



ACT
Government

Environment and Planning

ACT Nature Conservation Strategy 2013–23

Implementation Plan 1 (2013–2018)



© Australian Capital Territory, Canberra 2013

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

Director-General, Environment and Planning Directorate, ACT Government, GPO Box 158, Canberra ACT 2601.

Telephone: 02 6207 1923

Website: www.environment.act.gov.au

Printed on recycled paper

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 Canberra Connect on 13 22 81 or email the Environment and Planning Directorate at epd_communications@act.gov.au

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 Canberra Connect on 13 22 81.

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

For more information on these services visit <http://www.relayservice.com.au>



Contents

Introduction	2
How will the NCS be implemented?	2
How will Implementation Plan 1 be measured and reported?	3
Strategy 1- Enhance habitat connectivity and ecosystem function	4
Strategy 2- Manage threats to biodiversity	5
Strategy 3- Protect species and ecological communities	7
Strategy 4- Enhance biodiversity value of urban areas	9
Strategy 5- Strengthen community engagement	11
Responsibilities for measuring performance indicators	13
Appendix 1	15
Summary of commitments for the Nature Conservation Strategy (2013-2023)	15
Appendix 2 - Roles of ACT Government agencies	17
1. Environment and Planning Directorate (EPD)	17
2. Territory and Municipal Services Directorate (TAMSD)	17
3. Justice and Community Safety Directorate (JACS)	18



Introduction

The Minister for the Environment and Sustainable Development, Mr Simon Corbell MLA, released the ACT Nature Conservation Strategy 2013–2023 (the NCS) and it commenced on 14 November 2013. The NCS outlines a vision for nature conservation in the ACT over the next decade, to achieve *'biodiversity rich, resilient landscapes stretching from the inner city to the mountains, where well functioning ecosystems can meet the needs of people and the environment'*. The NCS is guided by the vision and five 'Strategic Approaches' including:

1. Enhance habitat connectivity and ecosystem function
2. Manage threats to biodiversity
3. Protect species and ecological communities
4. Enhance biodiversity value of urban areas
5. Strengthen community engagement

The NCS proposes 32 actions to achieve the strategy's seven targets. The overall strategic framework for the NCS is summarised at Appendix 1.

How will the NCS be implemented?

The NCS will be guided by two implementation plans, divided into five year periods:

1. Implementation Plan 1 (2013–2018)
2. Implementation Plan 2 (2019–2023)

This first implementation plan has been developed by the ACT Government and provides a road map of the most significant milestones required to deliver the NCS actions and targets during the period 2013–2018.

Implementation of actions will be dependent upon the availability of funding. Relevant ACT Government Directorates will focus efforts to secure resources for actions that demonstrate cost effectiveness in terms of responding to critical conservation priorities, and achieving the greatest positive conservation impacts. Activities which are currently unfunded remain future options for further consideration by Government and other interested partners. If funding is not available, this may require activities to be re-scoped, and undertaken within existing resources where possible.

The plan also outlines the roles of ACT Government agencies in meeting the objectives of the NCS, allocates responsibilities to lead ACT agencies for achievement of individual actions, and sets timeframes to enable progress of the actions to be monitored and assessed.

More detailed information about ACT agencies is included in Appendix 2. Acronyms for lead agencies used in the main table of the implementation plan include:

1. **ACT Environment and Planning Directorate (EPD)**
 - » NCP - Nature Conservation Policy
 - » SCC - Sustainability and Climate Change
 - » SP- Strategic Planning



- » CAW- Catchments and Water

2. **Territory and Municipal Services Directorate (TAMSD)**

- » CS - City Services

- » PaCS - Parks and Conservation Service (PaCS)

3. **Justice and Community Safety Directorate (JACS)**

- » ESA - Emergency Services Agency

The second implementation plan will be developed by the end of 2018 following a review of the first plan by the ACT Conservator of Flora and Fauna, and in consideration of the 2015 State of the Environment (SoE) Report by the Commissioner for Sustainability and the Environment, stakeholder interest, and availability of funding. Public and expert input and review will also be taken into consideration for the development of the second implementation plan.

How will Implementation Plan 1 be measured and reported?

Milestones in the implementation plan will form the basis for assessing annual progress. Progress in implementing the Strategy will be reported in each Environment and Planning Directorate (EPD) Annual Report.

The NCS is guided by a monitoring and review protocol, including seven targets and 14 indicators. Roles and responsibilities for collecting data for the 14 indicators have been assigned through the implementation plan. Data will be provided to the Commissioner for Sustainability and Environment to be reported through four yearly State of the Environment reporting. Additional reporting will occur through the EPD Annual Report, focusing on progress against achievement of Actions.



