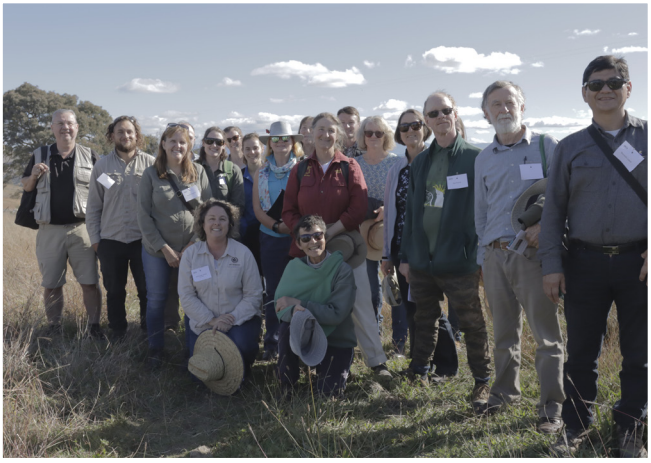
ACT and Region Catchment Management Coordination Group



Annual Report 2020–21

Cover images:
Community volunteers assisting with the Upper Murrumbidgee Catchment Network and native tube stocks provided to meeting attendees.

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

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Chair's Foreword

I am pleased to present the 2020-2021 Annual Report for the ACT and Region Catchment Management Coordination Group ('the Coordination Group') and in so doing I acknowledge the Ngunnawal people as traditional custodians of the ACT and surrounding areas. I honour their continuing culture and the contribution they make to the life of Canberra and the region. I also acknowledge all other First Nations people in the region and across Australia, and pay my respect to all Elders past, present and emerging.

As I write this, the ACT's current total dam storage sits at 100 per cent, and yet in February 2019 it was at 44 per cent. Mercifully the drought broke, and rains did arrive, which importantly aided recovery of our catchments from the devastating 2019-20 bushfires. However, as quickly as the rains came, they are likely to disappear again.

The reality is this - short term water storage abundance such as what we are experiencing this year potentially masks the important need for a continuing focus on longer-term water security, which will be crucial in building the ACT's resilience to the risk of more frequent droughts due to our changing climate. Water security is also critical for managing other climate change risks - more extreme high temperatures and heatwaves; more dangerous bushfires and lengthening fire seasons; and more frequent heavy rainfall events. Building water security so that there is sufficient water both for human use and for the environment is a complex undertaking that relies on having healthy catchments and involves numerous interwoven issues. The Coordination Group's *ACT and Region Catchment Strategy 2016-2046* provides a framework for consideration of such matters, and this report shows that Coordination Group members are at the forefront of working cooperatively and sharing knowledge to advance catchment health at a regional level.

Coordination Group members have continued to work together tenaciously, even though the COVID-19 pandemic has placed great strain on our ability to come together as a group to support our stakeholders in addressing water catchment matters. Much has been achieved, and I would like to present to you some of the key highlights:

- In August 2020, as Chair of the Coordination Group, I facilitated a two-day online water security workshop involving Coordination Group members and other stakeholders to identify key issues associated with water security in the ACT and Region. The workshop drew representatives from across a wide and diverse range of sectors, backgrounds, experience, and interest areas.
- The Coordination Group consulted with academic, policy and regulatory experts throughout the year, with these consultations playing an important role in guiding our focus on specific catchment matters.
- Throughout the year, the Coordination Group considered the complexities of how the Queanbeyan-Palerang Regional Council might cost-effectively manage operations at its water sewage treatment plant located in the ACT, both to support its growing population to 2050 and to mitigate its consequential increase in effluent flow into the Molonglo River to reduce and actively manage algal blooms in Lake Burley Griffin.
- The Coordination Group continues to play an important role in other cross-border environmental matters. Most recently, we have considered how catchment management at a regional level might be funded and how to address the matter of illegal fill dumping, particularly the issue of ACT building waste ending up in NSW rural and peri-urban areas (the latter being then referred to the relevant cross-border coordination body that was established to address this issue).
- In June of this year, I gave a presentation to the Australian Water Association's ACT Water Matter Conference, on behalf of the Coordination Group. The Australian Water Association is Australia's leading water industry representative body, so its members naturally have a strong interest in water catchment management and water security.
- We continued our strategically-led financial support for the Upper Murrumbidgee Catchment Network. Through this support, members of the Network hosted a number of meetings and forums. I commend them for persevering during these challenging times.
- We continued to monitor the local bushfire recovery efforts in affected areas within our catchments, much of which was devastated by the 2019-20 bushfires. Many of our members have been directly involved in recovery work, working cooperatively across agencies and with community groups.

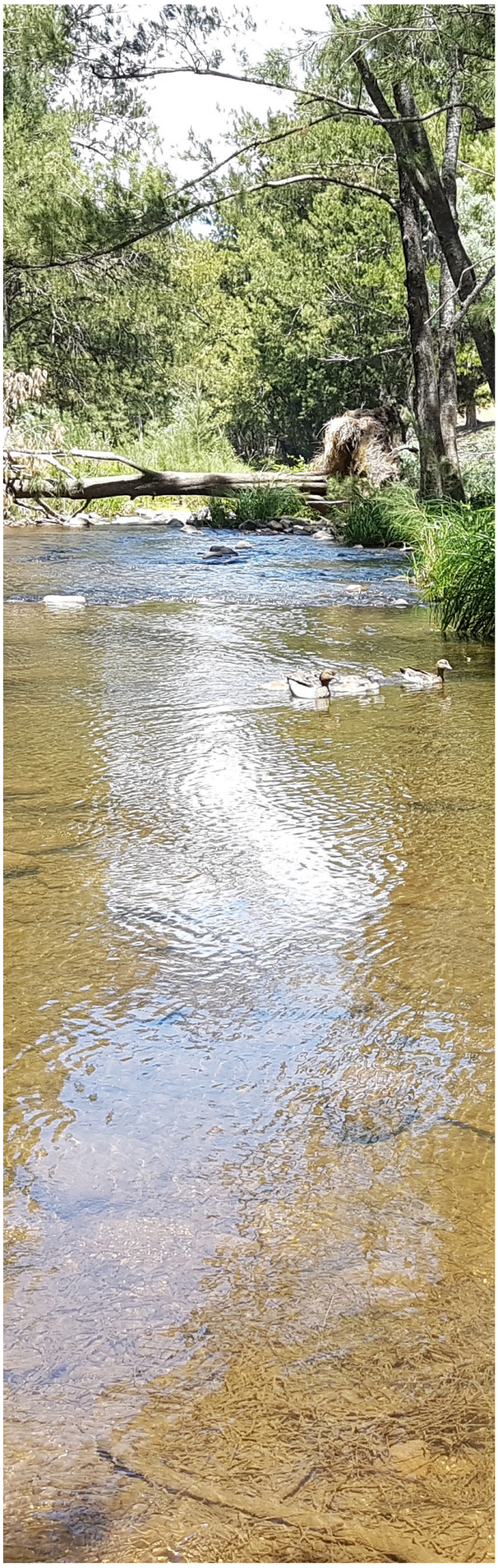
This year's annual report carries a theme of recovery and resilience. This theme has been demonstrated in the achievements and dedication of members of the Coordination Group.

In commending the Coordination Group, I would also like to once again thank Michael Ross from the ACT's Environment, Planning and Sustainable Development Directorate. Michael has provided invaluable secretariat and project management support for the Coordination Group.

For 2021-22 I look forward to the continuation of the great work from the Coordination Group. We will be focussing on:

- updating the inter-jurisdictional investment and resourcing framework that guides members' contributions and expenditure efforts
- continuing to support the roles and work undertaken by peak stakeholder groups, volunteers, landowners and managers
- advancing actions to build water security and protect the catchments of the ACT and region
- communicating with, and responding to requests by the Minister for Water, Energy and Emissions Reduction
- facilitating permanent Ngunnawal representation on the Coordination Group
- updating the following governance documents:
  - the *ACT & Region Catchment Management Coordination Group Charter (2015)*
  - the *ACT and Region Catchment Strategy 2016 - 2046*
  - the *2016 -2021 Catchment Management Implementation Plan.*

Dr Maxine Cooper
Independent Chair
July 2021



1. Background

This report outlines the activities of the ACT and Region Catchment Management Coordination Group (the Coordination Group) from 1 July 2020 to 30 June 2021 and fulfils the Coordination Group's obligations as per the Water Resources (Catchment Management Coordination Group) Amendment Bill 2015 Part 2 S. 67D.

1.1 67D Annual report by Coordination Group

1. For each financial year, the Coordination Group must prepare a report about the group's activities during the financial year, including any advice given, or recommendations made, to the Minister.
2. The group must give the report to the Minister within three months after the end of the financial year.
3. The Minister must, within 21 days after receiving the report, table the following in the Legislative Assembly:
    a. the report
    b. a statement by the Minister responding to any advice given or recommendations made to the Minister in the group's annual report.

