FOGO collection service in the ACT, including optimal collection models, the optimum processing location, viable technologies and the marketability of the processed product(s).
 - A major body of work is underway to determine ACT waste infrastructure needs, both now and into the future. The Strategic Waste Infrastructure Planning consultancy is analysing the infrastructure capacity and capability required to service the future needs of the ACT community.

- In September 2019 a new 15-year contract (with two further options of 5 years) was signed to upgrade gas infrastructure services at ACT Government landfill sites. Landfill gas is extracted and used to generate electricity and significantly reduce greenhouse gas emissions from the Mugga Lane Landfill. Installation of the new infrastructure was completed in June 2020 and will see an estimated 37,000 megawatt hours captured each year – enough to power 5,700 homes.
- Represented the ACT Government at national level on various interjurisdictional forums related to climate change, examples include but are not limited to:
 - The National Food Waste Strategy Implementation Working Group;
 - Working groups related to problematic waste streams resulting from Australia's renewable energy boom, such as photovoltaics and batteries, of significance as the ACT transitioned to 100% renewable electricity during 2019–20;
 - Circular Economy Working Group; and
 - Working groups related to the Council of Australian Government (COAG) Waste Export Ban.
- Made submissions into public inquiries including the House of Representatives Standing Committee on Industry, Innovation, Science and Resources inquiry into Australia's Waste Management and Recycling Industries.
- Released the Phasing out single-use plastics Engagement Report in October 2019 and the Phasing out single-use plastics – Next Steps Policy in December 2019, focussed on avoidance to reduce Canberrans' consumption of single-use plastics.
- The ACT Government Waste-to-Energy Policy was released in March 2020, excluding thermal treatments as an option for new operations.
- Provided education and behaviour change programs to empower Canberrans to make better choices. Education focussed on the waste hierarchy prioritises avoidance, followed by reuse and recycling.

CMTEDD UPDATE

Relevant strategy, Plan of Management or audit The objectives of the ACT Climate Change Adaption Strategy are integrated into Innovation, Industry and Investment's key strategies on investment attraction and facilitation, trade, innovation and business development.

- Renewable energy is a key capability of the ACT economy. The ACT Government continues to pursue investment opportunities and support innovation and industry growth across the sector.
- Innovation, Industry and Investment in collaboration with Austrade hosted a delegation from H2O Korea (the Korean national hydrogen government and industry group) to showcase ACT's strengths in hydrogen research and development, fostering ACT Government and ANU collaboration opportunities.
- Promoted the 2019-20 ACT reverse auction for renewable electricity to Austrade's global network of energy sector specialists.
- Multi-year funding allocated in 2018–19 of \$1.5 million to the distributed energy resource (DER) lab continues. DERs are small-scale units or devices such as home solar panels on rooftops and home batteries which feed back into the electricity grid of commercial providers. This lab is scheduled to be operational in early 2021 to enable industry to develop and test smart controllers, metering devices and software to manage and control the supply of renewable electricity back into the grid.
- On 5 March 2020 the ACT Government and UNSW announced the formalisation of an agreement through a signed Precinct Deed, to establish a new UNSW Canberra City Campus. Among other things, the Precinct Deed establishes design requirements on UNSW in developing the Campus to ensure its built form and character complements the social, economic, health and environmental priorities of the Territory. These requirements include:
 - a sustainable design which combines positive environmental, social and economic outcomes;
 - the use of natural cross ventilation and passive solar design to reduce reliance on technology and operation costs;
 - recycling and reuse of materials and waste; and
 - landscape design that integrates built and natural systems by retaining natural features that co-ordinate water and soil management, solar access, micro-climate, tree canopy, habitat values, and preservation of green networks.

CSD UPDATE

Relevant strategy, Plan of Management or audit Energy Efficiency Program for public housing properties.

During the 2019-20 financial year, the Community Services Directorate (CSD) worked to reduce emissions in accordance with the ACT Government's Carbon Neutral Government Framework.

The Energy Efficiency Program for public housing properties is an ACT Government initiative delivered under contract by ActewAGL was implemented in 2018-19 and will be continued in 2020-21. This program forms part of the broader Energy Efficiency Improvement Scheme run by the Environment, Planning and Sustainable Development Directorate (EPSDD).

- The Energy Efficiency Program will replace inefficient heating and hot water systems, predominantly gas, to 2,200 public housing properties by December 2021. As at June 2020, 1,849 installations have been completed. The program is on track to achieve energy efficient upgrades to the target of 2,200 public housing properties. The total abatement since the commencement of the program is over 39,000 t/CO2-e (tons of CO2 gas emissions). This abatement is realised over the lifetime of the installed products and is the equivalent to planting 195,500 trees.
- Housing ACT is undertaking a pilot program to spend \$220,000 to replace gas cooking appliances with electric alternatives. This program compliments the Energy Efficiency Program and in addition to the emissions savings, households will save \$300 per year in gas connection charges. 55 properties have been disconnected from the gas network in 2019–20.
- The ACT Government announced the Solar for Public Housing project on 22 May 2020 which is being delivered by EPSDD together with Housing ACT. This infrastructure project is part of the ACT Governments' Economic Survival Package which is being fast-tracked across the city to support local jobs, businesses and the Canberra community through the COVID-19 pandemic. As part of the project, solar panel installation has been identified for 12 sites across the Housing ACT portfolio including a multi-unit property in Kaleen, Common Ground Gungahlin, and a further 10 Housing ACT owned properties which are head-leased to community housing providers.
- In 2019-20 CSD reduced transport fuel-related emissions by reducing the transportation fleet from 96 vehicles to 90 vehicles. CSD increased the number of electric vehicles from two vehicles to seven vehicles.

- CSD reduced natural gas-related emissions by the completion of a multiyear program to upgrade natural gas boilers at Bimberi Youth Justice Centre. It is expected that this project will reduce emissions from boilers by approximately 15%.
- CSD completed the first stage of an external lighting upgrade that will significantly reduce electricity usage. This upgrade will see existing lighting upgraded to Light Emitting Diode (LED) lighting which has a longer lifespan of up to 20 years, more efficient energy usage and lower maintenance requirements. LED lighting was installed at Tuggeranong Child and Family Centre in 2019–20.

JACS UPDATE

Relevant strategy, Plan of Management or audit Strategic Bushfire Management Plan (2019), Territory Wide Risk Assessment, Strategic Flood Risk Management Plan and the Strategic Bushire Capability Framework



Strategic Bushfire Management Plan

- Version 4 (2019) of the Strategic Bushfire Management Plan was released in September 2019.
- Climate change is a focus of the Plan, with 'Adaptive management and climate change' one of the 5 overarching objectives of the plan.
- That objective provides that the ACT Government will adopt an adaptive management process to address increasing bushfire risks, including climate change, and support continuous improvement based on sound research, modelling, monitoring, evaluation and lessons learned.
- > The Plan contains a number of actions to achieve that objective, including:
 - Undertaking research and monitoring of potential impacts of climate upon the ACT's bushfire risk to produce long term modelling of impacts;
 - Reflect climate change projections and risk vulnerabilities in disaster and emergency prevention, preparedness, response and recovery;
 - Use climate change modelling to review and modify strategies for operational doctrine, community awareness, fuel management, response and capability; and
 - Embed climate change research into seasonal and operational risk assessment for bushfire fighting.

Territory Wide Risk Assessment (TWRA)

> The TWRA promotes resilient communities at a time when climate change is expected to generate a greater frequency and severity of natural disasters.

- > The TWRA identified climate change as a key influence that could potentially impact on emergency risk likelihood and consequence.
- The TWRA will be reviewed and updated in 2020/21, which will include a more detailed consideration of the impacts of climate change on natural disaster risk in the Territory.

ACT Flood Plan

The ACT Flood Plan, a hazard specific sub-plan of the ACT Emergency Plan, outlines the standing and emergency arrangements for an all agencies approach to flood preparedness, response and recovery in the ACT, and was updated in November 2019.

HEALTH UPDATE

Relevant strategy, Plan of Management or audit ACT Health contributes to multiple jurisdictional and inter-agency discussions to improve health outcomes in the face of climate change, including being an active contributor to the cross-government Climate Change Working Group responsible for implementation of the ACT's Climate Strategy.

ACT Health also supports climate change strategies in the planning and preparedness arrangements across the emergency management sector. A primary example of this is the Territory Wide Risk Assessment (TWRA). The purpose of the TWRA is to provide a strategic level analysis of the natural disasters and emergency risks facing the ACT, including the impact of climate change.

ACT Health is a supporting agency for heatwave emergencies under the ACT Extreme Heat Plan. The Plan recognises that climate change has resulted in worsening heatwaves that are hotter, last longer and occur more frequently. ACT Health works closely with the ACT Ambulance Service and relevant agencies to manage the public health impacts of heatwaves, including vulnerable groups (e.g. young children and babies, the elderly, pregnant women, individuals with a disability etc.).



- > ACT Preventive Health Plan was completed in December 2019 and included:
 - Continuing to promote and prioritise active travel for people of all ages and abilities and enhance active travel infrastructure to improve safety and connectivity of the active travel network (reducing the burning of fossil fuels for transport)
 - Promoting the choice of water rather than packaged drinks (promoting water as the drink of choice)
- ACT Health has in place protocols for the natural phenomenon of Thunderstorm Asthma. Thunderstorm asthma is a form of asthma that is triggered by an uncommon combination of high pollen (usually during late Spring to early Summer) and a certain kind of thunderstorm. ACT Health acknowledges the need to consider climate change in the planning and delivery of emergency management systems to respond to natural disasters.
- ACT Health has in place a communications strategy to formalise public health messaging around asthma, hay fever, and the ACT pollen season (predominately September-November each year).
- ACT Health continues to promote AirRater, a free app that provides real-time, geographically specific data on pollen, air quality and temperature. This information assists people with asthma and hay fever to know their triggers for symptoms and take steps to manage their condition.

EDUCATION UPDATE

Relevant strategy, Plan of Management or audit

The Education Directorate commenced a review of the design standards for new schools. The Sustainable Development of Public School Facilities Output Specifications is currently being revised to integrate changes in best practice pedagogy, planning regulation changes and environmental policy changes.

The Education Directorate completed a series of curated programs across climate change mitigation and adaptation to align with the ACT Climate Change Strategy 2019-25 and associated action plans including the transition to Zero Emission Vehicle Action Plan and Canberra's Living Infrastructure Plan.

Annual initiatives continued in 2019-20

The Building Tuning Program implemented mechanical plant efficiency measures for heating, ventilation and air-conditioning across the highest intensity gas users by school type (college, high school, primary school).

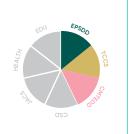
- The Draught Proofing Program continued in 2019–20 with twenty-four school benefitting from this program. The program focussed on excluding draughts from external doors to improve thermal comfort and energy efficiency.
- The Tree Planting Program commenced in 2017-18 and is continuing to provide long term amenity, passive cooling, and habitat. In 2019-20, trees were planted at four schools with 149 advanced specimens planted.
- > The Sustainable Transport Program delivered:
 - The construction of a secure bike facility with a capacity of 174 bicycles, and the design of an additional three facilities with a total capacity for 195 bicycles and scooters. The facilities promote active travel and include basic maintenance equipment to help students and staff keep their bikes in good working order;
 - The transition of leases of non-specialist fleet vehicles to plug-in electric vehicles; and
 - The design of an electric vehicle charging compound at the Hedley Beare Centre for Teaching and Learning was completed to accommodate fleet charging and garage requirements.

Strategic initiatives commencing in 2019-20

- Works commenced on the Energy Efficient Heating System Renewal Program, a four-year program targeting the replacement of aged gas heating systems with low to zero emission heating technologies. The four-year program includes building envelope improvements and building controls to improve thermal comfort and maximise cost and energy efficiencies.
- The Education Directorate entered into two partnerships with the Affordable Heating and Cooling Innovation Hub, a program run in partnership between the Australian Institute of Refrigeration, Air-conditioning and Heating, Australian Renewable Energy Agency and research partners to develop, test and evaluate pathways to a low emissions future. These projects will demonstrate the viability of new approaches and low emission technologies for use in other schools, both locally and nationally. These are:
 - ACT Schools Living Laboratories a partnership with the Wollongong University Sustainable Buildings Research Centre and industry sector experts to test and evaluate innovative technologies in operational buildings and cost-effective heating and cooling solutions for two ACT public schools; and
 - Integrated Design Studios a partnership with the University of Melbourne and private sector experts to facilitate a Master level design studio focusing on the development of integrated architectural and engineering designs to meet the unique pedagogy, climate resilience and functional requirements of two ACT public schools.