Strategy 1 - Enhance habitat connectivity and ecosystem function

Actions	Strategy 1 – Milestones and Timeframes	Lead
Action 1.1 Develop baseline information on landscape function	• Soil mapping (1:100,000) completed (2015) ¹ . Vegetation	NCP
	• mapping completed for the Kowen plateau, Murrumbidgee Valley, and Namadgi National Park (1:25,000) by 2015 ¹	NCP
	• Native vegetation condition indicators to be agreed nationally by 2014. Monitoring systems in place (2016) ¹ . These will build on existing monitoring programs and expand to new representative vegetation communities as funding becomes available	NCP
	• Migratory Species Action Plan finalised (2014) ¹	NCP
	• Habitat connectivity mapping for wildlife incorporated into connectivity GIS layer on ACTMAPi (2014) ¹	NCP
	• Hydrogeological Landscape Framework completed (2017) ²	NCP
	• Additional funding will be sought to finalise vegetation mapping of urban areas east of the Murrumbidgee.	NCP
Action 1.2 Undertake fine scale planning for habitat connectivity	• Fine scale planning for grassy woodland ecosystems completed (2013) ¹	NCP/PaCS
	• Further planning will be informed by recommendations from published plans and reports (ongoing), and new environmental data sets as they become available ¹	NCP
	• Implement key actions from the Murrumbidgee Demonstration Reach Implementation Plan, depending upon funding ² (see Action 2.5)	NCP/PaCS
Action 1.3 Enhance regional connectivity	• Regional Corridor Links identified and agreed with regional partners by 2013 ¹	NCP
	• Collaborate with partners to submit funding bids to the Commonwealth Biodiversity Fund for on ground restoration activities to support regional corridors (2013 – 2017) ¹	NCP
Action 1.4 Assess conservation investment opportunities across public and privately managed lands in the ACT	• Develop a climate change risk impacts statement for the ACT's biodiversity ¹	NCP
	• New soil data uploaded to ACTMAPi and Spatial Data Management System (SDMS) by 2015 ¹ , and Hydrogeological Landscape Framework by 2017 ²	NCP
	• Develop a dynamic NRM planning framework to be used to plan for climate change adaptation (2013-2017) ²	NCP
Action 1.5 Fund priority landscape actions	• Deliver at least 2000 hectares of revegetation and restoration in lowland grassy woodland ecosystems, and 15,000 hectares of invasive species control in these ecosystems by June 2017 ¹	NCP/PaCS
	• Finalise current fish habitat works in the Molonglo and Murrumbidgee Rivers (2014) ¹	NCP/PaCS
	• Seek funding opportunities through the Commonwealth, and ACT Governments (2013-2018), and deliver activities on ground ²	NCP/PaCS
<p>¹ Funded through existing resources</p> <p>² Future options for further consideration (currently unfunded)</p>		