3. However, if there are no sitting days during the 21-day period—
    a. the Minister must give the report and the statement, and a copy of each for each member of the Legislative Assembly, to the Speaker; and
    b. the report and the statement are taken for all purposes to have been tabled in the Legislative Assembly on the day the Minister gives it to the Speaker (the report day); and

c. the Speaker must arrange for a copy of the report and a copy of the statement to be given to each member of the Legislative Assembly on the report day; and

d. despite paragraph b, the Speaker must present the report and the statement to the Legislative Assembly on the next sitting day.

The establishment of an interjurisdictional coordination body to strengthen governance and catchment management in the ACT and surrounding regions was approved by the ACT Government in October 2014. The Coordination Group was established on an interim basis on 25 February 2015. The ACT Legislative Assembly passed the *Water Resources (Catchment Management) Amendment Act 2015,* which amended the *Water Resources Act 2007* and established the Coordination Group as a statutory body, on 4 August 2015.

This amendment allowed for the appointment of an independent chair and a community representative. In October 2019, Dr Maxine Cooper was appointed to the position of Chair and Ms Karissa Preuss was appointed to the position of Community Representative.

Dr Cooper replaced Emeritus Professor Ian Falconer AO as Chair, and Ms Preuss replaced Dr Fiona Dyer in the position of Community Representative. Both Emeritus Professor Falconer and Dr Dyer had held their respective positions since October 2015.

The Coordination Group is specified in the work plan for the ACT and NSW Memorandum of Understanding for Regional Collaboration (the MoU) which was re-signed in 2020. Consistent with the intent of the MoU, the considerations of the Coordination Group and the contribution of staff and financial resources are negotiated on a project-by-project basis. The format of this annual report sets out the range of activities undertaken by the Coordination Group, focussing on key priorities, achievements over the period and planned future activities.

The Water Policy Unit within the Environment, Planning and Sustainable Development Directorate (EPSDD) of ACT Government, provides secretariat support to the Coordination Group.

1.2 Functions

The Coordination Group is committed to improving governance of catchment management within the region. It works for the long-term benefit of the ACT and region catchments and the people who reside therein. It aims to:

» be a responsive, dynamic and representative body which works in a fair, open and collaborative manner

» take a holistic approach to understanding and managing the catchment

  › promote a whole-of-catchment and whole-of-government approach to improving the catchment's health in the long term, using best available science and community engagement to support its work.

The Coordination Group was established to:

» advise the ACT Minister for Water, Energy and Emissions Reduction

» improve coordination, cooperation and direction of effort in catchment management across the ACT and region

» facilitate collaborative problem solving for interjurisdiction and interagency issues

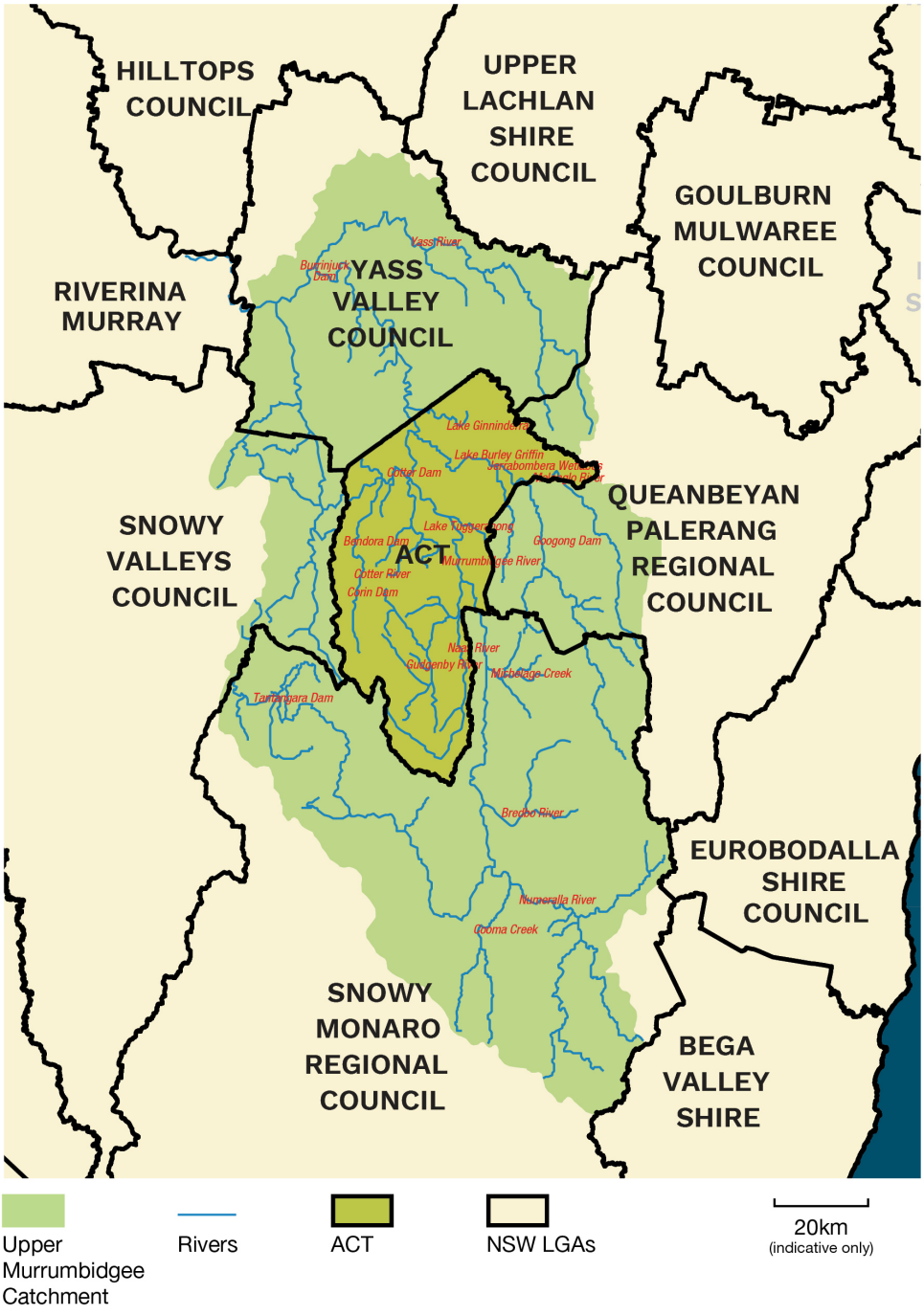
» provide advice on opportunities to align national, regional and territory investment in the context of integrated catchment management

» foster the implementation of the *ACT and Region Catchment Strategy 2016-2046*

» provide advice on proposed developments in terms of their likely impacts and strategies and actions to mitigate any risk to catchment health

» undertake other matters as determined by the Minister.

2. Geographical area of the ACT region water catchment



» The Coordination Group's geographical area of interest (pictured above) is the Upper Murrumbidgee catchment that is located within the border of the ACT and local government areas of:

» Snowy Monaro Regional Council

» Queanbeyan-Palerang Regional Council

» Yass Valley Council.

» The Upper Murrumbidgee Catchment waters originate in the headwaters above Adaminaby and exit the catchment at Burrinjuck Dam, covering approximately 14,000 km2.

3. Membership

ACT and Region Catchment Management Coordination Group Chair

Dr Maxine Cooper

The role of the Chair is to independently facilitate a collaborative process between jurisdictions to ensure the best outcomes are achieved. Dr Cooper, who is an Adjunct Professor with the University of Canberra, has extensive leadership experience, having held key positions including ACT Auditor-General, ACT Commissioner for Sustainability and the Environment, Chair and Executive Director of the ACT Water Security Taskforce. Dr Cooper is also the independent Chair of Landcare ACT and is on the board of the National Landcare Network.

ACT and Region Catchment Management Coordination Group Community Representative

Ms Karissa Preuss

The Community Representative's role within the Coordination Group is to contribute to discussions about the role and work undertaken by peak stakeholder groups, volunteers, community groups, property owners and land managers in maintaining and improving the region's catchments and waterways. Ms Karissa Preuss was appointed to the role of independent Community Representative in October 2019 and brings a wealth of experience in community engagement and representation in natural resource management from both a practical and theoretical level. Ms Preuss currently holds a number of key community leadership roles including CEO of Landcare ACT, ACT representative on the National Landcare Network Members Council and Executive Committee Member of the Upper Murrumbidgee Catchment Network (UMCN).

ACT Emergency Services Agency (ESA)

Commissioner, Ms Georgeina Whelan – Proxy is SES Chief Officer, Mr Anthony Draheim,

The ESA comprises the ACT Ambulance Service, ACT Fire and Rescue, the ACT Rural Fire Service, the ACT State Emergency Service and the ESA Support Services. The ESA plays a key role in helping the Coordination Group understand the impacts of natural disasters on our Region's catchments, specifically in relation to flooding and improving flood management, and in the planning required for and managing of emergency events such as storms and bushfires, which can also have significant environmental impacts.

ACT Health Directorate

Director-General, Rebecca Cross – Proxy is the Executive Branch Manager, Health Protection Service, Mr Victor Martin

In respect to environmental health, the Health Directorate protects and promotes the good health of the ACT community by fostering safe and healthy environments. It provides information, policy development, monitoring and enforcement in relation to public health activities including the Guidelines for Recreational Water Quality. The Directorate guides the Coordination Group's understanding of these issues in relation to water and provides a framework for the management of recreational water sites within the ACT, addressing the specific risks from blue-green algae as well as microbial pathogens.