RECOMMENDATION 2 – HUMAN NEEDS

That the ACT Government implements the monitoring, reporting and evaluation commitments in the ACT Planning Strategy and the ACT Waste Management Strategy, and details those for the ACT Nature Conservation Strategy.



Government response: Supported

EPSDD UPDATE

Relevant strategy, Plan of Management or audit ACT Planning Strategy and ACT Nature Conservation Strategy 2013–23

- Annual reporting on the ACT Planning Strategy will occur through the EPSDD Annual Report.
- In 2013 and 2018 structural aquatic habitat was installed in the Murrumbidgee River at Tharwa. These structures are habitat rehabilitation measures that are designed to provide deep water refugia for fish. Fish response to the structures is monitored annually.
- A Progress Report on the Implementation Plan for the Nature Conservation Strategy was released in 2019. The Progress Report on the implementation of the strategy shows that work undertaken so far has made a significant impact on the Territory's landscapes through restoration and rehabilitation on the ground. The Nature Conservation Strategy Progress Report 2019 shows 51 milestones/priorities have been completed with a further 51 ongoing. The Implementation Plan 2019-23 sets out new focus areas. These include:
 - working with rural landholders on promoting native vegetation and biodiversity
 - supporting Traditional Custodians to apply land management methods on Country
 - strengthening partnerships for conservation, including cross-border collaboration
 - improving the ACT's ability to monitor the effectiveness of environmental programs

TCCS UPDATE

Relevant strategy, Plan of Management or audit Waste Management Strategy 2011-2025

- As part of the delivery of the Bulky Waste collection service, ACT NoWaste was responsible for designing the residential booking system, requiring a significant modernisation project to upgrade back-end databases and improve the customer interface. This is a first for the ACT government and has significant potential to be used across a range of other government projects in the future.
- Work continues towards designing and implementing a system in the ACT that is aligned with NSW regional levy models and encourages resource recovery under both ACT and NSW strategic frameworks. ACT NoWaste is currently finalising the most appropriate model for the ACT.
- ACT continued to oversee compliance of the Container Deposit Scheme. The Scheme continues to grow, with 21 return points in the ACT. 2019–20 saw the return of 44 million containers through the network, an overall increase of 62.1% on last year.
- Ongoing development of an automated Waste Regulatory Management System to support best practice compliance with the Act. Waste facilities are now providing quarterly reports into the system, and reporting for waste transporters is due to come on board in 2020–21.
- On 13 March 2020, the COAG agreed to ban certain types of waste from being exported, as a significant step in ensuring Australia takes responsibility for managing its own waste. A partnership between the Australian and ACT Governments has been established to provide \$21 million to upgrade the ACT Materials Recovery Facility, to better separate and process recycling streams such as paper, glass and plastic.

CMTEDD UPDATE

Relevant strategy, Plan of Management or audit Innovation, Industry and Investment continues to support development for climate change adaptation and human needs through investment attraction, industry development and export support.

- Funding support for the Centre for Entrepreneurial Agri-Technology, from the Priority Investment Program continued in 2019-20. The Centre provides research translation and innovation programs alongside industry engagement to enable researchers and ACT subject matter experts to address critical needs in agriculture and environmental sciences related to climate change and food security.
- Innovation, Industry and Investment, through an appointed embedded business development manager in Austrade, Singapore has assisted ACT NoWaste with Singaporean counterparts to address emerging circular economy challenges and to collaboratively develop new cross-directorate approaches to attract and exchange innovative solutions and pursue investment opportunities.

RECOMMENDATION 3 – HUMAN NEEDS

That the ACT Government considers integrated monitoring, reporting and evaluation of all the key strategies to guide achievement of improved sustainability outcomes for the ACT, including the ACT Planning Strategy, AP2, Transport for Canberra, the ACT Water Strategy, the ACT Nature Conservation Strategy and the ACT Waste Management Strategy.



Government response: Supported in principle

*Note: Since 2015 the responsibilities for these strategies has moved across directorates. EPSDD is responsible for the ACT Planning Strategy, AP2 – now the Climate Change Strategy, ACT Water Strategy, and the ACT Nature Conservation Strategy. Transport for Canberra and the ACT Waste Management Strategy are led by TCCS. These strategies continue to align in achieving common sustainability outcomes.

EPSDD UPDATE

Relevant strategy, Plan of Management or audit ACT Planning Strategy, ACT Climate Change Strategy 2019-25, ACT Water Strategy 2014-44: Striking the Balance



- The ACT Planning Strategy indicates that annual reporting on the Strategy will occur through the EPSDD Annual Report. The Strategy contains 25 strategic directions and 65 actions, which amount to 47 specific projects (noting these are to be implemented over time). Of these 47 projects, seven have been completed, 16 are underway in whole or part, 16 are yet to commence and eight projects are ongoing. Many of the projects have interface with the transport, climate change, living infrastructure, waste and other strategies of Government. These strategies are taken into account in executing the strategic directions and actions of the ACT Planning Strategy.
- The ACT Government introduced the ACT Wellbeing Framework which promotes cohesive and integrated policy to contribute to a more dynamic and healthy community, economy and environment.
- The ACT Water Strategy Implementation Plan Two was publicly released on 20 June 2019 following review and consultation.
- A report card on the ACT Water Strategy implementation was prepared in 2020 and is currently being finalised. The Report Card shows good progress during 2019-20; however, most notable are the coordinated actions conducted to protect and begin to restore the terrestrial and aquatic ecosystems impacted by bushfires.
- > The ACT Water Resource Plan (WRP) was accredited by the Commonwealth

Government in 2019-20. The WRP is a key document under the Murray Darling Basin Plan that presents a comprehensive outline of the legislation, regulations, plans and strategies that have been established within the ACT to guide sustainable water resource management. The ACT is required to report on the integrated management of water resources (subject to the WRP) under the Murray Darling Basin Plan.

- The ACT and Region Catchment Coordination Group continues to set a leading example for multi-jurisdictional collaboration in regional catchment management. In 2019–20, it made further progress against actions in the ACT and Region Catchment Strategy. The Strategy's themes are crosscutting and include: governance, policy and planning; communities; regional development; water, land and biodiversity; implementation and reporting. An annual report on progress against priority actions is underway.
- The ACT Climate Change Strategy 2019-25 (the Strategy) was released in September 2019. It sets out the next steps for working towards the ACT's legislated emissions reduction targets and net zero emissions goal while building resilience to unavoidable climate change impacts. The Strategy replaces both Action Plan 2 and the Climate Change Adaptation Strategy, and considers both mitigation and adaptation outcomes of decisions and policy measures.
- In September 2019, the ACT Government also introduced Canberra's Living Infrastructure Plan to promote greater integration of planning and environmental policies to deliver a more sustainable and resilient urban environment in the context of urban intensification and a changing climate.
- Progress will be tracked on an ongoing basis and reported annually as part of the Minister's Annual Report on Implementation of the Climate Change and Greenhouse Gas Reduction Act 2010.

TCCS UPDATE

Relevant strategy, Plan of Management or audit Transport Strategy, ACT Waste Management Strategy 2011-2025



ACT Transport Strategy 2020

- The ACT Government consulted on the draft transport strategy, Moving Canberra: Integrated Transport Strategy, between December 2018 and March 2019.
- Since the consultation concluded several key developments have occurred that relate to transport and travel in Canberra.
- > Light Rail Stage One has started operation, a new integrated public

transport network has been launched, and the ACT Planning Strategy 2019 has been released.

- Additionally, since March 2020 Canberra has experienced the COVID-19 pandemic and its impacts on travel and transport.
- Considering these developments, and the comprehensive community feedback provided during consultation, the ACT Government is working to develop a final Transport Strategy which offers a long term, positive vision for Transport in Canberra.
- > The forthcoming Strategy will replace the 2012 Transport for Canberra.
- > It is anticipated this Strategy will be released by the end of 2020.

ACT Waste Management Strategy 2011-2025

- Cross-directorate engagement to ensure that activities under the ACT Waste Management Strategy 2011-2025 and the National Waste Policy Action Plan support the shared sustainability goals across the ACT Government.
- The ACT Government seeks to drive the resource recovery and the circular economy agenda at the local and the national levels. TCCS represents the ACT Government at the Meeting of Environment Ministers (MEM), established under the former Council of Australian Governments (COAG) (now National Cabinet) and other related forums including:
 - the Senior Officials Group supporting the MEM;
 - the Government Officials Group overseeing, the Australian Packaging Covenant Organisation, a co-regulatory not-for-profit organisation delivering the National Packaging Target of 100% of Australian packaging being reusable, recyclable or compostable by 2025; and
 - Various waste-related MEM working groups such as the circular economy, photovoltaics, heavy-weight plastic bags and batteries.
- Through the Meeting of Environment Ministers and relevant forums, the ACT joins all other Australian jurisdictions in committing to the National Waste Policy and associated Action Plan, working towards targets such as:
 - Banning the export of waste plastic, paper, glass and tyres
 - Reducing the total waste generated by each person by 10% by 2030
 - Significantly increasing the use of recycled content
 - Phasing out problematic and unnecessary plastics by 2025
 - Halving the amount of organic waste sent to landfill by 2030
 - Making comprehensive, economy-wide and timely data publicly available
 - The National Packaging Target of 100% of Australian packaging being reusable, recyclable or compostable by 2025

HEALTH UPDATE

Relevant strategy, Plan of Management or audit ACT Climate Change Strategy 2019–25, ACT Water Strategy, ACT Planning Strategy, and ACT Waste Management Strategy.



- ACT Health provided health input through consideration and conditioning of Development Applications along with input into Environment Impact Statements, Environmental Significant Opinions and Waste Facility License Applications.
- Commencement of zero emissions pathway for the ACT health system.
 This pathway will provide guidance for ACT Health, Canberra Health Services and health system key stakeholders about moving to zero emissions in the coming years.

EDUCATION UPDATE

Relevant strategy, Plan of Management or audit ACT Climate Change Strategy 2019–25, ACT Sustainable Transport Strategy 2017–21, ACT Nature Conservation Strategy 2012–2023, ACT Water Strategy 2014–44, and the Education Directorate's Reconciliation Action Plan 2018–2020.

Program actions completed in 2019-20

- The Education Directorate established an annual emission reduction target of 5% against 2018 gross emissions. Annual programs and strategic initiatives contributing to emission reductions are monitored quarterly across the school portfolio and reported biannually to the Director-General and Head of Service.
- An assessment of culturally significant trees and landscape features in and adjacent to all ACT Public Schools was undertaken in 2019-20 in collaboration with the four ACT Registered Aboriginal Organisations. Sites were mapped and recommendations recorded for their management. The report and recommendations will inform management actions to protect this valuable cultural heritage.
- A tree canopy assessment methodology was trialled using drones to survey the tree canopy, number of trees and the health of trees across twelve ACT public school sites. The methodology was successful and will be refined for future surveys to form a baseline and inform the directorate's response to Canberra's Living Infrastructure Plan and future landscape management treatments and plans.

Integrated water sensitive spaces at two schools were designed, one with an underground stormwater harvesting and irrigation facility. When implemented these spaces will benefit ACT water conservation goals, cooler schools, urban amenity, social cohesion and living infrastructure targets.

RECOMMENDATION 4 – AIR

That the ACT Government requires that the air quality impacts of future urban developments are explicitly considered – in particular, the impact of pollution from domestic wood heaters in greenfield developments.