Strategy 2 - Manage threats to biodiversity

Actions	Strategy 2 – Milestones and Timeframes	Lead
Action 2.1 Implement ACT Weed Strategy (2009-2019)	• Pest Plant Management Plans for critical weed species developed (2017) ¹ , pending a proposed review of ACT biosecurity legislation	NCP/PaCS
	• Weed alert system developed for the ACT (2014) ¹	NCP/PaCS
	• Mapping of serious and widespread weeds completed (2018) ²	NCP/PaCS
	• ACT and region web-based weeds portal on the Atlas of Living Australia developed to support improved mapping and monitoring (2014) ²	NCP
	• Programs to reduce new weed problems will be developed and implemented (2014-2017) ²	NCP/PaCS
Action 2.2 Implement ACT Pest Animal Management Strategy 2012- 2022	• Develop effective identification, surveillance, response and reporting strategies for new pest animal species ¹	NCP/PaCS
	• Rabbit Pest Animal Management Plan finalised (2013) ¹	NCP/PaCS
	• The schedules to the <i>Pest Plants and Animals Act 2005</i> updated (2015) ¹	NCP/PaCS
	• Priority pest animal management programs implemented, focusing on assisting wildlife corridor restoration (annual) ¹	PaCS
	• Guidelines developed for controlled native species management plans for damage reduction (2014) ¹	NCP/PaCS
	• Continued investment in the Invasive Animals Cooperative Research Centre to 2017 ¹ to access national research and best practice outcomes	NCP/PaCS
	• Pest Animal Management Plans for additional priority species such as wild dogs, pigs, and deer (as agreed with TAMSD) (2014-2018) ²	NCP/PaCS
Action 2.3 Manage total grazing pressure on ecosystem function in reserves	• Reserve Operational Plans (RoPs) developed for 14 reserves (2014). Remaining RoPs developed (2018) ¹	PaCS
	• Rabbit Pest Animal Management Plan implemented (2014 ongoing) ¹	PaCS
	• Biomass Management Plans developed for grassland reserves (2014) ¹ . Implementation for all plans dependent upon further funding ²	PaCS
	• Annual monitoring of kangaroo populations in selected reserves. Research on kangaroo population monitoring funded until 2014 ¹ . This is a high priority activity ²	NCP
Action 2.4 Establish and implement ecologically appropriate fire regimes	• ACT Strategic Bushfire Management Plan revised by the end of 2014 ¹	ESA/NCP/ PaCS
	• Post fire recovery monitoring of vegetation to continue until 2014 ¹ . Further monitoring dependent upon additional funding ¹	NCP/PaCS
	• Ecological fire management guidelines updated in 2014 and implemented through the TAMS Bushfire Operational Plan ¹ . Fuel and Fire Suppression Guidelines for ACT Declared Threatened Species and Endangered Ecological Communities updated by 2015 for high priority species ²	NCP/PaCS
	• Subject to resourcing, long-term monitoring undertaken of prescribed burning of high conservation value nature reserves or on specific flora and fauna. This is a high priority activity ²	NCP/PaCS



Actions	Strategy 2 – Milestones and Timeframes	Lead
Action 2.5 Implement improved catchment management to support aquatic ecosystems	<ul style="list-style-type: none"> • Cod balls in place in Molonglo River and Yerrabi pond, and fish usage of the structures (2014) monitored on an ongoing basis. Tharwa Fish Habitat structures constructed, and fish usage and changes to the river geomorphic profile monitored (2013)¹ • Determine the efficacy of the Casuarina Sands fishway to allow fish to pass using passive integrated transponder (PIT) tagging technology (2014)¹ • Determine the best method to monitor Murray Crayfish and the condition of the crayfish population within the ACT at selected sites (2014)¹ • Annually stock the larger lakes in Canberra with native fish species to reduce angling pressure on the natural river populations and improve the ecological functioning of the artificial urban lakes. This is a high priority activity² • Implement key actions in the Murrumbidgee Demonstration Reach Implementation Plan (2013–2018)² • Finalise Catchment Management Plan and first implementation for the ACT and region (2014), and seek funding for implementation through Murray Darling Basin Reform Agreement² 	<p>NCP</p> <p>NCP</p> <p>NCP</p> <p>NCP</p> <p>CAW/NCP/ PaCS</p>
<p>¹ Funded through existing resources</p> <p>² Future options for further consideration (currently unfunded)</p>		



Strategy 3 - Protect species and ecological communities

Actions	Strategy 3 – Milestones and Timeframes	Lead
Action 3.1 Manage the protected area estate	<ul style="list-style-type: none"> Reserve Operational Plans (RoPs) developed for 14 reserves (2014). Remaining RoPs developed (2018)¹ 	PaCS
	<ul style="list-style-type: none"> Canberra Nature Park Plan of Management reviewed (2015). Production of a revised plan and implementation dependent upon funding. 	NCP/PaCS
	<ul style="list-style-type: none"> Complete Molonglo River Corridor Plan of Management (2014)¹ 	PaCS
	<ul style="list-style-type: none"> Commence preparation of a Lower Cotter Catchment Plan of Management (2013)¹ 	NCP
	<ul style="list-style-type: none"> Progressive implementation of actions in Plans of Management and Threatened Species and Ecological Communities Action Plans (ongoing)¹ 	PaCS
	<ul style="list-style-type: none"> Trails Strategy finalised and implementation commenced (2014)¹ 	PaCS
	<ul style="list-style-type: none"> Restoration of degraded areas within Canberra Nature Park (2013-2018)¹ 	NCP/PaCS
Action 3.2 Develop, implement and review Action Plans for threatened species and communities	<ul style="list-style-type: none"> Action Plans will continue to be developed to identify and manage threats to declared species and communities (ongoing)¹ 	NCP/PaCS
	<ul style="list-style-type: none"> Action Plans will be reviewed, and updated where necessary to ensure they remain current (ongoing)¹ 	NCP/PaCS
Action 3.3 Restore and manage priority landscapes	<ul style="list-style-type: none"> Implement woodland restoration activities and invasive species control within priority lowland woodland areas across priority 'focal' landscapes (2017)¹ 	NCP/PaCS
	<ul style="list-style-type: none"> One Million Trees program finalised in Murrumbidgee River Corridor (2018)¹ 	PaCS
	<ul style="list-style-type: none"> Finalise monitoring and restoration of alpine bogs affected by the 2003 fires, and commencement of long term monitoring (2014)¹ 	NCP/PaCS
	<ul style="list-style-type: none"> Priority activities delivered from the Upper Murrumbidgee Demonstration Reach Implementation Plan (2013 – 2018)² <p>See also milestones under Actions 4.2 – 4.4 relating to the urban landscape</p>	PaCS
Action 3.4 Identify biodiversity refugia under drought and climate change	<ul style="list-style-type: none"> Develop criteria and principles for identifying and managing refugia (2013)¹ 	NCP
	<ul style="list-style-type: none"> Identify refugia in the ACT and region using NSW and ACT Region Climate Model (NARCLiM) data and other data sets (see also Activity 1.1) (2015)¹ 	NCP
	<ul style="list-style-type: none"> Manage at least one identified site for refugia values (2018)² 	NCP/PaCS