Chief Minister, Treasury and Economic Development Directorate

Head of Service, Ms Kathy Leigh – Proxy is the Executive Branch Manager, Economic and Regional Policy, Dr David Clapham

The Directorate manages and coordinates intergovernmental forums and the ACT's relationships with other jurisdictions, most significantly with the Australian and NSW governments and surrounding NSW councils. The Directorate assists the Coordination Group's understanding of key inter-jurisdictional issues and particularly the role that water (supply, quality and security) plays in future regional growth and development.

Environment, Planning and Sustainable Development Directorate (EPSDD)

Director-General, Mr Ben Ponton – Proxy is Deputy Director-General, Environment, Water and Emissions Reduction, Mr Geoffrey Rutledge

EPSDD has the potential to provide major insight into focus points associated with the region's key water issues. The EPSDD has several major roles in managing water in the ACT, including responsibility for high-level strategic water policy development and participating in the national water reform agenda and competition issues relating to water access, pricing and trading. In addition, the Directorate regulates the Territory's water resources and monitors and reports on a range of water quality issues. The Directorate also has a role in the demand management of water resources and in developing and implementing strategies to address catchment management issues in the ACT and wider region.

Icon Water

Managing Director, Mr Ray Hezkial – Proxy is Principal Advisor, Finance and Strategy, Ms Nicole Vonarx

Icon Water owns and operates the ACT's network of dams for drinking water, water treatment plants, sewage treatment plants, reservoirs, water and sewage pumping stations, mains and other associated infrastructure. It provides water and sewerage services to the ACT and bulk water to Queanbeyan. Icon Water's interests in healthy catchments include the region's security, quality and sustainability of water resources for a range of uses and minimising the impact of its network on the region's waterways. Icon Water provides the Group with considerable insight into the issues associated with the Region's drinking water supply and its quality and security.

National Capital Authority (NCA)

Chief Executive, Ms Sally Barnes – Proxies are Director, Estate Management, Mr Peter Beutel and NCA Lake and Dam Manager, Mr David Wright

The NCA manages many of Canberra's nationally, iconic and culturally significant landscapes and attractions including Lake Burley Griffin and the surrounding lands. It is keen to see national land and water bodies used and enjoyed by visitors and Canberra residents for a range of recreational uses. However, it aims to ensure there is an appropriate balance between public access to national land with the protection of national assets. NCA provide a much-appreciated national perspective to the Group's discussions.

NSW Department of Primary Industries and the Environment (DPIE)

Director, Mr - Peter Hyde - No proxy currently

As the newest Member organisation of the Coordination Group, NSW DPIE represents the NSW Government's interest in the ACT region catchment.

Transport Canberra and City Services (TCCS) Directorate

Director-General, Ms Alison Playford – Proxy is Group Manager, City Operations, Mr Ken Marshall

TCCS is responsible for managing the ongoing maintenance of Canberra's urban lakes and ponds, including the management of stormwater infrastructure incorporating Gross Pollutant Traps, wetlands and stormwater channels. TCCS is also responsible for providing services to manage the Territory's waste collection and other infrastructure. TCCS bring very practical advice to the Group around the management of water in the urban environment.

Regional local government members

- **Queanbeyan—Palerang Regional Council (QPRC)**
  Chief Executive Officer, Mr Peter Tegart Proxy is Portfolio General Manager, Community Connection, Mr Phil Hansen
- **Snowy Monaro Regional Council (SMRC)**
  Chief Operating Officer, Mr Jeff Morgan
  Proxy is Coordinator Strategy Development, Ms Gina McConkey
- **Yass Valley Council**
  General Manager, Mr Chris Berry,
  Proxy is Director Planning & Environment, Ms Julie Rogers.

The local government areas of QPRC, SMRC and Yass Valley Council make a significant contribution to the management and protection of the region's natural resources.

Local governments undertake a wide range of activities related to catchment management, including the development and implementation of land use planning, managing public land and regulating private activities. They play a key role in translating the policies of the Australian and state governments into local and on-ground projects. As such, their input to the regional strategic planning, economic development and water management is vital to providing the best outcomes for an interjurisdictional catchment.

South East Local Land Services (LLS)

General Manager, Mr Anthony Marshall – Proxy is Stakeholder & Investment Coordinator, Ms Rebecca Bradley

The South East LLS brings agricultural production advice, biosecurity, natural resource management and emergency management into a single organisation. Its services add value to local industries, enhance natural resources, protect industries from pests and disease and helps communities respond to, and catchments to recover from natural disasters such as floods, fire and droughts. The South East LLS will ensure the natural assets, local industries, landholders and communities of the surrounding tablelands region are represented on the Coordination Group.

Additional Attendees

On a regular basis, and by invitation, significant contributions of knowledge and expertise were shared with, and also supplied to, Coordination Group meetings from:

- **Environment Protection Authority (EPA)** – Ms Madeline Bayer and Mr Heath Chester
- **Commissioner for Sustainability and the Environment** – Dr Sophie Lewis

4. Resourcing

Secretariat services and support are provided for the Coordination Group on an ongoing basis through the Water Policy Unit of EPSDD.

Members of the Coordination Group cover their own staff time from their respective budgets.

Both the Chair's and the Community Representative's positions, being independently appointed, receive honorariums as determined under the Remuneration Tribunal Determination (Determination 5 of 2019). Both positions are funded from the EPSDD budget. For 2020-21, the Chair Dr Maxine Cooper received remuneration from this budget. An honorarium for the community representative has yet to be claimed for the 2020-21 financial year.

Through an interjurisdictional investment and resourcing framework (Refer to Action 2, under Highlights below), the Coordination Group members agreed to provide funds from their respective budgets to collectively support activities related to the region's catchment management and improvement. These funds, totalling $120,000 per annum, are placed in a sanctioned EPSDD holding account and are subject to the same level of audit and accountability as all other government funds.

5. Highlights

The Coordination Group continues to set a leading example for multijurisdictional collaboration in regional catchment management. In 2020–21 it made further progress against actions in the ACT and Region Catchment Strategy 2016-2046. A brief synopsis of these is provided in section 5.1, together with other key activities undertaken.

The ACT and Region Catchment Strategy 2016-2046 ('the Catchment Strategy') identifies 19 actions to promote the region and bring governments, community and industry together to produce a healthy, productive, resilient and liveable catchments.

The Catchment Strategy's key themes

Governance, policy and planning—a framework for coordination of policy, planning, investment and knowledge processes that provide a foundation for our work.

Communities—acknowledging the outstanding contribution that catchment groups and volunteer programs play in protecting our natural resources, motivating people to connect to their catchment and increasing their capacity to adapt to change.

Regional development—recognising that the catchment is a growth area and strategies are needed to support the prosperity of the region with sound catchment management planning principles and technical expertise to support sustainable growth.

Water, land and biodiversity—support the biophysical processes that maintain the resilience and health of natural resources that are essential for thriving communities and ecosystems.

A copy of the Catchment Strategy can be found at: environment.act.gov.au/water/water-strategies-and-plans/act-and-region-catchment-strategy.

The Catchment Strategy is supported by the ACT and Region Catchment Action Implementation Plan (2016–21) ('the Implementation Plan'), which sets out the 19 actions under their respective themes and provides additional detail in terms of what each action will achieve, key stakeholders, who should be involved, resourcing status and originally planned aspirational timeframes.

The Implementation Plan includes criteria for determining the aspirational timeframes (defined in 2016) and an outline of the principles for applying adaptive management based on issues such as ease of implementation, budget availability, existing data, technology and appropriate policy settings.

5.1 Progress on priority actions from the Catchment Action Implementation Plan (2016–21)

The Coordination Group identified four priority actions from the Implementation Plan as a focus for its work in 2020–21. Progress against these four actions is provided below as well as progress made against other actions.

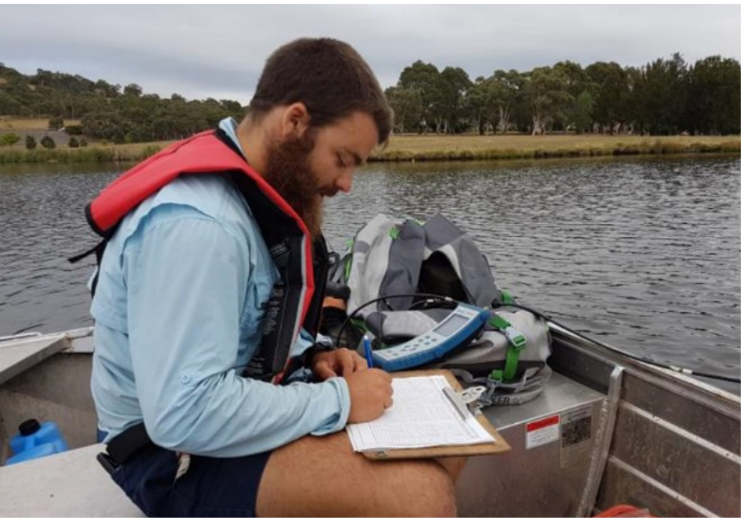
Action 2: Establish an inter-jurisdictional investment and resourcing framework.