Government response: Supported

EPSDD UPDATE

Relevant strategy, Plan of Management or audit

The ACT's ambient air quality is measured in accordance with the Ambient Air Quality National Environmental Protection Measure (NEPM) via the Performance Monitoring Station network in the ACT. The ACT is compliant with the National Environment Protection Measures (NEPM) which is reported annually in the National Environment Protection Council Annual Report available at: <u>http://www. nepc.gov.au/publications/annual-reports</u>

and the ACT Government's Annual Air Quality Report available at: <u>https://www.accesscanberra.</u> <u>act.gov.au/app/answers/detail/a_id/1320/~/air-</u> <u>pollution#!tabs-4</u>

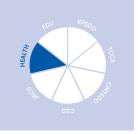


- There have not been any variations to the Territory Plan to rezone non-urban land to urban purposes in 19/20.
- On 1 September 2019, the Environment Protection Regulation 2005 was amended to introduce stricter emissions and efficiency standards for wood heaters sold in the ACT.
- The ACT Government continued its annual Burn Right Tonight public education campaign on the correct use of wood heaters during winter and the Wood Heater Replacement Program to remove old, inefficient wood heaters.
- In parts of January 2020, the ACT experienced the worst air quality in the world, with the air quality significantly exceeding the national ambient air

quality standards. From September 2019 to April 2020, there were a total of 91 days with poor to hazardous air quality. The smoke impacts on the community were worse than the 2003 bushfires and were the worst since air quality monitoring commenced in the ACT 15 years ago. This represents a significant deviation from otherwise high air quality standards.

HEALTH UPDATE

Relevant strategy, Plan of Management or audit ACT Health continues to provide technical support and advice to Environment Protection and Policy and the Environment Protection Authority (EPA) on ambient air quality issues.



 ACT Health is seeking to establish a network of particulate sensors to monitor wood smoke in areas of Canberra not covered by the current network.
 Recent and further pending changes to the NEPM result in the ACT currently being unable to meet the current and further proposed measure in full.
 Options to address this gap in capability are being investigated.

RECOMMENDATION 5 – LAND

That the ACT Government provides resources to fully implement priority actions in the ACT Nature Conservation Strategy, particularly actions aimed at developing foundation knowledge of landscape function and soils in the ACT.



Government response: Supported

EPSDD UPDATE

Relevant strategy, Plan of Management or audit Hydrogeological Landscape (HGL) Framework, Soil Landscape Framework, and Vegetation Community Mapping. ACT Nature Conservation Strategy 2013-23, in particular Action 1.1 Develop baseline information on landscape function.



Soil Landscape Framework – No new actions in 2019-20. The ACT Soils Landscapes Framework was completed in 2016 by the NSW Office of Environment and Heritage. The information is publically available through ACTMapi and the full report by Cook et al., (2016) Soil Landscapes of the Australian Capital Territory, Office of Environment and Heritage, Queanbeyan, NSW is also available on the Environment website. Soil profile information and soil test results can be accessed via eSPADE at <u>www.environment.nsw.gov.au/</u><u>eSpade2Webapp</u>.

- Hydrological Landscape Framework No new actions in 2019-20. The ACT Hydrogeological Landscapes Framework was completed by the NSW Office of Environment and Heritage in 2016, funded by the ACT Government and with the support of the Australian Government Regional Natural Resource Management Planning for Climate Change Fund (Stream 1). The information is publicly available through ACTMapi and helping to inform decision making about land management, urban planning and environmental research.
- The ACT Vegetation Map was completed in 2018 and was made available on ACTMapi: Significant Plants and Animals Map and the ACT Geospatial Catalogue under CCBY 4.0 licence for free download. The dataset was supplemented with height and cover information at the polygon scale, using the 2015 LiDAR data (Canopy Height Model).
- Refined mapping of the High Country Bogs and Fens was completed in the second half of 2019 and updated in the ACT Vegetation Map.
- See recommendation 8 for an update on the Conservation Effectiveness Monitoring Program.

RECOMMENDATION 6 – LAND

The ACT Government uses strategic environmental assessments as provided for in the Planning and Development Act 2007 to reduce and manage cumulative and cross-sectoral impacts on the environment.



Government response: Supported in principle

EPSDD UPDATE

Relevant strategy, Plan of Management or audit Environmental Impact Statement (EIS) process Strategic Assessments Environmental Significance Opinions (ESOs)



The ACT Government continued to deliver commitments for strategic assessments approved under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 in the ACT – Molonglo and Gungahlin. The ACT Government and Riverview projects continued to implement the West Belconnen strategic assessment. The ACT Government is continuing preparation of a fourth strategic assessment – Eastern Broadacre.

- Updates on urban development timing and land management, specifically future land releases in the ILRP in the Gungahlin Strategic Assessment (GSA) area are reported in GSA Annual Reports.
- In 2019-20, the ACT Government continued to administer environmental impact assessment processes, including issuing four Environmental Impact Statement (EIS) scoping documents, preparing two EIS assessment reports and two EIS Exemption assessment reports and processing 24 Environmental Significance Opinions.

RECOMMENDATION 7 – WATER

That the ACT Government assess the consequences of, and understand the driving mechanisms behind, the poor condition of water resources as shown by the indicators for total nitrogen, turbidity, chlorophyll-a and ecological biodiversity, and assess the need for collecting more information for indicators with little available data.



Government response: Supported

EPSDD UPDATE

Relevant strategy, Plan of Management or audit ACT Water Strategy



- In 2019, the Commissioner released its most recent State of the Environment report. Analysis reported within the report on condition and threats to the environment drew significantly on monitoring data collected through its community programs, including Waterwatch, Frogwatch, Canberra Ornithologists Group and Landcare.
- The Upper Murrumbidgee Waterwatch Catchment Health Indicator Program continued to be supported during 2019–20. The program recorded 2,040 water quality surveys, 184 water bug surveys and 211 riverbank vegetation assessments collected by over 200 volunteers. Collating information provided by various community catchment groups, such as Waterwatch, is critical to the ACT and Region Coordination Group for making informed policy decisions about catchment health.
- > The ACT Waterwatch program established three new sites within the southern ACT region (the Naas, Gudgenby and Cotter rivers) to provide improved representation across the rural and conservation land-use types.

- The ACT and Region Catchment Coordination Group has continued to support and provide input into the development of the ACT Government's catchment and waterway data monitoring and collection initiative known as the ACT Data Lake. The ACT Data Lake, funded through the ACT Healthy Waterways program, provides unified and clear results on water quantity and quality. The ACT Data Lake gathers information from community supported water quality management programs, and existing ACT Government waterway and catchment data collection activities.
- In the 2019-20 financial year, the ACT Data Lake project saw several key achievements including:
 - development of a flash-flood warning system for the ACT Emergency Services Association
 - daily rainfall and streamflow updates published on the ACT Government Open Data Portal (<u>www.data.act.gov.au</u>)
 - existing ACT Government water quality and quantity data formally incorporated into the program.

HEALTH UPDATE

Relevant strategy, Plan of Management or audit ACT Wide Water Quality Monitoring Framework



 ACT Health participates in the multiagency Aquatic Monitoring Advisory Group to provide health input into water strategies.

RECOMMENDATION 8 – BIODIVERSITY

That the ACT Government provides the necessary resources to complete the next phases of the Conservation Effectiveness Monitoring Program.



Government response: Supported

EPSDD UPDATE

Relevant strategy, Plan of Management or audit Nature Conservation Strategy, Conservation Effectiveness Monitoring Program (CEMP)



The ACT Government is continuing to fund the Conservation Effectiveness Monitoring Program (CEMP). The CEMP will provide field protocols for selected indicators and develop systems to compile, analyse and report on monitoring data to inform reserve management for eight ACT ecosystems. The Government will work towards draft plans for the all eight ecosystems along with the development and testing of indicators to support the already completed information for the Grasslands and Riparian ecosystems.

RECOMMENDATION 9 – BIODIVERSITY

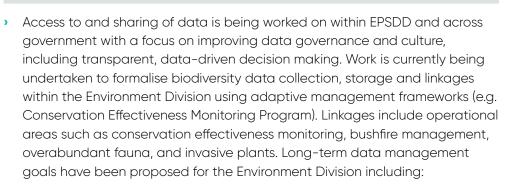
That the ACT Government formalise biodiversity conservation data collection and storage protocols and procedures, to integrate reports commissioned by different agencies with existing government data.



Government response: Supported in principle

EPSDD UPDATE

Relevant strategy, Plan of Management or audit Nature Conservation Strategy, Conservation Effectiveness Monitoring Program (CEMP), ACT Healthy Waterways



- data governance processes and culture that fosters the importance of data curation, accessibility and transparency established in the Division
- innovation and best practice technology for capture, processing and storage of data
- workflows that address an adaptive management cycle and strategic objectives beyond data capture and storage are adopted
- data generated by the Division are accessible and catalogued in line with the ACT's Open Data Policy
- use of knowledge-base to utilise research findings to support decision-making.

- The ACT Healthy Waterways program team in partnership with the Office of the Chief Digital Officer (OCDO, CMTEDD) established a databasing solution for water-related datasets in the ACT, using the ACT Data Lake. This included automated ingestion of rainfall, streamflow and water quality data from the ACT Hydrometric network, in addition to data from BoM and SILO. Some achievements include:
 - For the first time, ACT Government rainfall and streamflow data is now publicly available via the ACT Government Open Data portal, <u>www.data.act.gov.au</u>.
 - Data collected in near-real time has been provided to ACT ESA to explore the potential for improved information access in response to critical rainfall events in the ACT.
 - Data pipelines have been created to enhance analytical and modelling activities in relation to water resources in the ACT.

RECOMMENDATION 10 – HERITAGE

That the ACT Government and the ACT Heritage Council commence a program of audits to assess and monitor the condition of heritage places and objects on the ACT Heritage Register.



Government response: Supported

EPSDD UPDATE

Relevant strategy, Plan of Management or audit Program of heritage audits ACT Heritage Strategy



The concept of a broader program of an audit to monitor the condition of heritage places is supported in-principle; however, this could only be implemented with significant resourcing. At present resourcing is prioritised to respond to a 107% increase in heritage advice requests and approval applications over the past five financial years, and the focus is to reduce the nomination list and implement legislative amendments to increase heritage compliance tools.

Implementation Status Report on ACT Government's Climate Change Policy (2017)

Government's Response and Directorate updates

In the 2017 Implementation Status Report on ACT Government's Climate Change Policy, the Commissioner made 17 recommendations which are listed below with the Government's response to each one and an update from directorates on actions achieved during 2019–20.

RECOMMENDATION 1

Budget appropriation for climate change mitigation and adaptation policies will be significant, cannot be postponed and must be consistent.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

 Funding has been secured for core programs from 2019–20 to provide consistency of effort in addressing climate change, including implementation of many actions in the ACT Climate Change Strategy 2019–25.

Energy efficiency initiatives are crucial in delivering climate change outcomes and must be prioritised in policy development.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

The Zero Emissions Government (previously Carbon Neutral Government) Framework Climate Change Adaptation Strategy – Living with a Warming Climate

 The Energy Efficiency Improvement Scheme has been extended by legislation to 2030 and recalibrated to recognise achievement of the ACT's 100% renewable electricity target.

RECOMMENDATION 3

Climate change mitigation and adaptation policies must be embedded and integrated across whole of government functions.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

The Zero Emissions Government (previously Carbon Neutral Government) Framework The ACT Climate Change Strategy 2019-25

- The Zero Emissions Government (previously Carbon Neutral Government) Framework sets a target of reducing emissions in government operations to zero by 2040.
- The ACT Climate Change Strategy 2019-25 contains actions aimed to incorporate sustainability into Government decision-making including specific recommendations in relation to a zero emissions health sector, zero emissions schools, a shift to all-electric buildings, a transition to a zero emissions bus fleet, and sustainability ratings or equivalent for all projects over \$10 million.

Transport is the biggest climate change mitigation challenge for the ACT and significant commitment to policy development, action and targets will be central to the ACT continuing its reputation as a climate change policy leader and driver of change.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

Transition to Zero Emissions Vehicles Action Plan (2018–2021) ACT Transport Strategy

- The ACT Government continues to implement its Transition to Zero Emissions Vehicles Action Plan (2018–2021). This plan sets a clear direction for the ACT to accelerate and support the uptake of ZEVs, including battery electric vehicles, hydrogen fuel cell vehicles and electric bikes.
- Under the Action Plan, from 2020-21, 100% of new ACT Government leases will be ZEVs, where fit for purpose.
- Greenhouse gas emissions reductions are identified as one of three high level objectives of the recently released ACT Transport Strategy.