¹ Funded through existing resources

² Future options for further consideration (currently unfunded)



Actions	Strategy 3 – Milestones and Timeframes	Lead
Action 3.5 Monitor five priority ecosystems most vulnerable to threats	<ul style="list-style-type: none"> Monitoring of five ecosystems- native temperate grasslands, grassy box-gum woodlands, alpine bogs, montane forests, and Murrumbidgee-Cotter River system (2013–2018)². This is a high priority activity. Current resources will be utilised and new funding sought for consistency between ecosystems and to extend into those ecosystems not currently funded² Monitoring of riverine ecosystems to date focuses on in stream biodiversity, primarily fish. Additional resourcing will be required to properly undertake riparian monitoring. This is a high priority activity² 	<p>NCP</p> <p>NCP</p>
Action 3.6 Implement captive breeding programs and translocation programs	<ul style="list-style-type: none"> Captive breeding program for the Corroboree Frog to be continued (ongoing)¹ Reintroduction of the Macquarie Perch in the enlarged Cotter reservoir (in partnership with ACTEW)¹ Translocation programs will continue to be undertaken in the Mulligans Flat sanctuary consistent with the aims of the ecological research project (ongoing)¹ The methodology for translocating golden sun moth will continue to be developed and will lead to the production of translocation guidelines (2015)¹ Programs for the Brush Tailed Rock Wallaby and Bettongs to be continued and expanded, including translocation of Bettongs outside Mulligans Flat Sanctuary (ongoing)² 	<p>NCP/PaCS</p> <p>NCP</p> <p>NCP/PaCS</p> <p>NCP</p> <p>NCP/PaCS</p>
Action 3.7 Propagate and translocate threatened plants	<ul style="list-style-type: none"> Propagation and translocation programs for Tuggeranong Lignum, Button Wrinklewort, Small Purple Pea and Ginninderra Peppergrass developed and underway if technically possible and resources available (2016)² Subject to community interest, a community plant rescue program will be developed and implemented (2016)² 	<p>NCP/PaCS</p> <p>NCP/PaCS</p>
Action 3.8 Establish seed banks and seed orchards	<ul style="list-style-type: none"> Development, management and use of seed banks and seed orchards (ongoing)¹ Seed collection policy released (2014)¹ 	<p>NCP/PaCS</p> <p>NCP</p>
<p>1 Funded through existing resources</p> <p>2 Future options for further consideration (currently unfunded)</p>		