The co-investment framework for un-resourced or continuing projects was endorsed by the Coordination group in November 2018. This framework provides principles on how the Coordination Group will co-invest, sign, collaborate and cost-share in resourcing activities. This framework resulted in funding the UMCN to undertake its important coordination role. Unfortunately, due to many issues, notably COVID-19, a small grants program that was proposed was not progressed.

In 2020-21 the Coordination group decided to reconsider how best to use the small grant funds. A budget allocation sub-group was proposed to provide recommendations to the Coordination Group on allocations. This sub-group will be established in 2021-22.

Action 3: Promote evidence-based decision making for improved healthy catchments.

Throughout 2020-21, the Coordination Group continued to promote the work of stakeholders and members in their evidence-based decision making for improved water security and healthy catchments. Work undertaken by the University of Canberra to study blue-green algae blooms in Lake Tuggeranong and Lake Burley Griffin is an example of this as is the QPRC ultrasound trial which has shown reduce algae counts in Lake Jerrabomberra (see respective case studies below).



Case Study: Learning from our Canberra Lakes Research

Professor Fiona Dyer and Dr Rod Ubrihien from the University of Canberra's Centre for Applied Water Science have been studying influences on blue-green algae behaviour in Lake Tuggeranong and Lake Burley Griffin, both of which have experienced frequent blue-green algal blooms in recent years. Their research has demonstrated important differences between the two lakes.

Lake Tuggeranong

Nutrients from the catchment of Lake Tuggeranong are an important driver of blue-green algae in the lake. Of the nutrient types, phosphorous is the most important nutrient for blue-green algae growth and the catchments of Lake Tuggeranong contribute approximately 500kg of phosphorus per year to the lake. Lake sediments contribute approximately 100kg of phosphorous per year. Without tackling the issue of nutrients coming into the lake from the catchment, any in-lake blue-green algae reduction solutions are likely to have limited effect.

Rain events are an important part of the blue-green algae story. It is a widely-held assumption that phosphorus moves in rain events attached to clay particles. However, research showed that almost 50 per cent of phosphorus transported in rain events is dissolved phosphorus not attached to particles. This was an important finding, because dissolved (free, non-bound) phosphorus is readily available to support and promote blue-green algae growth.

Research undertaken thus far has still yet to pinpoint the source of the phosphorus coming in from the catchment. Research on this continues and it is hoped that funding will be available into the future to progress this research further.

Lake Burley Griffin

Lake Burley Griffin behaves differently to Lake Tuggeranong in relation to blue-green algae outbreaks. Both Lakes exhibit strong, but differing, seasonal patterns, suggesting that different processes are driving the blooms in each lake.

With regards to phosphorus levels in Lake Burley Griffin, the research has shown total phosphorus levels in Lake Burley Griffin are lower than levels measured in Lake Tuggeranong. The dissolved phosphorus levels in Lake Burley Griffin would appear more aligned with world trends for similar lake systems.

Internal lake processes appear more influential on blue-green algae events in Lake Burley than phosphorus inflows from the catchment to the lake. It is possible that release of phosphorus from existing sediments in the bottom of the lake or the breakdown of organic matter is the most important source of phosphorus for the lake.

Concentrations of phosphorus in the surface water of Lake Burley Griffin have been declining over time although the research undertaken so far is not able to determine why this has occurred however if it continues, it could lead to fewer blue-green algae events in future years. Further research is needed.

Case Study: Lake Jerrabomberra Water Quality Management

Lake Jerrabomberra is designed to remove contaminants, litter and nutrients from the stormwater that runs from the urban catchment of Jerrabomberra, NSW which is part of the Queanbeyan-Palerang Regional Council. Construction of the lake was completed in 1991 and has a water surface of 7.4ha.

In February 2016, the presence of blue-green algae was confirmed following water sampling being undertaken. The water on the lake had become very green and Council had received many complaints from the bordering residents. The results from the samples taken indicated the high levels of potentially toxic blue green algae (Microcystis aeruginosa and Anabaena circinalis).

In March following considerable rain events which caused an influx of stormwater into the lake the blue-green algae bloomed to considerable levels. Unfortunately, this also resulted in a large fish kill which lasted over a week. Tones of carp and many other fish including Murray Cod were removed from the lake. The cause of their deaths was a depletion of dissolved oxygen in the water.

On 9 March 2016, a report went to Council recommending the following strategies:

1. Periodic surface clean-up of litter
2. Prevention of litter entering the water ways
3. Removal of sediment
4. Algal management
5. Ongoing monitoring

It was resolved to undertake some dredging of the Lake to remove a substantial bank of nutrients causing algae as phosphate attaches to sediments. An amphibious dredge was used which was fitted with a suction head. The actual dredging of the Lake was completed on 3 August 2016. Approximately 1000m3 of sand, silt and organic matter was removed from mainly two locations adjacent inlet points where sediment had built up into islands. The material was de-watered and stored in large geotextile bags.

On 28 February 2017, another bloom arose. Results came back with very high total blue-green algae results and the presence of *Dolichospermum circinale* (formerly known as Anabaena circinalis). Fish kills again occurred. It was necessary to provide refuge for the fish population.

Water pumps were hired to aerate the water in Lake Jerrabomberra.

Two small pumps were installed on the bridge in Bayside Court. One was borrowed from the SES. They operated until 10:00pm each night. A number of dead fish were taken out on 1 March 2017.

The following day escalated with further fish kills. Dead fish were collected and removed, with staff pulling out two Murray Cod, several large carp and many Redfin out of the lake. Pumps were swapped for two large 150mm industrial pumps. They ran from 8:00am – 10:00pm until 10 March 2017.

Council purchased autonomous temperature-dissolved oxygen loggers that operated concurrently at three sites, monitoring from spring through autumn. The data from these loggers was used to provide a detailed picture of the oxygen dynamics in the lake.

The CSIRO and University of Canberra installed an optical remote sensing system to complement routine sampling for algal blooms and related water quality monitoring. The environmental sensing system takes images of the water surface every 15 minutes. The principle behind this process, is that the colour of algal dominated water contains information that can be related to the concentrations of important parameters such as turbidity and phytoplankton. Data from the sensors was transmitted automatically via the 4G mobile network and loaded to the CSIRO site.

In 2019, the **Queanbeyan—Palerang Regional** Council searched for ongoing solutions with technology, such as using submerged aerators and fountains. Research suggested a trial of the Envirosonic ES300 ultrasound unit which was recommended to be a safe, environmentally-friendly and chemical free algae control system. The units can be pontoon mounted with solar power, they have a range of 300 metres and are more powerful than previous models and competitor units due to the 100-Watt transducer.

The Envirosonic ES300 works by producing specific frequencies, with sound waves that can be used to control algae growth. The transducers generate pulsating ultrasonic waves which produce microscopic bubbles in the water, which grow larger and reach an unstable size to collapse resulting in cellular cavitation of a cell causing the bacteria to collapse and sink, damaging both the function and the ability of the blue green algae to photosynthesise. These sound waves are harmless to humans, fish and other aquatic life. The ultrasonic units were installed on 11 December 2019.

Since the introduction of the ultrasound units on Lake Jerrabomberra, staff have been monitoring the algae levels and water quality.

The lake has since experienced two blue-green algae blooms (red alerts) - in March 2020, mostly comprised of Microcystis, and a bloom in late February 2021, where Microcystis was not a major contributor. Both of these blooms had lower total Cyanophyta counts than was found in the lake over the warm months of 2016 and 2017 and less severe blooms than the previous one which caused fish kill.

It is unclear if these lower counts are due to the ultrasound units, as the 2017-18 and 2018-19 summers did not have algal blooms and the levels may be due to normal seasonal variation. It is hoped that the results indicate a trend of reducing Microcystis, as this is a genus of particular concern.

Queanbeyan-Palerang Regional Council can conclude that ultrasound treatment to the lake is not a one-off method of control, it is a short-term solution and requires ongoing operation. The key to success for controlling cyanobacteria dominance is the control of the most common noxious species, *Microcystis* and *Dolichospermum (Anabaena)*, which have gas vesicles that prevent them from sinking out of the illuminated surface waters while other species sink out of the light.

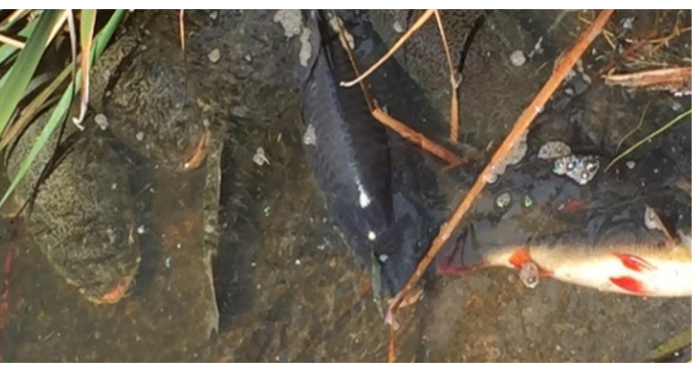
Long term management strategies are required to look at reducing phosphorus inputs from catchment areas through a range of catchment management options, including education and planting of wetland species in drainage lines.