RECOMMENDATION 5

Community engagement in discussions about climate change policy is fundamental to effective interventions in respect of mitigation and adaptation.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

ACT Climate Change Strategy

The new ACT Climate Change Strategy has been informed by extensive community and stakeholder consultation. Government will partner with the community and businesses in the next stage of our efforts to further reduce ACT emissions and build resilience to climate change impacts. Implementing the Strategy, and successfully meeting our interim emission reduction targets, will require broad community participation. Government will look for innovative ways to encourage and support behaviour change and community and business leadership on climate change.

RECOMMENDATION 6

Commitment to social equity in the face of climate change challenges must be strengthened in all new policy initiatives.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

ACT Climate Change Strategy

- The Government is committed to working in partnership with the community to support low income households and vulnerable sectors as we transition to zero emissions in a way that maximises their access to low emission, reliable and affordable services.
- > Under the Climate Change and Greenhouse Gas Emission Reduction Act 2010 the Minister for Climate Change and Sustainability prepares an annual report on action on climate change, including a Cost of Living Statement.
- > The Energy Efficiency Improvement Scheme targeted assistance and rebates.

RECOMMENDATION 7

To effectively meet immediate and evolving climate change challenges, policy must be timely, focused by means of multi-sectoral short, medium and long term targets.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

Interim targets of 50–60% by 2025, 65–75% by 2030 and 80–90% by 2040 have been legislated since 2018, and the net zero emissions target has been brought forward to 2045 at the latest.

Climate change policy actions and targets must continue to be monitored and evaluated in open, transparent and independent review and audit processes.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

- The monitoring and evaluation of Government climate change commitments are tracked and reported on, as required under the Climate Change and Greenhouse Gas Reduction Act 2010.
- The preparation of an annual greenhouse gas inventory report for the ACT by an independent consultant also provides transparency in the effectiveness of mitigation measures.

RECOMMENDATION 9

Engage the community in meaningful conversation about the credibility and validity of investing in offsets to support carbon neutrality against other investment options.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

Government is committed to achieving its emissions reduction targets and net zero emissions goal and will discuss with the community the potential role and opportunities of the use of carbon offsets, noting a preference to achieve emissions reductions directly and only engage in offsets where there are direct benefits to the AQT region.

Develop a Basis of Preparation end to end process manual for the ACT emissions inventory to ensure ongoing accuracy and repeatability of ACT emissions monitoring and reporting.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

The ACT Government's annual greenhouse gas inventory is undertaken by external consultants who, as part of the process, develop and submit a proposed methodology. This methodology is approved prior to the quantifying of the ACT's emissions to ensure its accuracy and consistency with previous methodologies.

RECOMMENDATION 11

Conduct an audit of ACT emissions inventory to ensure accuracy and facilitate continuous improvement, initially in 2 years' time and at regular intervals thereafter.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

 The ACT Government inventory is prepared annually by external consultants and reviewed by officers to ensure accuracy and facilitate continuous improvement.

Identify energy productivity and/or efficiency targets in conjunction with emissions reduction targets at 5 to 10 year intervals out to 2050 to optimise sustainability outcomes.

Government Response: NOTED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

 The Energy Efficiency Improvement Scheme (EEIS) currently runs to 2030. The EEIS sets an Energy Savings Target (EST) for each compliance period. The EST is currently set at 8.6% of electricity sales for all ACT electricity retailers until the end of the 2021 via the disallowable instruments: <u>Energy</u> <u>Efficiency (Cost of Living) Improvement (Energy Savings Target) Determination</u> <u>2015 (No 1)</u> and <u>Energy Efficiency (Cost of Living) Improvement (Energy Savings Target) Determination 2020 (No 1).
</u>

- Tier 1 electricity retailers must meet their energy savings obligations by delivering eligible activities while Tier 2 electricity retailers can choose to meet their obligation by delivering activities, paying an Energy Savings Contribution (ESC) or by a combination of the two. ESC funding contributes to activities that meet the EEIS objectives.
- Tier 1 Retailers must meet the Priority Household Target (PHT), which requires them to deliver a set percentage of their energy savings obligation to priority households. Priority households are households that have been determined to experience barriers to uptake of energy efficient upgrades. The PHT is reviewed each year and set via disallowable instrument. The PHT is currently set at 30% until the end of the 2021 via the disallowable instruments: Energy Efficiency (Cost of Living) Improvement (Priority Household Target) Determination 2019 and Energy Efficiency (Cost of Living) Improvement (Priority Household Target) Determination 2020.

Ensure that adequate and permanent resources are committed to the Carbon Neutral Government Program, both in the central facilitation team and within agencies.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

• Core funding for climate change response announced in the 2019-20 budget included funding for activities of the Zero Emissions Government Program.

RECOMMENDATION 14

In line with national best practice, consider reporting significant Scope 3 emissions associated with ACT Government operations and clearly document their inclusions or exclusions in carbon neutral aspirations.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

> No actions have been reported for 2019-20.

RECOMMENDATION 15

Produce an emissions boundary diagram for each agency to improve transparency and rigor in reporting emissions and developing mitigation strategies.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

ACT Climate Change Strategy

 Methodology for the creation of the ACT Government greenhouse gas inventory has been developed. This methodology will inform consideration of the need for emissions boundary diagrams.

RECOMMENDATION 16

Ensure ongoing improvement to document processes for government agency greenhouse gas inventories to ensure integrity and efficiency of initiatives.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

The ACT Government has prepared a methodology for the creation of the ACT Government greenhouse gas inventory. The methodology references all data sources and the source of all emissions factors used. This methodology will be used to create an ACT Government greenhouse gas.

RECOMMENDATION 17

Improve awareness and ease for applications to the Carbon Neutral Government Loan Fund.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program ACT Climate Change Strategy

 Processes for seeking loans under the Zero Emissions Government Loan Fund have been streamlined and clarified.

Lower Cotter Catchment Restoration Evaluation – The Heroic and the Dammed

Government's Response and Directorate updates

RECOMMENDATION 1.1

The Lower Cotter Catchment Monitoring and Evaluation Framework be implemented urgently.

Government Response: AGREED IN PRINCIPLE

EPSDD UPDATE

Relevant strategy, plan or program

The Conservation Effectiveness Monitoring Program (CEMP)

- Catchment health and water quality monitoring in the Lower Cotter Catchment will primarily be captured under the CEMP framework, EPSDD's ecosystem condition monitoring framework. The Aquatic and Riparian Conservation Strategy contains several monitoring metrics designed specifically for the Lower Cotter Catchment to better inform management effectiveness and improve water quality outcomes.
- Citizen science programs including Waterwatch and Frogwatch continue to undertake monitoring, including sites within the lower Cotter catchment. Results for 2019-20 period have been published in the 2019 CHIP report, and data is available via the Atlas of Living Australia (Waterwatch) and Canberra Nature Map (Frogwatch).

All existing and future Lower Cotter Catchment data should be stored in a secure central database.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

ACT Government Data Lake

- Discussions are progressing to establish and access the ACT Government's Data Lake to better integrate environmental data storage and implement the ACT Government Open Access policy. When access provisions are finalised, all relevant Lower Cotter Catchment data, including that collected and synthesised through the CEMP framework, will be incorporated into the Data Lake.
- Streamflow, rainfall and some water quality data are now captured within the ACT Data Lake. The EPSDD is exploring the possibility of generating a wholeof-Government live dashboard for displaying the data. Within government, Information and Communication Technology (ICT) capability to do this is currently being developed.

RECOMMENDATION 1.3

Improve consistency and coordination of monitoring, mapping and modelling resources across government.

Government Response: AGREED IN PRINCIPLE

EPSDD UPDATE

Relevant strategy, plan or program None applicable

Whole of EPSDD coordination and examination is ongoing to determine the most suitable, widely applicable and cost-effective remote sensing tools to inform protected area management strategies, including for the Lower Cotter Catchment. However, any substantial improvement in monitoring capability is dependent upon additional funding being received.

Allocate discrete annual funding from the Water Abstraction Charge (WAC) directly to catchment management for the life of the Reserve Management Plan 2018. This is in addition to existing recurrent funding. Financial year budget rollover is necessary to reflect the contract management cycles for land management works.

Government Response: NOTED

EPSDD UPDATE

Relevant strategy, plan or program None applicable

The Government did not accept this recommendation. A short-term Covid-19 stimulus package of \$350 000 was provided to contract labour hire companies, mostly to complete invasive species control (pine wilding removal) works in the Lower Cotter Catchment in 2019-2020. No additional recurrent funding has been allocated to the Lower Cotter Catchment to date but the EPSDD will continue to bid for funding as part of annual budget processes.

RECOMMENDATION 2.2

Distribute Parks and Conservation Service (PCS) funding discretely for core ongoing operational and strategic long-term management. Allocation of resources between business units within PCS should reflect reserve management responsibilities outlined in the implementation plan.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program Implementation Plan of the Lower Cotter Catchment Reserve Management Plan 2018 (RMP)

The completed Implementation Plan forms the basis for the preparation of an annual works plan for holistic management of the LCC. However, to date no additional funding has been apportioned within the PCS budget for reserve management responsibilities outlined in the implementation plan.

Allocate funding specifically for the implementation and ongoing costs of Recommendation 1 (Monitoring and Evaluation Implementation) across PCS, Conservation Research, Water Policy, and the Environment Protection Authority respective of their individual contributions.

Government Response: AGREED IN PRINCIPLE

EPSDD UPDATE

Relevant strategy, plan or program None applicable

- > See actions related to recommendation 1.1 1.3 and 2.2.
- The EPSDD has been supporting CEMP development and implementation and will continue to do so.

RECOMMENDATION 3.1

Complete outstanding Auditor-General's recommendations, specifically recommendations 1, 3 and 4, as a matter of priority by no later than 30 June 2019. This includes undertaking an internal review to confirm completion of all recommendations in consideration of observations made in this report.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

ACT Parks and Conservation Service (PCS) Code of Sustainable Land Management

The PCS is working to finalise the Code of Sustainable Land Management Practices to guide its activity across the whole conservation estate, the majority of which is drinking water catchment. This will involve consultation with key stakeholders including throughout Government, with Icon Water and the Office of the Commissioner for Sustainability and the Environment. A Working Group of PCS staff has been established to further develop and finalise Code of Practice; completion time has been revised to March 2021 in order to provide a comprehensive policy to guide operational delivery, whilst also satisfying the regulators and the community. In 2019–20, PCS re-assessed the Code of Sustainable Land Management Practice project with an external consultant, which assisted in re-focusing the scope and project timeframes. It is anticipated that community consultation and completion in first quarter of 2021.

RECOMMENDATION 3.2

Review and update the Lower Cotter Catchment Risk Treatment Plan quarterly as per ACT Insurance Authority requirements. Include risk management as a standing agenda item on the Lower Cotter Catchment Implementation Coordination Group meeting agenda.

Government Response: AGREED IN PRINCIPLE

EPSDD UPDATE

Relevant strategy, plan or program

Lower Cotter Catchment Risk Assessment and Risk Treatment Plan

> Reviewing the LCC Risk Assessment and Risk Treatment Plan has been added as a standing agenda item on the LCC Implementation Coordination Group.

RECOMMENDATION 3.3

Develop the Reserve Management Plan 2018 Implementation Plan as outlined in the plan and under the Nature Conservation Act 2014 by no later than 30 June 2019. This should include the strategic long-term management of commercial pine plantations, non-commercial pine plantations, and pine wildling regrowth.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

Implementation Plan of the Lower Cotter Catchment Reserve Management Plan 2018

 The Implementation Plan of the Lower Cotter Catchment Reserve Management Plan 2018 was completed before 30 June 2019. It forms the basis on how actions in the Reserve Management Plan are executed.

RECOMMENDATION 4.1

Review the Terms of Reference for the Lower Cotter Catchment Implementation Coordination Group, including relevant attendees, and revert to 'Phase 1' until all high and medium priority management actions outlined in the Reserve Management Plan 2018 are complete. This Group will then be critical to review and assess the Lower Cotter Catchment Monitoring and Evaluation Framework at set intervals over time to facilitate adaptive management.