Strategy 4 - Enhance biodiversity value of urban areas

Actions	Strategy 4 — Milestones and Timeframes	Lead
Action 4.1 Manage impacts of urban development on biodiversity	<ul style="list-style-type: none"> • Manage impacts of urban development on significant biodiversity assets through Environmental Impact Statement processes and Strategic Environmental Assessments (ongoing)¹ • Accreditation of ACT environmental assessment processes through a revised Bilateral Assessment process (2014)¹ • Development and finalisation of the approach to environmental offsets in the ACT (2013-2018)¹ 	<p>NCP/SP</p> <p>NCP/PaCS</p> <p>NCP</p>
Action 4.2 Manage urban open space	<ul style="list-style-type: none"> • Policies to improve biodiversity outcomes from landscaping developed (2015)¹ • TAMS revised guidelines ('Tree Selector') used to plant appropriate species in urban parks and open space to enhance biodiversity and climate change adaptation (2013–2018)¹ • Key areas mapped where environmental plantings can enhance connectivity and biodiversity outcomes in urban areas (2014)¹ and deliver plantings through the urban component of the One Million Trees program. • Continue to stock lakes with native fish species annually (see also Action 2.5)¹ • Encourage native plantings and retention of mature / hollow bearing trees across urban areas, or any other areas that require more native vegetation coverage, ensuring fire fuel management responsibilities (ongoing)^{1,2} 	<p>CS/SP</p> <p>CS</p> <p>CS/NCP</p> <p>NCP</p> <p>SCC/CS/SP</p>
Action 4.3 Enhance connectivity through urban areas	<ul style="list-style-type: none"> • One Million Trees urban component finalised (2018) and lessons learnt incorporated into connectivity planning (ongoing)¹ • Implementation of education and incentive programs to encourage more native plantings in backyards close to reserves and urban fringe areas commenced (2014) (refer also to Action 5.3)² 	<p>CS</p> <p>CS/PaCS</p>
Action 4.4 Manage the urban edge	<ul style="list-style-type: none"> • ACT Trails Strategy completed (2014)¹ • The ACT Government to continue, commitment to pet containment, waste management, recreational use, fire management (ongoing), the spread of invasive plants into bushland and support for the current Bush on the Boundaries (BoB) program^{1,2} • Implement education program on the impacts of escaped domestic animals (pets such as fish, dogs, cats etc)² 	<p>PaCS</p> <p>CS/PaCS</p> <p>NCP/CS/PaCS</p>



Actions	Strategy 4 — Milestones and Timeframes	Lead
Action 4.5 Support Urban Landcare and ParkCare activities	<ul style="list-style-type: none"> • Continue to support urban landcare and ParkCare groups (ongoing)¹ • Work with existing urban landcare and ParkCare groups to identify key areas of weed infestation and incorporate this knowledge into proposed weed mapping targets (2013–2018)¹ • Showcase and promote the research undertaken and knowledge held by Urban Landcare and ParkCare groups as examples of community driven, urban based nature conservation initiatives (2013–2018)¹ • Provide training opportunities for urban landcare and ParkCare groups in biodiversity research techniques and mapping (2013–2018)² • Create and support new Urban Landcare and ParkCare groups that capture urban open space and roadsides and other green areas (2013–2018). 	CS/PaCS CS/PaCS CS/PaCS CS/PaCS CS/PaCS
Action 4.6 Assess urban areas, manage and enhance green assets and infrastructure	<ul style="list-style-type: none"> • Assess urban areas to determine the need and suitability for additional tree coverage to mitigate potential heat island effect (by 2016)¹ • Strategy for the maintenance and management of the ACT’s green assets and infrastructure developed (2018)² 	CS/SP/SCC SCC/CAW/ CS
<p>1 Funded through existing resources</p> <p>2 Future options for further consideration (currently unfunded)</p>		



Strategy 5 - Strengthen community engagement

Actions	Strategy 5 — Milestones and Timeframes	Lead
Action 5.1 Support greater community involvement through volunteering	<ul style="list-style-type: none"> Continue support for ParkCare, urban landcare and catchment management groups (refer to Action 4.5)¹ 	PaCS
	<ul style="list-style-type: none"> Provide support to community events related to woodland restoration (2013–2017)¹ 	NCP/PaCS
Action 5.2 Enhance and promote the use of citizen science projects	<ul style="list-style-type: none"> Continue to provide support to community groups to provide critical monitoring of the ACT's biodiversity (ongoing)¹ 	PaCS
	<ul style="list-style-type: none"> Update ACTMAPi with new conservation related data layers and analysis (ongoing)¹ 	NCP
	<ul style="list-style-type: none"> Annual environment grants- Community groups will be supported through grants and provision of equipment and training (ongoing)¹ 	NCP
Action 5.3 Implement targeted community education campaigns on priority issues	<ul style="list-style-type: none"> Education / outreach activities with anglers on responsible fishing (2013–2018)¹ 	NCP
	<ul style="list-style-type: none"> Campaigns delivered: understanding the importance of box-gum woodlands and native grasslands (2013)¹; implications of climate change on biodiversity in the ACT and region (2014)¹; managing the impacts of pets roaming from the suburbs (2015)²; managing backyards for biodiversity (2016)²; and greater awareness about managing the urban/bushland edge (2017)² 	NCP/SP
	<ul style="list-style-type: none"> Biennial forum on nature reserves to promote information exchange, community education and awareness and planning (2014)² 	NCP
	See also Action 4.3	
Action 5.4 Build indigenous engagement in the management of natural resources	<ul style="list-style-type: none"> Involve indigenous people in woodland restoration (2013- 17)¹ 	NCP/PaCS
	<ul style="list-style-type: none"> Continuation of the Indigenous Ranger Program¹ 	NCP/PaCS
	<ul style="list-style-type: none"> Support Murrumbung Yurung Mara indigenous group in ACT Government to engage with the aboriginal community on NRM issues (2013–2018)¹ 	NCP/PaCS
	<ul style="list-style-type: none"> Continue to employ an Indigenous Natural Resource Management Facilitator² 	NCP
Action 5.5 Encourage the involvement of youth in nature conservation	<ul style="list-style-type: none"> Five areas adopted by 2018¹ 	PaCS
	<ul style="list-style-type: none"> Develop and implement a program to encourage and support educational institutions to 'adopt' an area of conservation significance as places for nature-based education (mid 2015)^{1,2} 	NCP/PaCS
Action 5.6. Support appropriate recreational and tourism use of natural areas	<ul style="list-style-type: none"> Finalise and implement the ACT Tracks and Trails Strategy¹ 	PaCS
	<ul style="list-style-type: none"> Finalise the ACT Mountain Bike Strategy¹ 	PaCS