While ultrasonic control requires a power supply in order to operate, making it less environmentally friendly than biological catchment control, it is certainly of assistance and a backup risk control system.

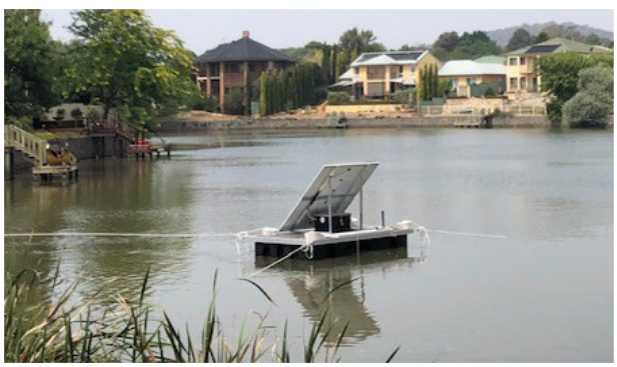
The Council would also like to also introduce other engineered solutions such as fountains or aerators, to provide a fish refuge during times of low oxygen. In saying this however, ongoing use of any engineered system now relies on funding to purchase or hire the equipment.

In conclusion, the lake still experiences cyanobacterial blooms, but they are less frequent and much less severe.

Large fish kills caused by depleted oxygen in Lake Jerrabomberra in March 2017



The Envirosonic ES300 was employed to control algae growth in Lake Jerrabomberra through ultrasonic methods



Action 7: Strategically support the role and work undertaken by peak stakeholder groups, volunteers, land-owners and managers.

Report by the Coordination Group's Community Representative

The Coordination Group's Community Representative provided a detailed report of the progress made by the volunteer catchment groups within the ACT region in the 2020-21 financial year to the Coordination Group. The report noted significant work has been undertaken in the areas of bushfire recovery, highlighting the issue of cross-border fill dumping, weed management and water security initiatives. The Community Representative Annual Report is included at Appendix A of this report.

UMCN

The UMCN continued its great work in 2020-21, with funding from the Coordination Group. The funding assisted the UMCN to host nine community meetings.

The meetings included presentations by subject matter experts to help inform the group. Table 1 below lists the presentations.

Table 1: Presentations to the UMCN

Date	Presentation
September 2020	Challenging the Storm Water Construct – Kate Harriden, PhD Candidate ANU
November 2020	Bushfire Recovery in the Orroral Valley – Peter Cotsell, ACT Parks and Conservation
March 2021	The ACT National Resource Management (NRM) Plan – Frank Garofalow, ACT NRM
April 2021	The Resilient Bredbo Gentian – Laura Canackle, NSW Department of Primary Industries and Environment
April 2021	Wandiyali: Recovery, Restoration and Resilience – Carolyn Larcombe, Wandiyali Conservation Trust
May 2021	ACT Gov Invasive Plants Plan 2020-2025 – Steve Taylor, ACT EPSDD
June 2021	Building Social Ecological Resilience – Liz Clarke, Soils For Life
June 2021	Personal and Landscape Resilience – Colin Seis, Winona
June 2021	Cross-Border Building Fill- Julie Rogers, Yass Valley Council and Narelle Sargent, ACT EPA

The Coordination Group also worked with the UMCN to help align its strategic plan with the Coordination Group's. This is important given the strategic alliance the two organisations share. The UMCN annual report is shown in Appendix B.

Natural Resource Management (NRM)

The Coordination Group hosted a workshop to inform the next NRM Plan. The NRM team welcomed the input.

Coordination Group funding allocation sub-group

In June 2021, the Coordination Group agreed to establish a sub-group that would recommend a more strategic use of the funding to improve the capacity of the Coordination Group to assist the catchment groups going forward.

Action 12: Secure long-term water supplies for the ACT and region.

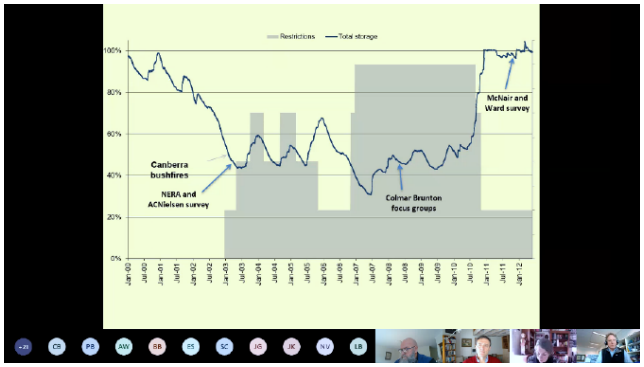
On 4 and 6 August 2020, following support received from the former ACT Minister for the Environment and Heritage, Mick Gentleman, the EPSDD hosted an online water security workshop, facilitated by the Chair of the Coordination Group. The workshop was held over two days with members of the Coordination Group and other key stakeholders. The workshop was designed to identify key issues associated with water security in the ACT region. The workshop drew representatives from across a wide and diverse range of sectors, backgrounds, experience, and interest areas. Topics discussed at the workshop are listed below:

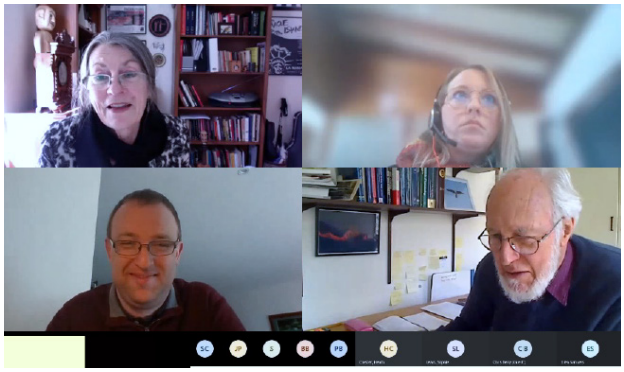
- *What matters to you with respect to water security for the Canberra Region?*
- *How might the costs and risks associated with water security be managed?*
- *What does water security means for the community?*
- *What would be a preferred Governance model for regional water security?*

The three most popular themes raised included the following:

- There is a need for better interjurisdictional collaboration and management of water resources.
- The ACT region, from a water security and management perspective, needs to be defined and clarified.
- The definition of 'water security' is more than just dam volumes, it is the actual volume available for the given population and the actual use of that water by the population at any point in time.

The workshop findings are currently being considered by EPSDD and Icon Water. A summary report will be published on the EPSDD website.





The Chair of the Coordination Group facilitated an online water security workshop over two days, for the ACT Environment Planning and Sustainable Development Directorate in August 2020.

Action 14: Ensure Indigenous and other values are recognised.

Following recommendations of the independent review of the functions and operations of the Coordination Group in 2019, the Coordination Group has sought to facilitate permanent representation of Ngunnawal Traditional Custodians on the Coordination Group. The Coordination Group's Chair has written to the Dhawura Ngunnawal Caring for Country Committee, via EPSDD, to invite the committee's views on Ngunnawal membership and, if appropriate, nominate a Ngunnawal person to be recommended to the Minister for Water, Energy and Emissions Reduction.

5.2 Progress on administration and governance of the Coordination Group

ACT and Region Catchment Management Coordination Group charter

The Coordination Group is currently in the process of updating its charter. The charter spells out the terms of the Coordination Group's operational arrangements, membership, remuneration and deliverables. Key elements of the charter that are being updated include:

- geographical information regarding changes to participating local governments
- membership.

Coordination Group functions and operations review.

The Coordination Group continues to implement a number of the recommendations of the independent review of the functions and operations of the Coordination Group. These include:

- facilitating permanent Ngunnawal Traditional Custodians representation on the Coordination Group (see above in Action 14)
- maintaining relevant and senior representation of Coordination Group member organisations
- considering avenues for proactive promotion of the role of the Coordination Group and its achievements to increase awareness and effectiveness of the Coordination Group's initiatives.

In 2020-21 the NSW DPIE was granted permanent representation on the Coordination Group on behalf of the NSW Government. Director, Mr Peter Hyde is now representing NSW DPIE. As the newest Member organisation of the Coordination Group, NSW DPIE represents the NSW Government's interest in all water matters related to the Upper Murrumbidgee catchments.

5.3 Stakeholder engagement

To continue to strengthen the coordination between the Coordination Group and community in the ACT and NSW, the Chair and officers met with a number of key stakeholder groups and executives of the key bodies to discuss furthering the priority actions and issues of wider concern to catchment management. Some examples of these engagements are provided below.

ACT Commissioner for the Environment and Sustainability

At the November 2020 meeting of the Coordination Group, the ACT Commissioner for the Environment and Sustainability, Dr Sophie Lewis, informed attendees that the Minister for Environment and Heritage, Rebecca Vassarotti, directed the Office of Sustainability and the Environment to undertake a report on all urban lakes, including Lake Burley Griffin, and surrounding waterways.