Government Response: AGREED IN PRINCIPLE

EPSDD UPDATE

Relevant strategy, plan or program None applicable

- The Lower Cotter Catchment Implementation Coordination Group was established to operate in two phases. Phase 1 was written into the Terms of Reference of the Lower Cotter Catchment Implementation Group to enable the prioritisation of the delivery of the Auditor-General's recommendations. As this task is still being completed (three of the 12 recommendations remain outstanding), the Committee remains in Phase 1.
- Once the Committee has addressed the three remaining recommendations, it is proposed the Committee will move into Phase 2, which will be amended in acknowledgement of the intent of Recommendation 4.1 to read as follows: Phase 2: Key stakeholder liaison group for source water protection and land management within the Lower Cotter Catchment with an emphasis on consultation on the implementation of the Reserve Management Plan 2018 and monitoring and evaluation work.
- As outlined in the Nature Conservation Act 2014, the custodian retains the responsibility for the delivery of the Lower Cotter Catchment Reserve Management Plan and it is not appropriate for this task to fall to a committee. This change to the Terms of Reference of the Lower Cotter Catchment Implementation Group meets the intent of the recommendation.

RECOMMENDATION 4.2

The Lower Cotter Catchment be placed as a standing agenda item on the Director's-General Water Group meeting for the life of the current Reserve Management Plan 2018. The Implementation Coordination Group Chair or a delegate should report to the meeting.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program None applicable

- The Director's-General Water Group is the appropriate senior official's forum to oversee implementation of the Lower Cotter Catchment Management Plan, the group should receive regular progress reports from the Implementation Coordination Group.
- The Lower Cotter Catchment is a standing agenda item on all Director's-General Water Group meetings.

RECOMMENDATION 4.3

The Lower Cotter Catchment become a standing agenda item on the Regional Catchment Management Group meeting schedule, to ensure the consideration of matters concerning water security, climate change, bushfire management, water quality, and feral species, at a regional level.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

ACT and Region Catchment Management Coordination Group

The ACT and Region Catchment Management Coordination Group is established under the ACT Water Resources Act 2007, to promote coordination and collaboration between Government and community stakeholders concerned with catchment management. This includes coordination between agencies in the ACT. Work to restore the Lower Cotter Catchment is an excellent test case in effective collaboration and cooperation in catchment management. • The Lower Cotter Catchment is a standing agenda item on all ACT and Region Catchment Management Coordination Group meetings.

RECOMMENDATION 5.1

ACT Government amend the Road Transport (Safety and Traffic Management) Act 1999 to allow for the immediate removal of abandoned vehicles by government authorities.

Government Response: AGREED IN PRINCIPLE

CCS UPDATE

Relevant strategy, plan or program

The delivery of actions to address this recommendation are delivered by the TCCS City Services, Licensing and Compliance section as part of their business improvement.

In the ACT, abandoned motor vehicles (ABV) are regulated and managed by Transport Canberra and City Services, Licensing and Compliance, authorised officers.

On 1 November 2019, amendments were introduced to the ACT Litter Act 2004 to give authorised officers and police officers better power to respond to and manage ABV. Amendments to the Litter Act 2004 commenced on 1 November 2019 that:

- Give authorised persons the power to enter a vehicle that has been apparently abandoned in a public place to identify the vehicle or the person responsible for the vehicle where the vehicle or person responsible for the vehicle cannot be identified without entering the vehicle. (s.24O)
- Permit an authorised person or police officer to direct a person who apparently abandons a vehicle in a public place to remove the vehicle at least two working days after the direction is given. (s.24P) Failure to remove a vehicle in accordance with a direction is an offence. (s.24Q)
- Permit removal of a vehicle by the Territory if an abandoned vehicle removal direction is not complied with. (s.24R).

On 15 January 2020, EPSDD staff located an abandoned vehicle down an embankment along Brindabella Road that was assessed as a potential fire risk. This was reported to, and subsequently removed by, TCCS City Rangers.

Included in the legislative amendments, was the power for authorised people to remove vehicles at public places where a person fails to comply with a Removal Direction, or where an authorised person reasonably believes that the vehicle is abandoned. These amendments serve to reduce the time a vehicle could remain in situ, reducing the potential risk of arson and other vandalism. The introduced Litter Act amendments also support the privatising of the towing, storage and disposal of ABV in the Territory. TCCS is currently working on the proposed tender and contracting of this model. This project has been delayed due to COVID-19 but is expected to be completed in 2020-21.

Along with the legislative changes, TCCS are also currently working with ACT Policing and other stakeholders to amend the policy for the management of ABV to reduce timeframes currently applied and the associated risk of arson. This is achieved primarily by police being able to issue a Removal Direction on a suspected ABV at the first instance when it is identified or attended to by police; or where the attending authorised official reasonably believes that the vehicle is abandoned they can have the vehicle immediately removed from the public place.

RECOMMENDATION 5.2

ACT Government amend the Lower Cotter Catchment Activities Declaration to allow the restriction of public vehicular access to ecologically sensitive and isolated parts of the Lower Cotter Catchment.

Government Response: AGREED

EPSDD UPDATE

Relevant strategy, plan or program

Nature Conservation (Lower Cotter Catchment Reserve) Activities Declaration 2019 Nature Conservation (Lower Cotter Catchment Reserve – Uriarra Village) Activities Declaration 2019

Two Activities Declarations covering the LCC are now enforceable as notifiable instruments (NI2017–417 and NI2019–418); these were completed by 30 June 2019 as agreed. These significantly improve the public clarity around prohibited and restricted recreational activities, including several changes to public vehicular access to sensitive areas of the LCC, and are more consistent with the Lower Cotter Catchment Reserve Management Plan 2018 policies and objectives.

Lake Burley Griffin Investigation 2012

Government's Response and Directorate updates

RECOMMENDATION 7

Catchment management to improve the Lake's water quality.

The ACT Government should develop a strategic approach to watersensitive urban design (WSUD). This should include:

- a) Identifying sites where installing catchment intervention, such as wetlands and pollution control ponds, would improve water quality entering Lake Burley Griffin. This should include:
 - initial feasibility studies into the construction of pollution control ponds or wetlands on the Yarralumla drainage line and Jerrabomberra Creek should be undertaken. Any installations should be designed to be of an appropriate size to treat the catchment area they service; and
 - ii. identifying WSUD that complements current programs of installing wetlands and water control ponds in both new urban areas and retrofitting in existing suburbs where applicable.
- b) Ensuring that WSUD requirements are enforced in particular:
 - i. ensuring that wetlands and ponds are of appropriate sizes to service their catchments; and
 - ii. undertaking auditing/compliance arrangements to ensure that temporary pollution control ponds for sediment control during the construction phase in new estates are maintained and functioning effectively.
- c) Improving monitoring of the effectiveness of WSUD in urban developments to determine whether water quality meets WSUD general code targets. Results should be used to inform improvements in WSUD standards.
- d) Comparison of ACT approaches to WSUD with those of other Australian urban areas to help the Territory remain consistent with developing technology and best practice.

RECOMMENDATION 7

- e) Reviewing the efficacy of existing gross pollutant traps. The review should include:
 - i. effectiveness in pollutant reduction;
 - ii. effectiveness of current maintenance of pollution control measures
 - iii. capital costs;
 - iv. ongoing maintenance costs to ensure the current drainage infrastructure remains high-standard and is in line with current best practice, protecting downstream environments;
 - v. reduction of polluted leachate water; and
 - vi. the capacity to manage requirements of future urban growth and development.

f) Working with the National Capital Authority (NCA) and NSW councils.

Government Response: AGREED IN PRINCIPLE

Commissioner's comment:

Progress has been reported. Provide an update on actions achieved in 2019–20 and a reference to how each of the specific recommendations are being achieved in the table below, e.g. a specific committed action from a plan or strategy.

EPSDD UPDATE

Relevant strategy, plan or program

ACT Healthy Waterways Project Water Sensitive Urban Design (WSUD) Code and Guidelines



Actions completed in 2019-20 by EPSDD

The ACT Government's WSUD 2014 review report continues to guide the policy development, strategic planning and implementation. Relevant progress during 2019–20 in response to the review and with regard to other relevant projects include:

- The Territory plan has been updated to include the new Water Sensitive Urban Design Code (with a WSUD Guideline document). This code is being progressively applied and requires new housing developments to incorporate water saving measures.
- The Living Infrastructure Plan was publicly released in 2019 and provides strategic direction for urban design that enables economic prosperity, supports climate resilience, maintains natural amenity, and provides benefits

for community health and wellbeing. The Plan establishes a 30% target for the permeability of new hardened landscapes to improve the retention of water within the landscape. The Plan sets out actions that will be progressively implemented.

- Research and monitoring projects continued during 2019-20 under the Healthy Waterways program with an evaluation report planned for mid-2021. Research conducted within the Lake Tuggeranong catchment has provided significant new insights into pollution sources and societal behaviours that will inform the refinement of future strategies for WSUD. The Healthy Waterways Program has been extended to June 2021.
- A major feasibility study is on-going as part of the Murray–Darling Basin Water Efficiency Program to assess options for improving water efficiency for the Territory. The options being assessed include: WSUD, demand management, stormwater harvesting and irrigation of key urban parks. If found to be feasible, water savings could help contribute to environmental flows in the ACT and the broader Murray–Darling Basin in conjunction with ACT waterway improvement efforts.

ICCS UPDATE

Relevant strategy, plan or program ACT Healthy Waterways Project Water Sensitive Urban Design (WSUD) Code and Guidelines

HEAL

Actions completed in 2019-20 by TCCS

Recommendation b)

The ACT Municipal Infrastructure Standards for Stormwater 08 provide details regarding suitable Water Sensitive Urban Design (WSUD) systems, including wetlands and ponds. Site specific planning during pre-design planning includes assessment of the catchment area.

Recommendation d)

TCCS undertook an internal audit of operation and maintenance of stormwater assets, including a review of benchmarking against other similar jurisdictions.

Recommendation e)

- > The volume of debris removed from Gross Pollutant Traps (GPTs) during 2019-20 was approximately 4,000 cubic metres.
- Within recurrent funding constraints, GPTs are currently cleaned as effectively as possible, with GPTs protecting the lake being prioritised. TCCS is planning to undertake a GPT audit in 2020-21.
- Capital budget bids are submitted annually for augmentation and renewal of stormwater assets.

- GPT drainage of drying pads have been progressively improved to protect waterways from leachate water.
- > The Water Sensitive Urban Design Code stipulates requirements for water quality protection resulting from urban growth.

RECOMMENDATION 10

Rural Catchment Management

That the ACT and NSW governments and the National Capital Authority support planning and implementation of on-ground actions to reduce the potential for soil erosion in the upper Queanbeyan River, upper Molonglo River and Jerrabomberra Creek. In doing so active involvement of Palerang Council, the Molonglo Catchment Management Group, ACTEW and other Natural Resource Management groups should continue to be strongly encouraged and supported.

Government Response: Agree in principle

Commissioner's comment:

It is noted that support has been demonstrated through the ACT and Region Catchment Management Strategy and Implementation Plan. Provide an update on progress.

EPSDD

Relevant strategy, plan or program The ACT and Region Catchment Action Implementation Plan (2016–21) The ACT Water Strategy Plan



Actions completed in 2019-20 by EPSDD

- The ACT and Region Catchment Action Implementation Plan (2016–21) sets out 19 actions under their respective themes to address threats to catchment health. Soil health, and mitigating soil erosion at priority sites has been identified as a priority action under the Implementation Plan. The Coordination Group provides an important framework for collaborative actions conducted in partnership between multiple agencies and across regional/catchment boundaries.
- Under the ACT Water Resources Act 2007, the ACT Water Strategy Plan was developed to guide the management of water resources. Key to the outcomes of this plan is healthy catchments and water bodies. An outcome of the Implementation Plan was that Icon Water nominated to take the lead in developing catchment Actions for Clean Water (ACWA) plans, including the Upper Murrumbidgee, Googong and Cotter catchments. The Upper Murrumbidgee and Googong catchment ACWA plans have been completed

over previous years and the Cotter ACWA completed earlier this year. The three main catchments in the region have now been assessed as part of the ACT Government Water Strategy.

- A new Addendum to the Cotter Catchment Actions for Clean Water (ACWA) Plan has recently been released by Icon Water. This Addendum is concerned with the water quality risk associated with bushfire in the upper Cotter River catchment, and the impact of the 2020 Orroral Valley Fire in particular. It was provided to the ACT Parks and Conservation Service to influence recovery actions to protect local water supply.
- The Addendum supplements the Cotter Catchment ACWA Plan 2020 developed to guide efforts to stabilise and rectify erosion risk in the Cotter catchment. Recommended management interventions were prioritised based on the risks to water quality. Erosion risks were mapped for hillslope, gully, and channel sources.
- Icon Water has publicly released ACWA reports for all three drinking water catchments to assist with government and land manager prioritisation of natural resource management efforts consistent with our Source Water Protection Strategy.