Actions	Strategy 5 — Milestones and Timeframes	Lead
Action 5.7 Enhance key partnerships across government, community and the private sector	<ul style="list-style-type: none"> Continued support of Mulligan’s Flat Goorooyaroo Woodland experiment (currently funded until 2015)¹ Work with rural landholders, Rural Landholders Association and institutional landholders on woodland restoration works (2013–2017)¹ Formalise engagement with national networks focused on biodiversity and climate change by the end of 2013¹ Work with NSW partners to identify regional wildlife corridors (2013)¹ Work with research partners to develop a dynamic ACT Natural Resource Management framework that is ‘climate change ready’ (2016)² 	<p>NCP/PaCS</p> <p>NCP/PaCS</p> <p>NCP</p> <p>NCP</p> <p>NCP</p>
<p>¹ Funded through existing resources</p> <p>² Future options for further consideration (currently unfunded)</p>		



Responsibilities for measuring performance indicators

Targets	Targets from the NCS and indicators	Responsibilities and notes
Target 1 - The overall extent of lowland native vegetation across the ACT will be maintained, and the condition of lowland native vegetation communities will be improved	Extent of lowland native vegetation (broad measure in overall hectares, to be monitored by vegetation community from 2013 when the revised ACT vegetation communities map is complete)	<p>NCP</p> <ul style="list-style-type: none"> Periodic mapping of change in vegetation extent against the vegetation community map (when complete)
	Condition of lowland native vegetation (standard indicators to be developed nationally under the Australian Native Vegetation Framework by 2015)	<p>NCP</p> <ul style="list-style-type: none"> Utilise national standard condition indicators to report on change in condition of priority ecosystems (grasslands, woodlands, forests and bogs) (inclusion of riparian ecosystems dependent on funding)
Target 2 - A measurable increase in connectivity between patches of native vegetation, non-native vegetation in urban areas, and along riparian areas	Spatial links habitat connectivity score is above a certain measure, as verified by 10 yearly on- ground assessments	<p>NCP</p> <ul style="list-style-type: none"> Will collect information based on the monitoring protocol prepared by CSIRO under the Functional Connectivity project, and update into the ACT connectivity layer
	Riverine connectivity measure (e.g. number of in-stream barriers)	<p>NCP</p> <ul style="list-style-type: none"> Map of anthropogenic in stream barriers and qualitative comments provided on the impact of these barriers and possible remediation measures. Funding would be required to conduct this mapping
Target 3 - A reduction in threats to biodiversity from weeds, pest animals and inappropriate fire regimes	Abundance and distribution of priority environmental ACT weeds ('high', 'very high' and 'extreme' danger ratings) in reserves	<p>Natural Resource Protection (TAMSD) / NCP</p> <ul style="list-style-type: none"> Collected through standard operations / reporting on the Environmental Weeds Operation Plan (eWoP)
	Abundance and distribution of significant pest animals; significance and levels of damage from pest animals	<p>Natural Resource Protection (TAMSD)</p> <ul style="list-style-type: none"> Collected through standard operations / reporting on annual pest animal management activities Fish data collected through routine monitoring work by EPD
	Prescribed burning in high conservation areas to be informed by ecological guidelines and ecological fire thresholds. Monitoring undertaken to ensure consistency	<p>Forestry and Fire Management (TAMSD) / NCP</p> <ul style="list-style-type: none"> TAMSD annual Bushfire Operation Plan (BoP) assessed against ecological guidelines Monitoring of prescribed burning undertaken of some high conservation areas (subject to on-going funding)