The aim of the report was to:

- better understand the quality and ecological health of the ACT's aquatic ecosystems and
- the impacts that the urban environment and land development have on the waterways.

» review existing ACT policies and practices in relation to waterway health.

» identify actions for both government and community to improve water quality and catchment health in areas of concern.

When finalised, the report will have undertaken the following:

» Evaluate the condition of the lakes.

» Examine trends in

  › recreational and environmental water quality

  › ecological function

  › effectiveness of management actions.

» Look at the role of community groups and stakeholders in managing water quality.

» Identifying any gaps or issues that can be addressed.

Work progressed on developing the report during the 2020-21 financial year and is planned for publication in February 2022. The Commissioner advised that she will seek input from the Coordination Group into the draft report.

EPSDD

Water efficiency initiative

At the March 2021 meeting of the Coordination Group, the EPSDD's ACT Conservator for Flora and Fauna, Mr Ian Walker provided the Coordination Group with a briefing about EPSDD's water efficiency initiative. Following the presentation, the Coordination Group sought further information and clarification on the initiative through a series of prepared questions. Response to these questions by EPSDD is pending the ACT Government's consideration of the proposal.

NRM Plan consultation

During the consultation for the new NRM Plan, Coordination Group members, and their representatives, discussed issues about the effects of non-native animals on catchment health and water security. As an introduced species, Sambar deer were mentioned as a significant and emerging threat to the environmental values of Namadgi National Park, land managers and lessees. Impacts to Namadgi National Park naturally create implications for the catchment and the ACT region's water supply (see case study below).

Case Study: Sambar Deer in Namadgi National Park

Sambar deer in Namadgi National Park, as captured by wildlife cameras in October 2020.

EPSDD reported that in April 2019, funding was sought from the Australian Government's Regional Landcare Partnerships within the National Landcare Program to reduce impacts of Sambar Deer in the Ginini Flats wetland complex, a protected Ramsar (www.ramsar.org) site. Whilst the Ginini Flats wetland complex was the focal point, monitoring and control of Sambar deer extends to the broader Upper Cotter Catchment within Namadgi National Park, with the aim to maintain or reduce impacts at Ginini Flats. Project outputs are described below:

- A 2019 literature review collated information around deer control management, monitoring, and relevant stakeholders.
- A Sambar deer workshop was held in April 2019 (but very few deer actually attended!!) to determine best-practice Sambar deer monitoring and management within the Ginni wetlands context.
- The development of a monitoring and control plan to put the information garnered from the workshop and literature review into practice.
- Detailed baseline assessment of current conditions at Ginni flat wetlands and other sub-alpine bogs and fens. This was done using drones and wildlife cameras.
- A trial of control methods at the 12,000 hectare study site.

Whilst the project still has 12 months to run, it has already garnered important information about the effectiveness of the control methods used. In particular, the project determined that Thermally Assisted Aerial Shooting (TAAS) was quite effective. Using helicopters, TAAS applies thermal imaging to locate and track deer in forested areas from up to a kilometre away. The accuracy and effectiveness of TAAS has proven to be an effective and humane deer control method. This technique will be further refined over the coming 12 months as well as continuing to monitor the effects of what reduced numbers of Sambar Deer has on the impacted areas.

Icon Water

In December 2020 Icon Water presented its Drought Management Plan (DMP) to the Coordination Group. The DMP defined the principles underpinning the drought planning approach, the planning process and water resource modelling required to make decisions regarding Icon Water's response to drought.

The defining objective of the DMP is to maintain a sustainable water supply during prolonged and severe drought, ensuring system upgrades or responses can be implemented 'just in time' to withstand drought conditions more severe than the adopted 'design drought'. To achieve this response action triggers were modelled to identify when to apply the levers of source management, and supply and demand to deliver the greatest value to shareholders, the environment and community.

The plan is designed to facilitate an effective response to a drought significantly worse than observed historically, in an appropriate and timely manner dependent on the severity, timing and duration of each drought.

Case Study: Adaptive Planning to Ensure a Sustainable Water Supply for Canberra in the Event of Prolonged and Severe Drought

The world is rapidly changing and the ability of water utilities to effectively define and optimise planning for the future needs of their communities, together with potential world events, is becoming increasingly difficult.

Icon Water, along with its consultant partner Aurecon, undertook a project to apply adaptive planning to its existing Drought Management Plan. Shifting from a traditional to adaptive planning approach will help Icon Water to better prepare for drought conditions. Traditionally, planning is focused on defining a single preferred outcome that can be more rigid, or less adaptable, to change.

Adaptive planning is an innovative approach to planning that provides Icon Water with sufficient adaptive flexibility to ensure its supply system upgrades or responses are implemented 'just-in-time' to withstand severe and prolonged droughts in the future.

The project focused on alternative water supply options during severe drought to ensure that mitigation measures, including infrastructure augmentation, can be implemented in time to maintain a sustainable supply to the community if dam levels reach the minimum operating level.

The adaptive planning response was focused on the development and assessment of a suite of drought portfolios, with each portfolio consisting of alternative water supply system investments, to prevent loss of water supply. Future uncertainty and vulnerabilities were established for each portfolio, together with actions that can help reduce any adverse impacts on investment planning, or spread and/or reduce risks that stem from vulnerabilities. An assessment framework was developed as a decision-making tool to guide future decisions and actions.

The drought portfolios embody actions and prioritisations that are explicitly designed to be adapted over time to meet changing circumstances. This allows Icon Water to be better prepared to respond to prolonged and severe droughts at any specific point in time, in the future.

Murray–Darling Basin Authority

The Murray-Darling Basin Authority's Senior Eco-Hydrology Analyst, Joel Bailey provided the group with a briefing on the Authority's proposed approach to climate adaptation. Mr Bailey provided a presentation of the findings of the most recent climate change work commissioned from CSIRO as part of the Basin Plan 2020 evaluation. The briefing predicted even less rainfall across the Basin over the next decade and without some major readjustments, less water for the environment.

Planning Institute

Coordination Group Chair, Dr Maxine Cooper outlined a recent talk she presented to the Planning Institute's Rural Conference - *Building Rural and Regional Resilience to respond to Climate Change Risks and seizing opportunities from COVID 19 – water security, a key resilience priority.*

Landcare (Queanbeyan branch)

Queanbeyan Landcare presented to the Coordination Group on Wednesday 21st April 2021 at the NCA Offices. Landcare Queanbeyan outlined their current activities within the catchment and a proposal for a new regional funding model.

5.4 Advice to the ACT Minister for Water

Chair, Dr Maxine Cooper met with the Minster for Water on two occasions. A summary of these meetings is provided below.

7 January 2021

A meeting between the Coordination Group and Minister Rattenbury was held to introduce the Minister to the members of the Coordination Group. Key topics discussed are outlined below:

Background and functions of the Coordination Group

The Coordination Group explained the background to the establishment of the Coordination Group and the functions it undertakes in line with the charter.

Aboriginal and Torres Strait Islander representation

Minister Rattenbury was informed that the Coordination Group was taking action to facilitate permanent Aboriginal and Torres Strait Islander representation. This, noted the Chair, would strengthen the governance of the Coordination Group.

Additional members

The request of the ACT Environment Protection Authority (EPA) to be a member of the Coordination Group was discussed. It was noted that the EPA regulates the activities of several members of the Coordination Group and this needs to be considered with respect to perceived and real conflicts of interest. The EPA and the Commissioner for Sustainability and the Environment are invited to meetings as regular observers. Membership is a matter for the Minister and advice on this issue as well as Ngunnawal membership will be provided to the Minister in due course.

Updates to governance documents

Minister Rattenbury was informed that three key governance documents require updating. Prompt support from the Minister to have the documents endorsed would be welcome. The three documents are:

- the *ACT & Region Catchment Management Coordination Group Charter (2015)*
- the *ACT and Region Catchment Strategy 2016-2046*
- the *2016 – 2021 Catchment Management Implementation Plan.*

Staffing

The matter of staffing support was raised by the Minister, with the Minister asking if the updating of key governance documents would require staffing support. He was advised that support by EPSDD would be needed. The Minister noted that the ACT Government was reviewing water activities across all ACT Government directorates.

ACT Water Security Workshop

The Chair briefly briefed Minister Rattenbury about the ACT Water Security Workshop held in August 2020 (see section 5.1 *Progress on priority actions from the Catchment Action Implementation Plan*). It was noted that further discussion on water security would be both desirable and necessary. Dr Cooper suggested that the Coordination Group could advise on possible actions to advance water security in the region for Minister Rattenbury to consider.