RECOMMENDATION 11

That the ACT Government finalise and implement the Googong Foreshores Draft Plan of Management. The plan should include adequate monitoring, reporting and review, and mechanisms to ensure effective cooperation between ACTEW, NSW and ACT in the management of the Googong Foreshores.

Government Response: Agree in principle

Commissioner's comment:

This recommendation was made in 2012. In the 2016-17 Annual Report, it was reported that a review of the plan would be undertaken in 2018, should resources be available. Provide an update on progress.

EPSDD



Relevant strategy, plan or program Googong Foreshores Plan of Management

Actions completed in 2019-20 by EPSDD

The Googong Foreshores plan has been completed and the Minister has sent it to the Commonwealth. It is anticipated it can be placed on the EPSDD website prior to the end of 2020.

RECOMMENDATION 16

Management of other Recreational Waterways

A comprehensive assessment of environmental, social and economic value of key ACT lakes be undertaken and take into account current and predicted challenges to water quality. This assessment should inform:

- a review and update of Canberra's Urban Lakes and Ponds Plan of Management involving extensive community consultation and taking into account the long-term challenges to water quality in the urban catchments;
- b) the need for government investments in water quality;
- c) decisions regarding trials of appropriate in-lake and catchment management measures, with the results assessed from scientific (environmental), social and economic perspectives; and
- d) decisions regarding implementation of lake and catchment management options.

Government Response: Agree in principle

Commissioner's comment:

Progress has been reported. Provide an update on implementation of the Integrated Water Monitoring Plan.

EPSDD

Relevant strategy, plan or program

Canberra Urban Lakes and Ponds Plan of Management Healthy Waterways Program



Actions completed in 2019-20 by EPSDD

A review of the Canberra's Urban Lakes and Ponds Plan of Management (2001) was completed in 2019. An update draft plan of management was issued for public consultation which commenced in February 2020 and concluded on 11 September 2020.

- a. The Canberra Urban Lakes and Ponds Plan of Management has been reviewed and updated. The updated plan was informed by:
 - a 2016 report prepared for the ACT Government by the University of Canberra on the knowledge, attitudes and values of residents in regard to waterways, storm water issues and factors affecting water quality in the region; and

• outcomes from environmental research and monitoring conducted under the Healthy Waterways program.

The vision for the updated plan and key performance indicators reflects the multiple values identified through prior environmental assessments and community consultation.

b. Water quality issues remain an important management focus for the ACT Government.

The Healthy Waterways program has been extended to 2021 to continue with community education initiatives, finalise research and evaluation and management of wetland infrastructure.

Research conducted under the Healthy Waterways program, particularly in the Lake Tuggeranong catchment, has provided significant new insights into pollution sources and societal behaviours that will inform the refinement of future strategies and program design.

c. The ACT and Region Catchment Coordination Group, the ACT and Region Catchment Strategy, and the associated Implementation Plan (2016–21) continue to provide an effective framework for integrated catchment management. In 2019-20, the Coordination Group continued to promote evidence-based decision-making through their support for the data monitoring and collection initiative known as the ACT Data Lake. This initiative is ongoing.

RECOMMENDATION 17

The ACT, Australian, NSW and local governments establish a Burley Griffin-Molonglo-Queanbeyan catchment management agreement. Such an agreement should outline:

a) strategic objectives for the integrated and coordinated management of the Lake and catchments, to encompasses water quality, environmental flows, potable water, land use, wastewater, and future urban and climate change impacts on the catchment;

b) each party's responsibilities for water quality in the Lake and its catchments;

c) a long-term catchment planning framework; and

d) an evidence-based, adaptive, management work plan.

To avoid past challenges of multi-jurisdictional catchment management co-ordination, such an agreement should include a dedicated governance group with representation from all jurisdictions, a consistent and persistent mechanism to ensure implementation and accountability, and reporting requirements.

The National Capital Authority, as Lake manager, should in the first instance convene a meeting of relevant jurisdictional representatives to guide the above recommendations.

Government Response: Agree

Commissioner's comment:

Progress was reported on the priority actions in the ACT and Region Catchment Management Coordination Group 2017-18 Annual Report. Provide an update on implementation of these actions in 2019-20.

EPSDD



Relevant strategy, plan or program The ACT and Region Catchment Strategy

Actions completed in 2019–20 by EPSDD

ACT and Region Catchment Coordination Group, the ACT and Region Catchment Strategy and the associated Implementation Plan (2016–21) continues to provide an effective framework for integrated catchment management. The Coordination Group identified eight priority actions from the Implementation Plan as a focus for its work in 2019–20. Progress against these eight actions include:

- > establishing an inter-jurisdictional investment and resourcing framework;
- continued support of the ACT Healthy Waterway Data Lake program to support evidence- based decision-making;
- > continued to support community-based programs and water education;
- finalise an integrated catchment emergency response plan that was used to guide post-bushfire recovery efforts within the ACT region; and
- work continues to develop a sub-regional supply strategy and an integrated planning approach for urban expansion.

Report on the Canberra Nature Park (nature reserves), Molonglo River Corridor (nature reserves) and Googong Foreshores Investigation – October 2011

Government's Response and Directorate updates

RECOMMENDATION 4.2

Reviewing the Canberra Nature Park Management Plan 1999 as mandated under the Planning and Development Act 2007 and in so doing include:

- > nature reserves added to the reserve system since 1999,
- > addresses categorising nature reserves (recommendation 3.4),
- polices to address current issues and those developed since 1999, particularly,
- > Action Plan No. 27 ACT Lowland Woodland Conservation Strategy,
- Action Plan No. 28 ACT Lowland Native Grassland Conservation Strategy,
- Action Plan. No 29 ACT Aquatic Species and Riparian Zone Conservation Strategy, and
- consideration of climate change (including Impacts of Climate on the Canberra Nature Park: Risks and responses by Dr Bob Webb – Appendix E) and connectivity (including Ecological Connectivity for Climate Change in the ACT and surrounding region by Manning et al.).

Government Response: Agreed

Commissioner's comment:

Provide an update on the review of the Canberra Nature Park Plan of Management.

EPSDD



Relevant strategy, plan or program Canberra Nature Park Reserve Management Plan

Actions completed in 2019-20 by EPSDD

- A draft Canberra Nature Park Reserve Management Plan was prepared following a review of the 1999 Canberra Nature Park Management Plan, and released for public comment in 2019.
- > The Canberra Nature Park Reserve Management Plan will be finalised in the first quarter 2021.
- > The draft plan includes:
 - nature reserves added to the reserve system since 1999
 - IUCN classifications for all reserves in Canberra Nature Park (CNP); the Conservator of Flora and Fauna has assigned category IV – habitat/ species management area with a primary objective to maintain, conserve and restore species and habitats. The new draft CNP plan is consistent with the goals and objectives of Category IV
 - policies that address current issues and those developed since 1999 including reference to those in three new conservation Strategies: ACT Native Woodland Conservation Strategy and Action Plans; ACT Native Grassland Conservation Strategy and action plans; and the ACT Aquatic and Riparian Conservation Strategy and action plans.
 - consideration of climate change and connectivity.
- Further information on the review and draft plan are at: <u>https://www.yoursay.</u> act.gov.au/act-parks/canberra-nature-park

Complaint investigations and investigation recommendations

There were no active complaint investigations in 2019–20. No new matters have been subject to investigation following inquiry.

B2.3.3 RECOMMENDATIONS STILL TO BE IMPLEMENTED

This section relates to the statutory functions under s20 (c) of the Act and must include details of 'any recommendation in a report mentioned in paragraph (b) that the Commissioner believes is still to be implemented or fully implemented'.

Having reviewed the answers provided by directorates and agencies, there is nothing to be reported under this section that has not yet been outlined in this report.

B2.4 Activities Under the Objects of the Act

This section relates to the objects of the Act under s2B (a) – (e) in the Act.

B2.4.1 SUMMARY OF THE OBJECTS OF THE ACT

The objects of the Act are to ensure regular and consistent reporting on matters relating to the condition and management of the environment and progress towards ecologically sustainable development in the Territory. This is outlined in B2.4.2, and B2.4.3 below.

B2.4.2 ADVOCACY AND COMMUNITY ENGAGEMENT

Forms of direct engagement included meetings with the Commissioner, presentations, launches, networking events, seminars and project support with a wide range of individuals and groups. Presentations from the Commissioner and other staff at the office at conferences, seminars and forums are outlined in **Appendix 1**.

Events which involve the office staff and the Commissioner are routinely posted on social media and statistical insights are monitored to determine which issues are of interest to the public.

The aim of using social media in the office is to reach a broader audience and export the message of ecologically sustainable development.

The Commissioner is actively building a social media profile to strategically promote ecologically sustainable development. A communications review was undertaken towards the end of the 2019-20 year to guide this. The review recommended the appointment of a dedicated communications resource within the office. This resource has been recruited. Other recommendations will be considered in the 2020-21 reporting year. All members of the office will continue to be involved in promoting ecologically sustainable development across social media and community engagement platforms.

The office's <u>Facebook profile</u> continues to grow, increasing by approximately 300 followers over the reporting period.

The office's Twitter account, <u>@EnvComm_ACT</u> had over 1,600 followers at 30 June 2020.

Women in Climate and Health event

In February 2020 the office hosted Women in Climate and Health, a panel discussion and free networking breakfast to bring together women in career and community to discuss Canberra's horror summer and next steps. Professor Kate Auty provided an address on the climate emergency, environmental challenges and the important role of women in the lead up to the release of the ACT State of the Environment Report 2019.

Other speakers included:

- > Dr Sophie Lewis, 2019 ACT Scientist of the Year, Climate Scientist, now Commissioner
- > Dr Arnagretta Hunter, Cardiologist and Clinical Senior Lecturer
- Dr Bec Colvin, Environment, Resources & Development, Crawford School of Public Policy
- > Jo Mummery, Research Fellow and PhD Candidate, Climate Change Policy
- > Dr Aparna Lal, Research School of Population Health



Women in Climate and Health event, February 2020. Source: OCSE

Messages of Appreciation

Feedback provided on an ad hoc basis gives an indication of the work the Commissioner has been undertaking with the community and individuals:

"Thank you very much for speaking at our public lecture and for participating in and speaking at our workshop this week. I was very glad to have your perspective to balance the technological focus of many of the other talks."

- ANU College of Engineering & Computer Science "Is it a bird? Is it a plane? No – it's a group of wonderful women helping spread the message that cycling is great! Thank you all so much for giving up your time this morning and being such fabulous sports."

- Pedal Power ACT

"Thank you for your stimulating presentation on the new innovative strategies you and your Office are taking for reporting on the State of the Environment for the ACT.

We were so pleased to have you talk, we appreciate the thought and time that goes into presentations and we are very grateful. Your talk was thoroughly enjoyed by the audience, they were fully engaged, your enthusiasm for using case studies of research and activities of Canberra scientists and the community were of particular interest for the audience."

– Thursday Talks Committee of the Australian National Botanical Gardens "Thank you for the excellent presentation on ACT and the broader water issues that was made during our recent visit to Canberra. The content and messages were not only clear and concise, but they were extremely appropriate in the emerging markets we work in across the globe.

We are very appreciative of the time and effort that you and your colleagues spent preparing for these valuable inputs and there are clearly lessons and key findings that we have already shared with the leadership team of the Water Global Practice."

– Global Water Security and Sanitation Partnership Program Council, and the World Bank's Water Global Practice

B2.4.3 SUBMISSIONS

The office comments and provides input into ACT Government draft documents by specific invitation or through the public consultation process (often advertised via <u>Your Say on the ACT</u> <u>Government's website</u>).

Submissions to public consultations are made publicly available on the Commissioner's website. This is not the case with submissions by invitation.