Targets	Targets from the NCS and indicators	Responsibilities and notes
Target 4 - Impacts from threatening processes, and climate change refugia in the ACT are better understood and appropriately managed	Number of refugia identified and appropriately managed (maintained or enhanced)	NCP <ul style="list-style-type: none"> Number of refugia identified and appropriately managed, and measured by management effort (eg funding and activities)
	Monitoring programs established in five ACT priority ecosystems considered to be most sensitive to threats including: native grasslands, woodlands; alpine bogs, montane forests, and the Murrumbidgee-Cotter River system	NCP <ul style="list-style-type: none"> Data collected as part of routine monitoring of threatened species and ecological communities Additional funding will be required to properly monitor in stream biodiversity
Target 5 - An increase in the area of land under volunteer effort (ParkCare, 'Friends of' or other volunteer groups) in management of the Canberra Nature Park	Total number of groups	Community and Visitor Program (TAMSD) <ul style="list-style-type: none"> Collected through standard operations
	Total number of 'community work hours' devoted to management of reserves and other natural areas	Community and Visitor Program (TAMSD) <ul style="list-style-type: none"> Collected through standard operations
	Total area treated by volunteers in hectares	Community and Visitor Program (TAMSD) <ul style="list-style-type: none"> Collected through standard operations
Target 6 - Ten areas of conservation significance (including areas outside reserves) 'adopted' by ACT schools or higher learning institutions as sites for nature based education	Number of reserves or other natural areas adopted and actively used by schools or higher learning institutions	Community and Visitor Program (TAMSD)/NCP <ul style="list-style-type: none"> Collected through standard operations
	Number of students involved in learning activities in these sites	Community and Visitor Program (TAMSD)/NCP <ul style="list-style-type: none"> Collected through standard operations
Target 7 - Increased community understanding of, and support for, the protection of the ACT's biodiversity	Number of education campaigns delivered	NCP <ul style="list-style-type: none"> Count of number of campaigns delivered
	Community surveys and consultation	Community and Visitor Program (TAMSD)/NCP <ul style="list-style-type: none"> Community surveys designed and delivered by EPD and TAMSD Community consultations run by EPD and TAMSD



Appendix 1

Summary of commitments for the Nature Conservation Strategy (2013-2023)

Vision: Biodiversity rich, resilient landscapes stretching from the inner city to the mountains, where well functioning ecosystems can meet the needs of people and the environment

OUTCOMES	1. Native vegetation and biodiversity is maintained and improved	2. Landscapes are more resilient, including to climate change	3. Community health and well-being is increased through use and appreciation of natural areas and 'green assets' in urban areas
TARGETS	<ol style="list-style-type: none"> 1. The overall extent of lowland native vegetation across the ACT will be maintained, and the condition of lowland native vegetation communities will be improved 2. A measurable increase in connectivity between patches of native vegetation, non-native vegetation in urban areas, and riverine systems 	<ol style="list-style-type: none"> 3. A reduction in threats to biodiversity from inappropriate fire regimes, weeds, pest animals and urban development 4. Impacts from threatening processes, and climate change refugia in the ACT are better understood and appropriately managed 	<ol style="list-style-type: none"> 5. An increase in the area of land under volunteer effort (Parkcare, 'Friends of' or other volunteer groups) in management of the Canberra Nature Park 6. NCP Ten areas of conservation significance (including areas outside reserves) 'adopted' by ACT schools or higher learning institutions as sites for nature based education 7. Increased community understanding of, and support for, the protection of the ACT's biodiversity