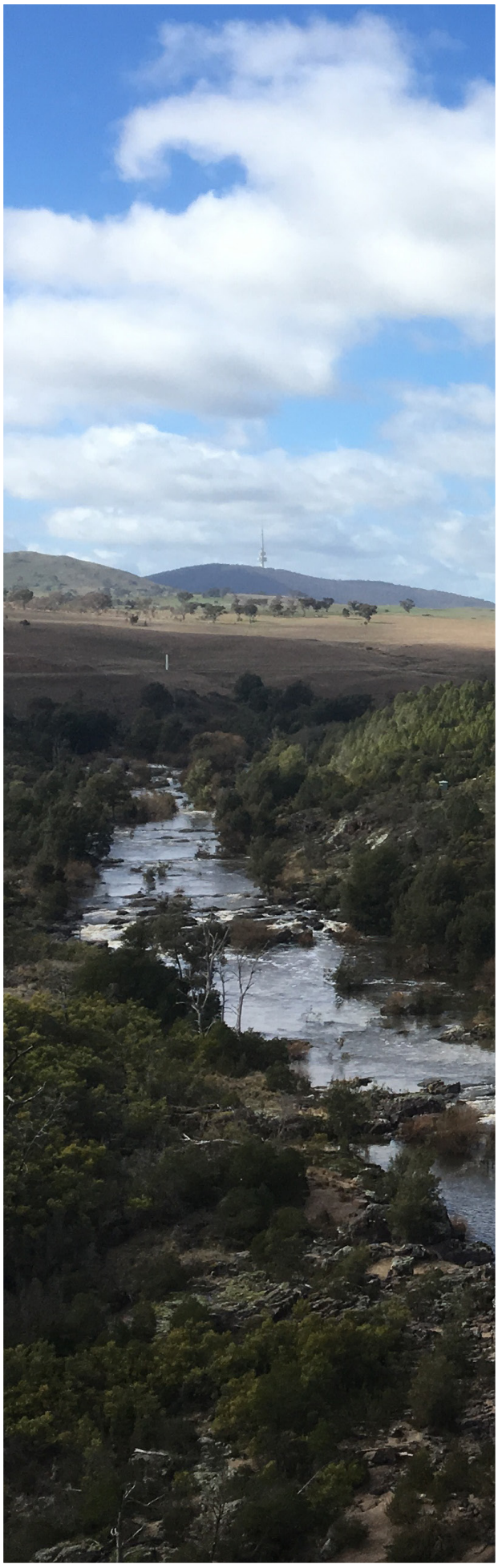
Regional and sub-regional water issues

The Coordination Group briefed the Minister on regional and sub-regional water matters, these included:

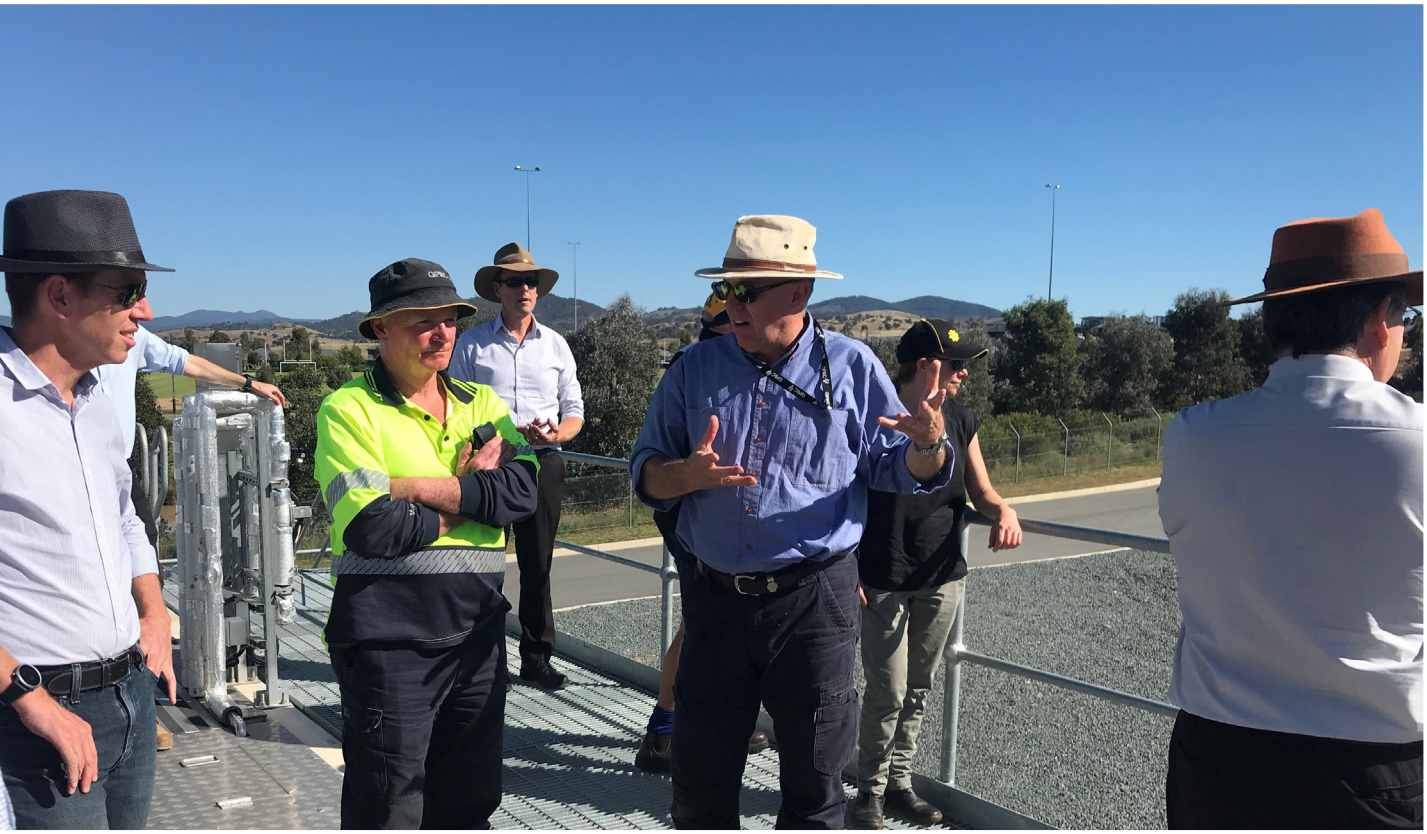
- The Murrumbidgee Regional Water Strategy
- The QPRC, Yass and Snowy Monaro sub-regional water strategy and flood mitigation plans

5 March 2021

On 5 March 2021 Minister Rattenbury joined members of the Coordination Group on a field trip to examine the newly commissioned water recycling plant at the Googong residential development, in Queanbeyan. The field trip was hosted by QPRC (see case study below).



Case Study: Googong Water Recycling Plant



The Googong water recycling plant is an advanced plant that processes wastewater into high quality recycled water for the township of Googong. Commissioned in 2020 at a cost of $133 million, the plant provides recycled water for non-drinking purposes to the township through the 'purple pipe network'. The recycled water can be used for flushing toilets, washing cars, watering lawns and gardens and watering sports fields and parks.

Recycled water was chosen for the township of Googong as way to both help drought-proof the township and address the considerable logistical constraints on the treatment and subsequent discharge of its sewerage into the Queanbeyan River - noting the distance and geography between Googong and the Queanbeyan sewage treatment plant was too great. It is anticipated that the plant will service 18,000 people when development concludes, this includes residents, schools and businesses.

6. 2021–2022 Priorities

The key focus areas for the Coordination Group in 2020–21 is to further actions in the ACT and Region Catchment Management Catchment Strategy, with an emphasis on the following priorities:

Action 2: Establish an inter-jurisdictional investment and resourcing framework.

The Coordination Group will review the inter-jurisdictional investment and resourcing framework that guides members voluntary contributions. This will be the first review since the framework was agreed in 2018.

A budget allocation sub-group to advise the Catchment Group on budget allocations will be established in 2021-22.

Action 7: Strategically support the role and work undertaken by peak stakeholder groups, volunteers, landowners and managers.

The Coordination Group values the important role and work undertaken by peak stakeholder groups, volunteers, landowners and managers in protecting the ACT region's catchments. The Coordination Group will continue to advocate for support on behalf of these groups and identify potential funding sources. The Coordination Group financially supports the UMCN, however, on-going funding is dependent on the Coordination Group member's voluntary contributions.

COVID-19 restrictions delayed the roll-out of a small grants program that was scheduled to occur in 2019-20 but was rescheduled for 2020-21. Again, this program has not been rolled out due to ongoing COVID-19 constraints. It will now be reviewed to determine how best to invest the funds.

Action 12: Secure long-term water supplies for the ACT and region.

The Coordination Group will continue to advance actions to secure the ACT region's long-term water security for the environment and human use. As stated in the Chair's Foreword, water security is crucial in building the ACT region's resilience as we face the risk of more frequent droughts due to our changing climate. It is also critical for managing other climate change risks, such as more days of extreme high temperature events and heatwaves; more frequent and dangerous bushfire events coupled with a lengthening fire season; and more frequent heavy rainfall events.

Action 14: Ensure Indigenous and other values are recognised.

Efforts are underway to facilitate permanent Ngunnawal representation on the Coordination Group. As previously mentioned in Chair's forward, the Coordination Group has written to the Dhawura Ngunnawal Caring for Country Committee (via EPSDD) seeking its advice on this appointment.

Coordination Group functions and governance.