Submission	Recommendations	Submitted
Snowy 2.0	Broad recommendations related to:	6 November 2019
	climate change resilience in aquatic species,	
	 best practice environmental flow management and outcomes, 	
	 screens to reduce risks for pest transfer, and 	
	appropriate Indigenous recognition and representation.	
Independent	Broad recommendations related to:	15 April 2020
review of the EPBC Act	 Vulnerable species – consideration should be given to species and communities listed as vulnerable, rather than just those listed as endangered. 	
	 Monitoring and assessment – a formal and mandatory approach to monitoring and assessment needs to be included as part of the ecologically sustainable development process where Matters of Environmental Significance are concerned. 	
	 Climate change – separate consideration of climate change, encompassing all potential impacts of development on climate change and its management. This includes increased emissions from land use change and any long-term ongoing resource use. 	
	 High value ecosystems – protection of high value ecosystems should be included, not just endangered communities. 	
	 Significant resource reliance – land use changes requiring significant ongoing resource use needs to be specifically noted. This includes increased water and energy use. 	
	 Review of objects – objects should be regularly reviewed to ensure relevance and to enable rapid response to new significant matters. 	

Table 3: Summary of Submissions to Public Consultation Matters in 2019-20

B2.5 Information in Agency Annual Reports

This section relates to s23 in the Act.

All agencies responded to the Commissioner's requests for information relating to State of the Environment Reporting within a reasonable time.

B3 SCRUTINY

There were no requests for the Commissioner to report on progress during the reporting year in relation to undertakings made in reports produced by entities charged with responsibility for scrutiny, including the Auditor-General, Ombudsman and Legislative Assembly Committees.

B4 RISK MANAGEMENT

Risks are considered and addressed appropriately in all activities of the office. Advice is sought on procurement for major commissions on an as-needs basis. Risk is discussed at staff meetings and a risk register has been developed for the office.

B5 INTERNAL AUDIT

According to the ACT Government Internal Audit Framework "in the case of a small agency with no board, the governing body may elect not to delegate their 'conformance' responsibilities and functions to a committee." This means that the Commissioner has the responsibility to delegate auditing responsibilities.

Staff in the office are aware that the EPSDD's Audit Committee is available for assistance if required.

B6 FRAUD PREVENTION

Information on the office's fraud prevention processes and any reports or allegations are outlined in the EPSDD 2019-20 Annual Report.

B7 FREEDOM OF INFORMATION

Section 96 of the Freedom of Information Act (FOI Act) sets out the reporting requirements for agencies in relation to the operation of the FOI Act during the financial year.

The office does not have anything to report under section 96 (3) of the FOI Act for the 2019-20 financial year as there were no applications received nor managed under the FOI Act.

Submitting an application

The Environment, Planning and Sustainable Development Directorate (EPSDD) manages FOI Act applications on behalf of the Commissioner for Sustainability and the Environment.

Subject to the FOI Act, every person has an enforceable right to obtain access to government information.

We can assist you to locate the information you are seeking. Please contact the EPSDD Information and Knowledge Management Team on 13 22 81 or

email EPSDFOI@act.gov.au.

For more information on making an access application, visit: <u>https://www.environment.act.gov.au/about/access-government-information</u>

Access applications are recorded in a disclosure log, as required by the FOI Act. To view the disclosure log for the Environment, Planning and Sustainable Development Portfolio (which includes the Office of the Commissioner for Sustainability and the Environment), visit: <u>https://www.environment.act.gov.au/about/access-government-information/disclosure-log</u>

B8 WORK HEALTH AND SAFETY

The office is committed to providing a safe and healthy workplace and maintaining the health, safety and welfare of its employees. Occupational health and safety are managed in accordance with the provisions of the Work Health and Safety Act 2011.

During 2019-20 the Commissioner did not receive any notices under the Act, and there were no notifiable incidents. The Commissioner does not pay a first-tier worker's compensation premium.

Three stand-up desks are available in the office to aid staff health management. Workstation assessments are available through EPSDD and have been utilised by staff.

The office has access to EPSDD e-bikes and staff walk to meetings if the distance is appropriate.

Staff are encouraged to bring plants into the office to enhance the quality of the air, as well as improving their mental health.

The office's workplace health and safety policy is included in the EPSDD 2019-20 Annual Report. Staff are also encouraged to take part in relevant initiatives run by EPSDD.

B9 HUMAN RESOURCES MANAGEMENT

Further information to that provided in this section can be found in the EPSDD 2019-20 Annual Report.

B9.1 Workforce Profile

B9.1.1 FULL-TIME EQUIVALENT (FTE) HEADCOUNT AND DEMOGRAPHICS

As noted in Section B1.5, while our standard staffing number is six FTEs, at different times variations can occur in response to changing needs and situations.

This is reflected in the following tables, based on the number of paid staff on the last pay of the financial year, being 24 June 2020.

*Please note as at 24 June 2020 one FTE senior officer was on maternity leave.

Table 4: FTE by gender and head count

Headcount Total	FTE		Female	Male	Total
6	5.4	FTE by gender	4.4	1	5.4
6	5.4	Headcount by gender	5	1	6
	·	% of workforce	83.3%	16.7%	100.0%

Table 5: FTE by classification

Classification group	Female	Male	Total
Administrative officers	1	0	1
Senior officers	3	1	4
Statutory office holders	1	0	1
TOTAL	5	1	6

Table 6: Headcount by employment category and average years of service

Employment category	Female	Male	Total
Casual	0	0	0
Permanent full-time	3	1	4
Permanent part-time	1	0	1
Temporary full-time	1	0	1
Temporary part-time	0	0	0
TOTAL	5	1	6
Average years of service	5.9	2.2	5.3

Table 7: Headcount by diversity group

	Headcount	% of total staff
Aboriginal and/or Torres Strait Islander	1	16.7%
Culturally and Linguistically Diverse	0	0.0%
People with a disability	0	0.0%

Table 8: Headcount by age group

Age group	Female	Male	Total
Under 25	0	0	0
25–34	1	0	1
35–44	3	0	3
45–54	0	1	1
55 and over	1	0	1

Table 9: Permanent recruitment and separation rates

Classification Group	Recruitment rate	Separation rate
TOTAL	21.3%	0.0%

B9.2 Attraction and Retention Incentives (ARins)

The office had no ARins arrangements during the 2019-20 reporting year.

B9.3 Participation in Learning and Development Programs

The office is committed to strengthening workforce and organisational capacity through building skills and capabilities. This learning and development is guided by individual performance and development plans and supported through our strategic plan.

Diversity and inclusion training is strongly encouraged.

Mentoring options have been discussed with all staff. The office has engaged in mentoring external staff, university students, and early career graduate researchers. The office has accepted placements from ANU and University of Canberra undergraduate students in environmental science related studies and provided local content to several course assessments.

In addition to formal training sessions, office staff attended seminars and forums on various environment and sustainability topics including:

- > adaptation to and mitigation of climate change,
- international and sub-national reporting on environmentaleconomic accounting,
- > biodiversity and ecosystems research,
- > heritage, planning and development,
- > water and catchment management,
- renewable energy,
- > active transport and light rail,
- > State of the Environment Reporting, and
- > communicating environment and sustainability issues.

B9.4 Future Learning and Development Areas Identified as Priorities

Learning and development priorities for all office staff are identified within individual performance plans and in our strategic plan.

B9.5 Whole of Government Learning and Development Initiatives

Staff are encouraged to participate in Whole of Government Learning and Development Opportunities.

The office actively participates in the EPSDD Graduate Program and has previously benefitted from hosting a number of graduate placements.

B9.6 Participation in Study Assistance Program and ACTPS Training Calendar

No staff members participated in the study assistance program during 2019-20.

All staff attended mandatory sessions and took up other ACTPS advertised training opportunities. Details of learning and development programs offered to all ACT Government staff, including the office staff, can be found in the EPSDD 2019-20 Annual Report.

B10 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

B10.1 Office Accommodation

The office is located at the Canberra Institute of Technology (CIT) campus in Bruce.

At this location, the office occupies 137.5 square metres of floor space (not including shared access to kitchens and public amenities for all staff based on a proportion of the tenancy floor space). Office staff also have access to use Block K – the CIT Sustainable Skills Training Hub.

Staff and the Commissioner have access to free car parking and bicycle parking at CIT Bruce.

B10.2 Resource Management Planning

The office is covered under the EPSDD Resource Management Plan.

Specifically, the Resource Management Plan refers to the office:

'Due to the proportionally small impact of those 6 FTE in their workplace, the Key Performance Indicator for the office is to maintain its full Actsmart Business Accreditation.'

The office is accredited as an Actsmart business and continues to participate in the program. Accreditation for this reporting year was renewed in February 2020.

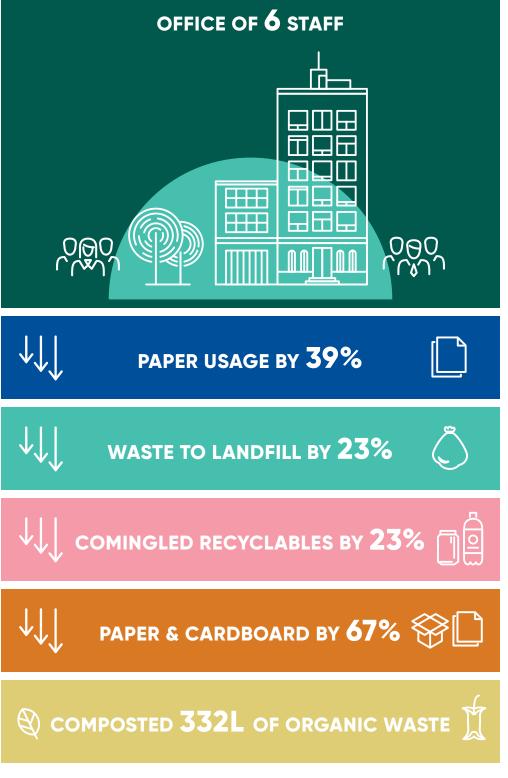


The office ensures that its facilities are appropriate to maintain independence from relevant Government activities.

A range of strategies are in place to assist in achieving more sustainable resource management, including:

- continuing to work towards becoming a paperless office by using electronic data management via Objective Electronic Data Management software for filing and to minimise paper and cartridge use,
- circulating electronic versions of reports for comment rather than hard copies, as well as developing interactive reports online to reduce the need to print reports,
- > collecting household batteries in the office for recycling,
- striving for sustainable procurement through approved tendering assessment processes,
- > using 100% recycled paper for printing,
- > maintaining our own system for composting organic waste,
- > collecting soft plastic to recycle through the REDcycle program,
- having three staff members trained in the use of the ACT Government Enterprise Sustainability Platform,
- > Using staff's own coffee cups and not disposable ones,
- encouraging staff to ride, carpool or use MyWay bus passes to attend off-site meetings and events where feasible, and
- working remotely as appropriate to reduce transport emissions and in response to COVID-19.

OFFICE WASTE TRENDS 2018-2020



Note: Factors Influencing Data

Small staff numbers and resource use result in larger percentage changes relative to small volumes. Measurement of waste is estimated.

Table 10: Sustainable development performance – current and previous
financial year

Indicator as at 30 June 2019	Unit	Previous FY 2018–19	Current FY 2019–20	% change
Casual	·		·	
Agency staff	FTE	6	6	See notes
Workplace floor area	Area (m2)	137.5	137.5	for this column
Stationary energy usage				
Electricity use	Kilowatt hours	9359.74	7753.80	
Natural gas use	Megajoules	36,466.5	33,349.6	
Diesel	Kilolitres	0	0	
Transport fuel usage				
Electric vehicles	Number	0	0	
Hybrid vehicles	Number	0	0	
Other vehicles (not electric or hybrid)	Number	0	0	
Total number of vehicles	Number	0	0	
Total kilometres travelled	Kilometres	0	0	
Fuel use – petrol	Kilolitres	0	0	
Fuel use – diesel	Kilolitres	0	0	
Fuel use – Liquid Petroleum Gas (LPG)	Kilolitres	0	0	
Fuel use – Compressed Natural Gas (CNG)	Cubic Metres (Cm3)	0	0	
Water usage				
Water use	Kilolitres	81.07	56.69	
Resource efficiency and waste				
Reams of paper purchased	Reams	41 ª	25 ª	
Recycled content of paper purchased	Percentage	100	100	

Indicator as at 30 June 2019	Unit	Previous FY 2018–19	Current FY 2019–20	% change
Waste to landfill	Litres	1050 ^b	808 6	See notes for this
Co-mingled material recycled	Litres	900 °	692 °	column
Paper and cardboard recycled (including secure paper)	Litres	1160 d	380 ^d	
Organic material recycled	Litres	342 ^e	332 ^e	
Greenhouse gas emissions ^m				
Emissions from transport	Tonnes CO ₂ -e	0	0	
Scope 1 emissions	Tonnes CO ₂ -e	1.88	1.72	
Scope 2 emissions	Tonnes CO ₂ -e	2.39	0	
Total emissions Tonnes	Tonnes CO ₂ -e	4.27	1.72	

Explanatory notes for Table 10

- a. 35 reams of A4, 1 ream of A3 were purchased.
- b. The figure for 2019–20 is estimated based on collection from CIT Bruce of a 15L bin filled and approximately once a week. Figure adjusted to reflect 12-week period of working remotely due to COVID-19 restrictions.
- c. Figures are calculated as pro rata allocation to the office for number of bins collected. Figure adjusted to reflect 12-week period of working remotely due to COVID-19 restrictions.
- d. The figure for 2019-20 was calculated by adding secure paper (240L emptied once) and unsecure paper and cardboard (240L bin emptied twice).
- e. This figure was calculated by adding up the recorded volume of food taken to the compost each week as a percentage of the 7L bin in our kitchen at CIT Bruce.