STRATEGIES	1. Enhance habitat connectivity and ecosystem function	2. Manage threats to biodiversity	3. Protect species and ecological communities	4. Enhance biodiversity value of urban areas	5. Strengthen community engagement
ACTIONS	<ol style="list-style-type: none"> 1. Develop baseline information on landscape function 2. Undertake fine scale planning for habitat connectivity 3. Enhance regional connectivity 4. Assess conservation investment opportunities across public and privately managed lands in the ACT 5. Fund priority landscape actions 	<ol style="list-style-type: none"> 1. Implement ACT Weed Strategy (2009–19) 2. Implement Pest Animal Management Strategy (2012–22) 3. Manage total grazing pressure on ecosystem function in reserves 4. Establish and implement ecologically appropriate fire regimes 5. Implement improved catchment management to support aquatic ecosystems 6. Develop and implement a migratory species action plan 7. Develop and implement an ACT soils Policy 	<ol style="list-style-type: none"> 1. Manage the protected area estate 2. Develop, implement and review Action Plans for threatened species and communities 3. Restore and manage priority landscapes 4. Identify biodiversity refugia under drought and climate change 5. Monitor five priority ecosystems most vulnerable to threats 6. Implement captive breeding programs and translocation programs 7. Propagate and translocate threatened plants 8. Establish seed banks and seed orchards 	<ol style="list-style-type: none"> 1. Manage impacts of urban development on biodiversity 2. Manage urban space 3. Enhance connectivity through urban areas 4. Manage the urban edge 5. Support Urban Landcare and ParkCare activities 6. Manage and enhance green assets and infrastructure 	<ol style="list-style-type: none"> 1. Support greater community involvement through volunteering 2. Enhance and promote the use of citizen science 3. Implement targeted community education campaigns on priority issues 4. Build Indigenous engagement in the management of natural resources 5. Encourage the involvement of youth in nature conservation 6. Enhance key partnerships across government, community and the private sector



Appendix 2 - Roles of ACT Government agencies

1. Environment and Planning Directorate (EPD)

i Nature Conservation Policy (NCP)

Natural Environment

The Natural Environment team has responsibility for the legislative framework for conservation and environmental protection, in particular the *Nature Conservation Act 1980*. The Branch is also responsible for the ACT Nature Conservation Strategy; action plans for threatened species and ecological communities, pest and weed strategies, and has significant input into bushfire planning and management of fisheries.

Natural Resource Management Programs Team (NRM Team)

The NRM team administers program funds including from the ACT's Environment Grants Program and Australian Government programs including the Caring for our Country initiative. The Section coordinates development of NRM investment proposals and provides secretariat support to the NRM Council.

Conservation Planning and Research (CPR)

CPR undertakes research on local flora and fauna, prepares scientific advice on the environment and natural resource management, conducts ecological surveys, monitors biodiversity and prepares and guides implementation of threatened species action plans and fisheries management plans. CPR also prepares Plans of Management for parks and reserves in the ACT, and development and planning advice is provided on ecological matters.

ii Sustainability and Climate Change (SCC)

Sustainability and Climate Change develops policies on issues relating to waste management, climate change, energy and environmental sustainability more widely. Sustainability Programs administers and helps design a number of sustainability programs that impact on natural resource management in the ACT. These include the ACTSmart Office and the ACTSmart Business recycling programs, and the Australian Sustainable Schools Initiative (AuSSI). AuSSI is a partnership of the Australian Government and the states and territories which seeks to support schools and their communities to become sustainable. Sustainability Programs also manages the Community Partnerships program which funds the Canberra Environment Centre, the Conservation Council South East Region and SEE-Change ACT.

iii Strategic Planning (SP)

This Section undertakes major strategic projects and is responsible for strategic planning initiatives to achieve quality urban development including the review of codes and guidelines, Our City, Town Centre reviews, Local Area plans, Section and Local Area plans, and Section and Local Centre Masterplans.

2 Territory and Municipal Services Directorate (TAMSD)

i City Services

City Services is responsible for a range of core municipal and Territory services, which include key operational areas and functions for: Licensing and Compliance (eg, policy, guidelines and licensing for use of public land and provisions under the *Nature Conservation Act 1980*); Place Management (eg, city-wide cleaning and open space asset maintenance including mowing); Urban Treescapes (eg, urban tree planning, management and maintenance); and Asset Data and Integration (eg, providing divisional support in relation to asset data management, and GIS mapping).

ii Parks and Conservation Service (PaCS)

The Parks and Conservation Service is a Branch within the Parks and City Services Division responsible for planning and management of parks, reserves and rural lands. It protects and conserves the natural resources of the ACT and promotes appropriate recreational, educational and scientific uses of our parks and reserves.



3. Justice and Community Safety Directorate (JACS)

i Emergency Services Agency (ESA)

The ACT Emergency Services Agency (ESA) is the ACT Government organisation charged with providing emergency management services to the Canberra community. The ESA comprises the ACT Ambulance Service, ACT Fire & Rescue, the ACT Rural Fire Service, the ACT State Emergency Service and the ESA Support Services.