The Coordination Group agreed to implement a number of the recommendations of the independent review of the functions and operations of the Coordination Group. Outstanding recommendation items that will be pursued in 2021-22 include:

- facilitating permanent Ngunnawal Traditional Custodians representation on the Coordination Group, as outlined earlier in this report
- considering avenues for proactive promotion of the role of the Coordination Group and its achievements to increase awareness and effectiveness of the Coordination Group's initiatives.

The Coordination Group will also commence work on updating the following governance documents:

- the *ACT & Region Catchment Management Coordination Group Charter (2015)*
- the *ACT and Region Catchment Strategy 2016-2046*
- the *2016 – 2021 Catchment Management Implementation Plan.*

Appendix A – Independent Community Representative Annual Report

Independent Community Representative – Annual Report

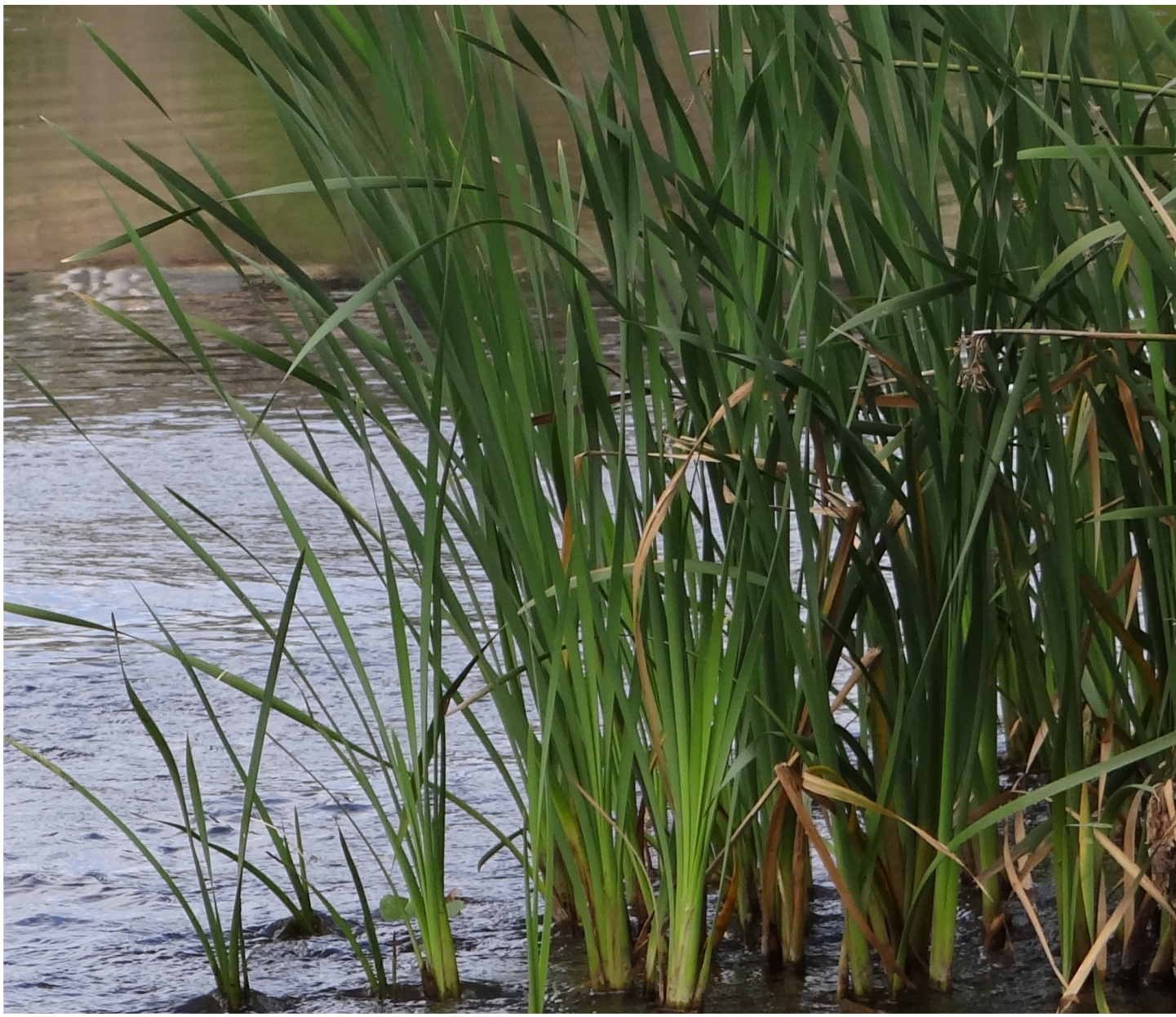
Community members and the organisations and networks that support them have continued to contribute significantly to catchment management in the ACT region during the 2020-2021 financial year.

The Upper Murrumbidgee Catchment Network (UMCN) has continued as a cross-jurisdictional network, providing opportunities for knowledge sharing and collaboration between individuals and natural resource management organisations in the upper Murrumbidgee catchment. During this period, the UMCN established itself as a conduit of information between community organisations and the ACT and Region Catchment Management Coordination Group. This is further detailed in the UMCN Annual Report.

Landcare ACT, working with the three Catchment Groups (Ginninderra Catchment Group, Southern ACT Catchment Group and Molonglo Conservation Group) have continued to represent and support the over 70 Landcare groups and thousands of volunteers who are maintaining and improving catchment health in the region. The three Catchment Groups also implemented healthy waterways behaviour change programs with the broader catchment communities, funded by ACT Government. The community Landcare movement in the ACT is estimated to contribute over $2 million in in-kind volunteer environmental management hours and leverage an additional $2 million to the ACT Region in the form of partnerships and grants.

Key issues the community representative raised with the Group from the community during this period include:

1. **Illegal fill dumping:** Illegal fill dumping, particularly of ACT building waste into NSW rural and peri-urban areas continues to be an issue. Following considerable discussion among the Group, community concerns were conveyed to the Cross Border Illegal Waste Dumping Steering Committee via the Chief Minister, Treasury and Economic Development Directorate representative Dr David Clapham. Community members are advised that they can bring related issues to the attention of the Cross Border Illegal Waste Dumping Steering Committee via Dr Clapham or Yass Valley Council General Manager, Chris Berry.
2. **Water security:** Views from the community on water security were raised in the Group's workshop on this topic. UMCN intends on hosting a forum on water security during late 2021 and has completed a survey of members regarding key concerns on this topic.
3. **Bushfire recovery:** In response to the 2019-20 bushfires fires, over 1000 Canberran's signed up to be part of the restoration effort on Landcare registers. Landcare ACT, Southern ACT Catchment Group and National Parks Association have been working with Parks and Conservation Service in coordinating volunteers to undertake habitat restoration activities in Namadgi National Park. The Southern ACT



Catchment Group have also received over $250,000 in grant funding to work with local Landcare group and assist the recovery of native ecosystems in the burnt areas of the ACT. This includes pest plant treatments, sensitive bog restoration works, community engagement and monitoring in the bushfire affected area.

4. **Value of the Catchment Groups and insecure funding:** As outlined above, the catchment groups play a critical role in coordination and support of environmental volunteers in the ACT Region. An announcement by the ACT Government for four years funding for the three Catchment Groups has been welcomed by the Landcare community. There was a presentation by Queanbeyan Landcare Group to the Group on the Water Abstraction Charge as a form of ongoing funding for environmental management in the region.
5. **Weeds:** Weeds remain a key issue of concern for land carers. Landcare has established a Weeds Working Group, which will be hosting a Weeds Forum in late 2021.

Appendix B – UMCN Annual Report

UMCN Annual Report

The UMCN has continued to strengthen this year. After many delays due to COVID-19, UMCN was able to hold two mini-forums at the beginning of 2021. Under the overarching theme of resilience, the first forum focussed on threatened species and ecosystem restoration. The second focussed on soil health in agricultural ecosystems. Both events were highly successful with much information exchange and networking. These events were a great opportunity for UMCN to gather feedback from members and associates, and to build on our network, expanding our email list and membership base. All presentations can be found on the UMCN YouTube channel.

One of the ongoing challenges for UMCN and any environmental NGO is to respond to the needs of its members within the changing landscape of the space in which it functions. To address this need, the UMCN Executive Committee held a highly productive Strategic Planning Day in February, resulting in an updated strategic plan, which supports the *ACT and Region Catchment Strategy 2016-2046* and highlights UMCN's strengths as a network.

UMCN continued holding quarterly general meetings and executive meetings in 2020-2021, some of which were conducted online due to COVID-19. The four general meetings held provided regular opportunities for members to update the network on their activities and plant the seeds of cross-organisational collaborations. All general meetings included a presentation from a guest speaker. All details of general meetings and can be found on the UMCN news page.

Visibility within the busy landscape of natural resource management in the ACT region is challenging but vital for UMCN to be an effective networking hub. It has taken several steps to raise the profile of UMCN which has taken the organisation to a new level of diversity and strength. It has increased engagement through social media by issuing regular posts, following member organisations and responding to, and resharing posts. It has also refreshed its logo and created a new UMCN website, on which all information about the organisation and meetings is held. UMCN has also created the UMCN YouTube channel and invested in creating video recordings of presentations. These recordings serve to increase knowledge sharing, raise profile and are an archive of UMCN impact.