Calculating a percentage change between 2018–19 and 2019–20 does not provide a meaningful comparison. Most figures are estimates based on data for whole buildings or floors. While floor area has been used to calculate our contribution or usage, the office is a very small unit and has been accommodated within a floor shared with other government units whose tenancy fluctuated throughout the financial year. Please note that some data reported for FY 2018-19 in the table above may differ slightly from figures reported in the 2018-19 Annual Report. These are due to updates to agency occupancy and historical consumption data, and annual adjustments to ACT specific electricity emissions factors. Where actual data is not available, the Enterprise Sustainability Platform provides estimations using an accruals function. Accruals are calculated from the average annual daily consumption of the most current 12-month period applied for the number of days of missing data.

Emissions reported for stationary energy and transport fuels include Scope 1 and Scope 2 emissions only. Scope 1 are direct emissions from sources owned and operated by the government including: emissions from transport fuel and natural gas use. Scope 2 are indirect emissions from mains electricity.

Emission factors used to calculate natural gas and fleet fuel are based on the latest National Greenhouse Accounts factors. Greenhouse gas emissions for electricity consumption have been calculated using the following emissions factors based on the latest ACT Electricity Emissions Factor Report released in 2020:

- a factor of 0.255 kilogram (kg) CO2-e / kilowatt hour (kWh) or 0.255 tonne (t) CO2-e/megawatt hour (MWh) has been used to calculate electricity emissions (Scope 2) for the 2018-19 period. It is based on actual historical data and is a retrospective adjustment of the original 0.507 factor (Scope 2) used for 2017-18 annual reporting; and
- The ACT met it's 100% renewable electricity target in 2019-20. This is the first year that the ACT Government will be reporting zero greenhouse gas emissions from electricity use. The ACT Government is committed to maintaining 100% renewable electricity supply beyond 2020.

Treatment of plug-in hybrids

For the purposes of annual reporting plug-in hybrids has been treated as electric vehicles. A plug-in hybrid electric vehicle (also known as a range-extended vehicle) is fuelled by electricity as well as having either a petrol or diesel tank to extend the range of the vehicle for long trips. These vehicles can be run either on electricity or fuel, but are considered to be zero emissions vehicles as it is most likely that the vehicle will be run on electricity for the majority of trips (due to lower cost for charging than re-fuelling).

SECTION C

Financial Management Reporting

C1 FINANCIAL MANAGEMENT ANALYSIS

Further information on the office's financial management is covered in the EPSDD 2019-20 Annual Report.

C2 FINANCIAL STATEMENTS

The ACT Government appropriation for the office in 2019-20 was \$2,010,000.

The financial transactions for the office are formally reported in the consolidated financial statements of the EPSDD 2019-20 Annual Report as part of 'Expenses on Behalf of the Territory'.

C3 CAPITAL WORKS

The office has no capital works projects.

C4 ASSET MANAGEMENT

The office does not own or manage any major assets but maintains a portable asset register.

C5 GOVERNMENT CONTRACTING

C5.1 Procurement Principles and Processes

Consistent with the provisions governing procurements up to \$200,000, the office continues to work with ACT Procurement to complete procurement actions where necessary.

C5.2 External Sources of Labour and Services: Individual Contracts Exceeding \$25,000

During 2019-20 the office initiated no contracts exceeding \$25,000.

C6 STATEMENT OF PERFORMANCE

The statement of performance for the office is included in the EPSDD 2019-20 Annual Report as 'Expenses on Behalf of the Territory'.



SECTION D

Appendices

APPENDIX 1: STAFF PRESENTING AT CONFERENCES, SEMINARS AND FORUMS

Date	Type of Activity	Name of Conference	Provider	Attendee
17-Jul-19	Conference	Women in Environment and Sustainability Leadership Summit	EIANZ	Kate Auty
		Panel Member: Empower the Next Generation of Leaders		
24-Jul-19	Panel	2040 screening and panel discussion	ANU Climate Change Institute	Kate Auty
30-Jul-19	Presentation	Women and Environmental Law: Can Law Provide the Protection We Need	WELA	Kate Auty
27-Aug-19	Conference	EIANZ National Biodiversity Offsets Conference – Reporting on Strategic Assessment Audits and the use of offsets in the ACT	EIANZ	Kate Auty
03-Sep- 19	Panel	Women's cycling culture in Canberra – what can we all do to get more women cycling every day	Transport Canberra and City Services	Kate Auty
13-Sep-19	Presentation	Life and Death in a City of Trees Synthesis Workshop	ANU School of Art & Design	Kate Auty
01-Oct-19	Lecture	ANU ENVS3020/6307 – Climate change advocacy and communities	ANU	Kate Auty
03-Oct-19	Presentation	Thursday Talk in the Botanic Gardens	Australian National Botanic Gardens Friends	Kate Auty

Date	Type of Activity	Name of Conference	Provider	Attendee
16-Oct-19	Panel	Policy uses of Natural Capital Accounts – the UK experience and what it might mean for Australia	Dr Michael Vardon, ANU	Kate Auty
17-Oct-19	Presentation	Conserving the natural heritage of the ACT and talking about the SoER	National Trust of Australia	Kate Auty
25-Oct-19	Presentation	Northeast Victoria Indigenous Cultural Burning and Water Reporting	North East Landcare, Beechworth Museum	Kate Auty
05-Nov-19	Presentation	CCE Course Living with Climate Change: changing to a zero carbon world	ANU	Kate Auty
12-Nov-19	Panel	Lancet Countdown on Health and Climate Change 2019 Report Launch	ANU	Kate Auty
19-Nov-19	Panel	Environmental Performance in Construction (EPiC) Launch	University of Melbourne	Kate Auty
20-Nov-19	Presentation and Panel	Future Earth — Circular Economy	Future Earth	Kirilly Dickson
21-Nov-19	Presentation	World Bank delegation	DFAT	Caitlin Roy
27-Nov-19	Launch	The National Parks Conservation Trust – website launch	National Parks Conservation Trust	Kate Auty
02-Dec-19	Presentation	Indian Myna Action Group AGM	Canberra Indian Myna Action Group	Kate Auty
04-Dec-19	Panel	Future Earth - Urban panel, State of Australian Cities Conference	Future Earth	Kate Auty
06-Feb-20	Forum	Women in Climate and Health	OCSE	Kate Auty
13-Feb-20	Presentation	Coalition of Major Participation Sports - Sport and Climate Change	Coalition of Major Participation Sports	Kate Auty, Caitlin Roy
17-Feb-20	Lecture	Imagining Australia with 100% renewable energy: how do we get there?	ANU	Kate Auty

Date	Type of Activity	Name of Conference	Provider	Attendee
18-19- Feb-20	Workshop	100% Renewable Energy, Emissions Reductions and Exports for Australia	ANU	Kate Auty
20-Feb-20	Presentation	National Parks Association ACT Presentation re 2019 SoER	National Parks Association ACT	Kate Auty
19-Mar-20	Presentation and Panel	2020 Catchment Forum	Water Research Australia	Caitlin Roy
07-Apr-20	Presentation	Climate change and religion discussion	Colloquy	Caitlin Roy
05-May-20	Interview	Discussion on new role as Commissioner	The RiotACT	Sophie Lewis
05-May-20	Presentation	Goulburn Valley Water Board Committee meeting	Goulburn Valley Water Board	Sophie Lewis
19-May-20	Discussion	Children and the environment discussion – AAEE	AAEE	Sophie Lewis, Sean Grimes
25-May-20	Interview	Discussion about smoke impacts on health	The RiotACT	Sophie Lewis
27-May-20	Introduction	ACT Landcare Board Meeting – introduction to members	ACT Landcare	Sophie Lewis
05-Jun-20	Panel	Ginninderry Panel Session on 2040 – Q&A and follow-up discussion	Ginninderry	Sophie Lewis
10-Jun-20	Panel	Leadership in ACTion – Leading under pressure	UNSW	Sophie Lewis
11-Jun-20	Interactive Teams Mtg	Q&A session with ACT Government	OCSE	Sophie Lewis
16-Jun-20	Panel	Thinking in Circles: Canberra's Circular Economy Forum	OCSE and Salon Canberra	Sophie Lewis
18-Jun-20	Facebook Live Event	Q&A session with community in morning and afternoon	OCSE	Sophie Lewis

APPENDIX 2: COMPLIANCE STATEMENT

The 2019-20 Commissioner for Sustainability and the Environment Annual Report must comply with the Annual Report Directions (the Directions) under section 8 of the Annual Reports Act. The Directions are found on the ACT Legislation Register: <u>www.legislation.act.gov.au</u>

The Compliance Statement indicates the subsections, under Parts 1 to 5 of the Directions, that are applicable to the Commissioner for Sustainability and the Environment and the location of information that satisfies these requirements:

Part 1: Directions Overview

The requirements under Part 1 of the Directions relate to the purpose, timing and distribution, and record keeping of annual reports. The 2019-20 Commissioner for Sustainability and the Environment Annual Report complies with all subsections of Part 1 under the Directions.

To meet section 15 Feedback, Part 1 of the Directions, contact details for the Commissioner for Sustainability and the Environment are provided within the 2019–20 Commissioner for Sustainability and the Environment Annual Report to provide readers with the opportunity to provide feedback.

Part 2: Directorate and Public Sector Body Annual Report Requirements

The requirements within Part 2 of the Directions are mandatory for all reporting entities and the Commissioner for Sustainability and the Environment complies with all subsections. The information that satisfies the requirements of Part 2 is found in the 2019-20 Commissioner for Sustainability and the Environment Annual Report as follows:

- > Transmittal Certificate, see Section A, page iii,
- Organisational Overview and Performance, inclusive of all subsections, see Section B, pages 1–36, and
- Financial Management Reporting, inclusive of all subsections, see Section C, pages 37–38.

Part 3: Reporting by Exception

The Commissioner for Sustainability and the Environment has nil information to report by exception under Part 3 of the Directions for the 2019–20 reporting year.

Part 4: Directorate and Public Sector Body Specific Annual Report Requirements

The subsections of Part 4 of the 2019 Directions are applicable to the Commissioner for Sustainability and the Environment and can be found within the 2019-20 Commissioner for Sustainability and the Environment Annual Report:

> Ministerial and Director-General Directions, see Section B2, pages 14-28.

Part 5: Whole of Government Annual Reporting

All subsections of Part 5 of the Directions apply to the Commissioner for Sustainability and the Environment. Consistent with the Directions, the information satisfying these requirements is reported in the one place for all ACT Public Service directorates, as follows:

- Bushfire Risk Management, see the annual report of the Justice and Community Safety Directorate;
- Human Rights, see the annual report of the Justice and Community Safety Directorate;
- Legal Services Directions, see the annual report of the Justice and Community Safety Directorate
- Public Sector Standards and Workforce Profile, see the annual State of the Service Report; and
- > Territory Records, see the annual report of Chief Minister, Treasury and Economic, Development Directorate.

ACT Public Service Directorate annual reports are found at the following web address: http://www.cmd.act.gov.au/open_government/report/annual_reports



OFFICE OF THE COMMISSIONER FOR SUSTAINABILITY AND THE ENVIRONMENT